MICROFILM DIVIDER

OMB/RECORDS MANAGEMENT DIVISION
SFN 2053 (2/85) 5M

ROLL NUMBER

1154

DESCRIPTION

2007 HOUSE HUMAN SERVICES

HB 1154

2007 HOUSE STANDING COMMITTEE MINUTES

Bill/Resolution No. HB 1154

House Human Services Committee

☐ Check here for Conference Committee

Hearing Date: January 10, 2007

Recorder Job Number: 877

Committee Clerk Signature Judy Schaeck

Minutes:

Chairman Price: We will open the hearing on HB 1154.

Representative Keiser District 47: This bill is a Wisconsin bill. The first section we talk about permit and a fee. We talk about advertising, failure to wear eye protection. We need to put some responsibility on the facility.

Senator Ralph Kilzer: District 47 in Bismarck. See attached with amendments.

Dr. William Cornatzer: I am a certified dermatologist in Bismarck ND. I have been practicing here for 22 years. My son and I were basically the two that did the leg work for this bill. My son is in medical school and can't be here to testify. In the past 5 years approximately 19 different states have submitted legislation to try to regulate the tanning industry, in effect of minors having the ability to get and have access to tanning beds. No one under 18 should be allowed with out parent consent. There should also be a warning label on the booths, and there should be a law saying they are not allowed to say they are safe. It is a known fact that ultra light causes cancer. We are seeing an epidemic of melanoma, a fatal skin cancer if deep in the skin. It is as high a rate of death as people using tobacco. On an average I take out 5-10 melanomas a month. I hope the committee will think about and pass this bill to protect our children's health. Over half the tanning facilities have no regulations at all. There is

medications where you should not get sun light, and they have come into the emergency rooms with sever burns. In France you can drink at 12, but you can't go to a tanning bed until they are 18. This is to try and protect their children. See information attached.

Dr Todd Twogood: President of ND American Academy of Pediatrics. I am a pediatrician in Bismarck ND. See attached. I am here to show support for the bill

Dr. Denise DForte: I am a dermatologist in Bismarck. We are seeing a tremendous increase in melanoma. Any tanning does damage to the skin. It is proven that tanning in a booth is much more damaging than out doors. We should try to prevent cancer. If there are to be changes on this bill it should be more stringent.

Kenan Bullinger: Director of Division of food and Lodging for ND Department of Health. See attached testimony. I have neutral testimony to HB 1154.

Representative Porter: Is it possible for your agency to contract with local health units or local inspectors.

Mr. Bullinger: That is currently the way we do it. I did notify them that this may be coming their way. Most are receptive. We have vehicles in place that inspect and collect.

Mary Ann Foss, Director of the Division of Cancer Prevention and Control of the ND Department of Health: See attached testimony.

Heidi Heitkamp, representing the Indoor Tanning Association: See Attached testimony. Currently the FDA does regulate these machines. We are also seeing more melanoma because we are testing more. In the back of my testimony is a spread sheet on how minors are monitored in other states. It is a parent's responsibility not ours I would be happy to work with the committee to get the bill implemented. Most that is in here is common sense. The beds are regulated not the facility.

Chairman Price: Any opposition?

Sue Blair, a salon owner In Bismarck: I am not completely against the bill. I do think we need to be regulated. I do support Heidi on what she is asking for. We provide sun screen and I regulate all of my people on the length of time an how often.

Jeri Heiser, Owner of two tanning facilities. I employ 15-25 people. Smarttan.com has very much information for you to help you with this bill. We have a log book to monitor our clients. Some of my beds have a higher UV. We do not allow them to tan for 48 hours. Moderation is the key. I will invite any of you a tour at my facility on tanning devices

Representative Schneider: Tanning devices must be accurate. Have you had any problems?

Ms. Heiser: The first time you tan, we do a skin analysis. We have total control about time. We set the time, and it can not be changed. I think it is important for tanning facilities to have a computer.

Chairman Price: We will close the hearing on HB 1154.

2007 HOUSE STANDING COMMITTEE MINUTES

Bill/Resolution No. HB 1154

House Human Services Committee

☐ Check here for Conference Committee

Hearing Date: January 16, 2007

Recorder Job Number: 1236 and 1237

Committee Clerk Signature Judy Schock

Minutes:

Chairman Price: Let's open HB 1154

Heidi Heidkamp purposed amendments See attached.

The committee discusses an in home tanning bed where a parent allows a 12 year old to use. Are we trying to solve a problem we don't have. Also is it our problem or the parents as to when a child can use a tanning bed.

Representative Schneider moves a do pass as amended. **Second by Representative Conrad**. Vote was 8 years, 3 nays and one absent. The bill RR/Appropreations.

Representative Schneider to carry to the floor.

FISCAL NOTE

Requested by Legislative Council
04/18/2007

Amendment to: Engrossed HB 1154

1A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

	2005-2007 Biennium		2007-2009 Biennium		2009-2011 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
Revenues				$32,281		$30,027
Expenditures				$32,281		$30,027
Appropriations						

1B. **County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

2005-2007 Biennium			2007-2009 Biennium			2009-2011 Biennium		
Counties	Cities	School Districts	Counties	Cities	School Districts	Counties	Cities	School Districts

2A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

This bill requires the Department of Health to regulate tanning facilities within the state of North Dakota. Currently this group of providers is not regulated. The costs included in this fiscal note include staff time for rules development and inspection of approximately 250 tanning facilities.

B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

There is no mention in the proposed legislation that inspections of tanning facilities are mandated with passage of the law. However, the department is mandated to enforce the provisions of the law and any rules promulgated to further enforce. In order to enforce this chapter the department would need to conduct routine inspections. For purposes of this fiscal note, I used one annual inspection as a basis for inspection and permitting costs. Two inspections per year would not be out of line. The Senate has added language that allows the Health Department to deposit the funds into our operating account and waive fees that are subject to local jurisdiction.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*
   A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

This bill allows the department to establish a fee for a permit to operate a tanning facility. Included in Engrossed HB 1004 is language that allows these fees to be deposited into the department's operating fund similar to our food and lodging inspection fees.

B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

During the 2007-2009 biennium, it is anticipated that it will take approximately 1,180 hours per biennium of staff time or about a .5 FTE for rules development, implementation, salary and operating costs. It is anticipated that the costs during the 2007-2009 biennium would be $32,281.

As development will occur prior to the 2009-2011 biennium, it is anticipated that the expenditures for ongoing operation of this program will be approximately $30,027 for the biennium.

C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and*

appropriations. Indicate whether the appropriation is also included in the executive budget or relates to a continuing appropriation.

Funds for this project are included in the Department's Appropriation bill (Engrossed HB 1004) as amended by the House.

Name:	Kathy J. Albin	**Agency:**	Department of Health
Phone Number:	328.4542	**Date Prepared:**	04/18/2007

FISCAL NOTE

Requested by Legislative Council
03/01/2007

Amendment to: Engrossed HB 1154

1A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

	2005-2007 Biennium		2007-2009 Biennium		2009-2011 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
Revenues				$32,281		$30,027
Expenditures				$32,281		$30,027
Appropriations						

1B. **County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

2005-2007 Biennium			2007-2009 Biennium			2009-2011 Biennium		
Counties	Cities	School Districts	Counties	Cities	School Districts	Counties	Cities	School Districts

2A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

This bill requires the Department of Health to regulate tanning facilities within the state of North Dakota. Currently this group of providers is not regulated. The costs included in this fiscal note include staff time for rules development and inspection of approximately 250 tanning facilities.

B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

There is no mention in the proposed legislation that inspections of tanning facilities are mandated with passage of the law. However, the department is mandated to enforce the provisions of the law and any rules promulgated to further enforce. In order to enforce this chapter the department would need to conduct routine inspections. For purposes of this fiscal note, I used one annual inspection as a basis for inspection and permitting costs. Two inspections per year would not be out of line. The Senate has added language that allows the Health Department to deposit the funds into our operating account and waive fees that are subject to local jurisdiction.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*
   A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

This bill allows the department to establish a fee for a permit to operate a tanning facility. Included in Engrossed HB 1004 is language that allows these fees to be deposited into the department's operating fund similar to our food and lodging inspection fees.

B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

During the 2007-2009 biennium, it is anticipated that it will take approximately 1,180 hours per biennium of staff time or about a .5 FTE for rules development, implementation, salary and operating costs. It is anticipated that the costs during the 2007-2009 biennium would be $32,281.

As development will occur prior to the 2009-2011 biennium, it is anticipated that the expenditures for ongoing operation of this program will be approximately $30,027 for the biennium.

C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and*

appropriations. Indicate whether the appropriation is also included in the executive budget or relates to a continuing appropriation.

Funds for this project are included in the Department's Appropriation bill (Engrossed HB 1004) as amended by the House.

Name:	Kathy J. Albin	**Agency:**	Health
Phone Number:	328.4542	**Date Prepared:**	03/01/2007

FISCAL NOTE

Requested by Legislative Council
02/15/2007

REVISION

Amendment to: HB 1154

1A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

	2005-2007 Biennium		2007-2009 Biennium		2009-2011 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
Revenues				$32,281		$30,027
Expenditures				$32,281		$30,027
Appropriations						

1B. **County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

2005-2007 Biennium			2007-2009 Biennium			2009-2011 Biennium		
Counties	Cities	School Districts	Counties	Cities	School Districts	Counties	Cities	School Districts

2A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

This bill requires the Department of Health to regulate tanning facilities within the state of North Dakota. Currently this group of providers is not regulated. The costs included in this fiscal note include staff time for rules development and inspection of approximately 250 tanning facilities.

B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

There is no mention in the proposed legislation that inspections of tanning facilities are mandated with passage of the law. However, the department is mandated to enforce the provisions of the law and any rules promulgated to further enforce. In order to enforce this chapter the department would need to conduct routine inspections. For purposes of this fiscal note, I used one annual inspection as a basis for inspection and permitting costs. Two inspections per year would not be out of line.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*
   A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

This bill allows the department to establish a fee for a permit to operate a tanning facility. Included in Engrossed HB 1004 is language that allows these fees to be deposited into the department's operating fund similar to our food and lodging inspection fees.

B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

During the 2007-2009 biennium, it is anticipated that it will take approximately 1,180 hours per biennium of staff time or about a .5 FTE for rules development, implementation, salary and operating costs. It is anticipated that the costs during the 2007-2009 biennium would be $32,281.

As development will occur prior to the 2009-2011 biennium, it is anticipated that the expenditures for ongoing operation of this program will be approximately $30,027 for the biennium.

C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and appropriations. Indicate whether the appropriation is also included in the executive budget or relates to a*

continuing appropriation.

Funds for this project are included in the Department's Appropriation bill (Engrossed HB 1004) as amended by the House.

Name:	Kathy J. Albin	**Agency:**	Health
Phone Number:	328.4542	**Date Prepared:**	02/16/2007

FISCAL NOTE

Requested by Legislative Council
02/05/2007

Amendment to: HB 1154

1A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

	2005-2007 Biennium		2007-2009 Biennium		2009-2011 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
Revenues			$32,281		$30,027	
Expenditures			$32,281		$30,027	
Appropriations						

1B. **County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

2005-2007 Biennium			2007-2009 Biennium			2009-2011 Biennium		
Counties	Cities	School Districts	Counties	Cities	School Districts	Counties	Cities	School Districts

2A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

This bill requires the Department of Health to regulate tanning facilities within the state of North Dakota. Currently this group of providers is not regulated. The costs included in this fiscal note include staff time for rules development and inspection of approximately 250 tanning facilities.

B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

There is no mention in the proposed legislation that inspections of tanning facilities are mandated with passage of the law. However, the department is mandated to enforce the provisions of the law and any rules promulgated to further enforce. In order to enforce this chapter the department would need to conduct routine inspections. For purposes of this fiscal note, I used one annual inspection as a basis for inspection and permitting costs. Two inspections per year would not be out of line

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*
   A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

This bill allows the department to establish a fee for a permit to operate a tanning facility. Since the bill is silent with regard to the deposit of that fee, it would be deposited into the general fund. An alternative to this would be to deposit these fees into the department's operating fund similar to our food and lodging inspection fees.

B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

During the 2007-2009 biennium, it is anticipated that it will take approximately 1,180 hours per biennium of staff time or about a .5 FTE for rules development, implementation, salary and operating costs. It is anticipated that the costs during the 2007-2009 biennium would be $32,281.

As development will occur prior to the 2009-2011 biennium, it is anticipated that the expenditures for ongoing operation of this program will be approximately $30,027 for the biennium.

C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and appropriations. Indicate whether the appropriation is also included in the executive budget or relates to a*

continuing appropriation.

Funds for this project are not included in the Department's Appropriation bill (HB 1004). The department would need these funds appropriated as well as a .5 FTE to carry out these responsibilities. If the department obtains authority to deposit the fees into the department's operating fund a special fund appropriation would be needed rather than a general fund appropriation.

Name:	Kathy J. Albin	**Agency:**	Health
Phone Number:	328.4542	**Date Prepared:**	01/05/2007

FISCAL NOTE

Requested by Legislative Council
01/05/2007

Bill/Resolution No.: HB 1154

1A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

	2005-2007 Biennium		2007-2009 Biennium		2009-2011 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
Revenues			$74,583		$77,003	
Expenditures			$74,583		$77,003	
Appropriations						

1B. **County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

2005-2007 Biennium			2007-2009 Biennium			2009-2011 Biennium		
Counties	Cities	School Districts	Counties	Cities	School Districts	Counties	Cities	School Districts

2A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

This bill requires the Department of Health regulate tanning facilities within the state of North Dakota. Currently this group of providers is not regulated. The costs included in this fiscal note include staff time for rules development and inspection of approximately 650 tanning facilities.

B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

There is no mention in the proposed legislation that inspections of tanning facilities are mandated with passage of the law. However, the department is mandated to enforce the provisions of the law and any rules promulgated to further enforce. In order to enforce this chapter the department would need to conduct routine inspections. For purposes of this fiscal note, I used one annual inspection as a basis for inspection and permitting costs. Two inspections per year would not be out of line

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*
   A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

A fee for a permit to operate a tanning facility is not addressed in this bill; however it does allow the department to establish a fee. We would collect a fee that would be equal to the cost of the program. The revenue would be deposited into the general fund. An alternative to this would be to deposit these fees into the department's operating fund similar to our food and lodging inspection fees.

B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

During the 2007-2009 biennium, it is anticipated that it will take approximately 2,800 hours per biennium of staff time or about a .75 FTE for rules development, implementation, salary and operating costs. It is anticipated that the costs during the 2007-2009 biennium would be $74,583.

As development will occur prior to the 2009-2011 biennium, it is anticipated that the expenditures for ongoing operation of this program will be approximately $77,003 for the biennium.

C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and*

appropriations. Indicate whether the appropriation is also included in the executive budget or relates to a continuing appropriation.

Funds for this project are not included in the Department's Appropriation bill (HB 1004). The department would need these funds appropriated as well as a .75 FTE to carry out these responsibilities.

Name:	Kathy J. Albin	**Agency:**	Health
Phone Number:	328.4542	**Date Prepared:**	01/09/2007

PROPOSED AMENDMENTS TO HOUSE BILL NO. 1154

On page 3, remove lines 8 and 9

On page 3, line 10, remove "replaced."

On page 3, line 11, after "replaced" insert ", and that record shall be made readily available to any customer who requests that information"

On page 3, remove lines 19 and 20 and insert the following:

a. A customer under eighteen years of age shall not be permitted to use the tanning facility until such customer provides the facility with written consent, in a form prescribed by the Department, of a parent or legal guardian to use such tanning facility. The consent shall indicate that the parent or guardian has read the warnings required by this chapter and that the customer agrees to wear protective eyewear. The parent or legal guardian shall sign the consent form in the presence of the owner of the tanning facility or an employee responsible for the operation of the ultraviolet radiation device of the facility. The written consent form shall expire 12 months from the date signed. No customers under the age of 14 shall be allowed to utilize a tanning device at a tanning facility without a written order from a physician licensed in this state and customers under the age of 14 must be accompanied by a parent or legal guardian for every use of the tanning facility.

On page 3, line 28, remove "A customer, before using a tanning device, is provided with properly" with "Properly"

On page 3, line 27 after "balance" insert "is made available to the customer"

On page 3, line 28 replace "uses" with "agrees to use FDA approved"

How the amendments will look in text

Amendment number 1. Subsection 4 on line 8 will become:

4. The tanning facility shall maintain a record of the date on which each fluorescent tube is replaced and that record shall be made readily available to any customer who requests that information.

Amendment number 2. Subsection 1.a. on lines 19 and 20 of page 3 will become:

b. A customer under eighteen years of age shall not be permitted to use the tanning facility until such customer provides the facility with written consent, in a form prescribed by the Department, of a parent or legal guardian to use such tanning facility. The consent shall indicate that the parent or guardian has read the warnings required by this chapter and that the customer agrees to wear protective eyewear. The parent or legal guardian shall sign the consent form in the presence of the owner of the tanning facility or an employee responsible for the operation of the ultraviolet radiation device of the facility. The written consent form shall expire 12 months from the date signed. No customers under the age of 14 shall be allowed to utilize a tanning device at a tanning facility without a written order from a physician licensed in this state and customers under the age of 14 must be accompanied by a parent or legal guardian for every use of the tanning facility.

Amendment number 3. Subsection 1.d. on lines 25 through 27 of page 3 will become:

d. Properly sanitized securely fitting protective eyewear that protects the wearer's eyes from ultraviolet radiation and allows enough vision to maintain balance is made available to the customer.

Amendment number 4. Subsection 1.e. on lines 28 and 29 of page 3 will become:

e. A customer is not allowed to use a tanning devise unless the customer agrees to use FDA approved protective eyewear.

Explanation of amendments

Amendment number 1: It is unclear what public health benefit would be arrived from posting the date on which the fluorescent bulbs were replaced. Because the bulbs become less intense with age, this subsection appears to be an increased regulation without any benefit to the public. The facilities are willing to maintain a log as to when the bulbs were replaced and make that information available to customers who are interested. This appears to be a good compromise.

Amendment number 2. The reasons for this amendment were discussed in the original testimony will not be repeated here. This proposed amendment is not identical to the amendment proposed in the original testimony. Rather this amendment addresses some of the comments that were made by the committee. In explanation, any customer 14 to 18 years of age would not be permitted to use a tanning device at a tanning facility unless that customer had the written consent of his or her parent or legal guardian. The amendment requires that that consent be given in writing in the presence of the owner of the facility or an employee and that the written consent will expire after 12 months. The initial amendment created a complete prohibition on the use of these devices by customers under the age of 14. However, I have since learned that occasionally physicians, for medical reasons, will recommend patients under the age of 14 use tanning devices. This amendment would allow customers under the age of 14 only with the written order of a licensed physician and only if that customer under the age of 14 was accompanied by a parent or legal guardian at every use.

Amendment number 3. This amendment clarifies that tanning facilities are not required to provide protective eyewear free of charge. Rather than using the words "provided with", the amendment requires that eyewear "be made available to the customer." This amendment addresses the health concerns of protective eyewear without putting an additional financial burden on the facilities.

Amendment number 4 This amendment clarifies that the customers must agree to use FDA approved protective eyewear

Prepared by the Legislative Council staff for
Senator Kilzer
January 9, 2007

PROPOSED AMENDMENTS TO HOUSE BILL NO. 1154

Page 4, after line 26, insert:

"**23-39-07. Exception.** Notwithstanding section 23-39-05, a customer under the age of sixteen may use a tanning facility if the use is under the order of a physician and the physician, tanning facility, and customer comply with an authorization protocol established by the department."

Page 4, line 27, replace "**23-39-07**" with "**23-39-08**"

Renumber accordingly

Date: 1/16
Roll Call Vote #: 1

2007 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. "Click here to type Bill/Resolution No."

House HUMAN SERVICES HB 1154 Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number

Action Taken Move Amendments ~~of addition~~ Pass.

Motion Made By Conrad Seconded By Weisz

Representatives	Yes	No	Representatives	Yes	No
Clara Sue Price – Chairman			Kari L Conrad		
Vonnie Pietsch – Vice Chairman			Lee Kaldor		
Chuck Damschen			Louise Potter		
Patrick R. Hatlestad			Jasper Schneider		
Curt Hofstad					
Todd Porter					
Gerry Uglem					
Robin Weisz					

Total (Yes) "Click here to type Yes Vote" 14 All No "Click here to type No Vote"

Absent

Floor Assignment

If the vote is on an amendment, briefly indicate intent:

Date: 1/14
Roll Call Vote #: 2

2007 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. "Click here to type Bill/Resolution No."

House HUMAN SERVICES HB 1154 Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number

Action Taken Move Page 2 21422 - Amendments

Motion Made By Porter Seconded By Weisz

Representatives	Yes	No	Representatives	Yes	No
Clara Sue Price – Chairman			Kari L Conrad		
Vonnie Pietsch – Vice Chairman			Lee Kaldor		
Chuck Damschen			Louise Potter		
Patrick R. Hatlestad			Jasper Schneider		
Curt Hofstad					
Todd Porter					
Gerry Uglem					
Robin Weisz					

Total (Yes) "Click here to type Yes Vote" No "Click here to type No Vote"

Absent

Floor Assignment

If the vote is on an amendment, briefly indicate intent:

Date: 1/16
Roll Call Vote #: 3

2007 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. "Click here to type Bill/Resolution No."

House HUMAN SERVICES HB 1154 Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number

Action Taken Amend the Amendment

Motion Made By U. Glem Seconded By Porter

Representatives	Yes	No	Representatives	Yes	No
Clara Sue Price – Chairman		✓	Kari L Conrad		✓
Vonnie Pietsch – Vice Chairman	✓		Lee Kaldor		
Chuck Damschen		✓	Louise Potter		✓
Patrick R. Hatlestad		✓	Jasper Schneider	✓	✓
Curt Hofstad		✓			
Todd Porter	✓				
Gerry Uglem	✓				
Robin Weisz		✓			

Total (Yes) "Click here to type Yes Vote" 3 No "Click here to type No Vote" 8

Absent 1

Floor Assignment

If the vote is on an amendment, briefly indicate intent:

Amendment failed

Adopted by the Human Services Committee
January 17, 2007

House Amendments to HB 1154 (70432.0102) - Human Services Committee 01/17/2007

Page 1, line 13, after "including" insert "food and drug administration-approved"

House Amendments to HB 1154 (70432.0102) - Human Services Committee 01/17/2007

Page 2, line 27, after "Wear" insert "food and drug administration-approved"

House Amendments to HB 1154 (70432.0102) - Human Services Committee 01/17/2007

Page 3, line 8, remove "A tanning facility shall post a sign in each area where a tanning device is used"

Page 3, remove line 9

Page 3, line 10, remove "replaced."

Page 3, line 11, after "replaced" insert "and that record must be made readily available to any customer who requests the information"

Page 3, line 19, replace "sixteen" with "eighteen" and replace "is not" with "may not be"

Page 3, line 20, after "facility" insert "until the customer provides the facility with written consent, in a form prescribed by the department, of a parent or legal guardian to use the tanning facility. The consent must indicate that the parent or legal guardian has read the warnings required by this chapter and that the customer agrees to wear food and drug administration-approved protective eyewear. The parent or legal guardian shall provide a notarized statement of consent or sign the consent form in the presence of the owner of the tanning facility or an employee responsible for the operation of the ultraviolet radiation device of the facility. The written consent form expires twelve months from the date signed. A customer under the age of fourteen years may not be allowed to utilize a tanning device at a tanning facility without a written order from a physician licensed in this state and without being accompanied by a parent or legal guardian for every use of the tanning facility"

Page 3, line 25, replace "A customer, before using a tanning device, is provided with properly" with "Properly"

Page 3, line 26, after "fitting" insert "food and drug administration-approved"

Page 3, line 27, after "balance" insert "is made available to the customer"

Page 3, line 28, replace "uses" with "agrees to use food and drug administration-approved"

House Amendments to HB 1154 (70432.0102) - Human Services Committee 01/17/2007

Page 4, line 21, after "use" insert "food and drug administration-approved"

Page 4, line 22, after "Use" insert "food and drug administration-approved"

Page 4, line 24, after the underscored comma insert "any physician, medical professional, or"

Renumber accordingly

Date: 1/16
Roll Call Vote #: 4

2007 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. "Click here to type Bill/Resolution No."

House HUMAN SERVICES HB 1154 Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number

Action Taken Move Include report;

Motion Made By Porter Seconded By Hatlestad

Representatives	Yes	No	Representatives	Yes	No
Clara Sue Price – Chairman			Kari L Conrad		
Vonnie Pietsch – Vice Chairman			Lee Kaldor		
Chuck Damschen			Louise Potter		
Patrick R. Hatlestad			Jasper Schneider		
Curt Hofstad					
Todd Porter					
Gerry Uglem					
Robin Weisz					

Total (Yes) 14 11 No 0

Absent

Floor Assignment

If the vote is on an amendment, briefly indicate intent:

Date: 1/14
Roll Call Vote #: 5

2007 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. "Click here to type Bill/Resolution No."

House HUMAN SERVICES HB 1154 Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number

Action Taken Move do pass as amended

Motion Made By Rep Schneider Seconded By Rep. Conrad

Representatives	Yes	No	Representatives	Yes	No
Clara Sue Price – Chairman	✓		Kari L Conrad	✓	
Vonnie Pietsch – Vice Chairman	✓		Lee Kaldor		
Chuck Damschen		✓	Louise Potter	✓	
Patrick R. Hatlestad	✓		Jasper Schneider	✓	
Curt Hofstad	✓				
Todd Porter		✓			
Gerry Uglem	✓				
Robin Weisz		✓			

Total (Yes) 8 No 3

Absent 1

Floor Assignment Rep. Schneider.

If the vote is on an amendment, briefly indicate intent:

Request Appropriation.

REPORT OF STANDING COMMITTEE

HB 1154: Human Services Committee (Rep. Price, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (8 YEAS, 3 NAYS, 1 ABSENT AND NOT VOTING). HB 1154 was placed on the Sixth order on the calendar.

Page 1, line 13, after "including" insert "food and drug administration-approved"

Page 2, line 27, after "Wear" insert "food and drug administration-approved"

Page 3, line 8, remove "A tanning facility shall post a sign in each area where a tanning device is used"

Page 3, remove line 9

Page 3, line 10, remove "replaced."

Page 3, line 11, after "replaced" insert "and that record must be made readily available to any customer who requests the information"

Page 3, line 19, replace "sixteen" with "eighteen" and replace "is not" with "may not be"

Page 3, line 20, after "facility" insert "until the customer provides the facility with written consent, in a form prescribed by the department, of a parent or legal guardian to use the tanning facility. The consent must indicate that the parent or legal guardian has read the warnings required by this chapter and that the customer agrees to wear food and drug administration-approved protective eyewear. The parent or legal guardian shall provide a notarized statement of consent or sign the consent form in the presence of the owner of the tanning facility or an employee responsible for the operation of the ultraviolet radiation device of the facility. The written consent form expires twelve months from the date signed. A customer under the age of fourteen years may not be allowed to utilize a tanning device at a tanning facility without a written order from a physician licensed in this state and without being accompanied by a parent or legal guardian for every use of the tanning facility"

Page 3, line 25, replace "A customer, before using a tanning device, is provided with properly" with "Properly"

Page 3, line 26, after "fitting" insert "food and drug administration-approved"

Page 3, line 27, after "balance" insert "is made available to the customer"

Page 3, line 28, replace "uses" with "agrees to use food and drug administration-approved"

Page 4, line 21, after "use" insert "food and drug administration-approved"

Page 4, line 22, after "Use" insert "food and drug administration-approved"

Page 4, line 24, after the underscored comma insert "any physician, medical professional, or"

Renumber accordingly

2007 HOUSE APPROPRIATIONS

HB 1154

2007 HOUSE STANDING COMMITTEE MINUTES

Bill/Resolution No. HB 1154

House Appropriations Committee

☐ Check here for Conference Committee

Hearing Date: January 29, 2007

Recorder Job Number: 2202

Committee Clerk Signature Shirley Branning

Minutes:

Chm. Svedjen called the meeting to order to take up HB 1154, a bill relating to regulation of tanning facilities by calling on **Rep. Clara Sue Price**, District 40 to explain the bill.

Rep. Price: This bill developed as a result of dermatologists in the area who want regulations for the tanning facilities. What is in front of you is what the policy committee set forth.

Chm. Svedjen asked **Rep. Price** to explain the bill amendment.

Rep. Price: The fiscal part of this is the regulation of facilities, permit fees, health inspections on a state wide basis. We added approved eye wear, age of permission.

Rep. Kempenich: Is there any duplication?

Rep. Wald: How are they regulated now?

Rep. Price: They are not, but possibly in larger communities. Some of the owners already have rules in place. A recommendation to pass this bill was made.

Rep. Klein moved a Do Pass to HB 1154. Rep. Carlisle seconded the motion. The Do Pass motion carried by a roll call vote of 17 yeas, 6 nay and 1 absent and not voting. Rep Schneider will be the carrier of the bill.

Date: January 29, 2007
Roll Call Vote #: 1

2007 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 1154

House Appropriations Full Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number ———

Action Taken Do Pass as engrossed

Motion Made By Klein Seconded By Carlisle

Representatives	Yes	No	Representatives	Yes	No
Chairman Svedjan	✓				
Vice Chairman Kempenich	✓				
Representative Wald	✓		Representative Aarsvold	✓	
Representative Monson	—		Representative Gulleson	✓	
Representative Hawken	✓				
Representative Klein	✓				
Representative Martinson	✓				
Representative Carlson		✓	Representative Glassheim	✓	
Representative Carlisle	✓		Representative Kroeber	✓	
Representative Skarphol		✓	Representative Williams	✓	
Representative Thoreson		✓			
Representative Pollert		✓	Representative Ekstrom	✓	
Representative Bellew		✓	Representative Kerzman	✓	
Representative Kreidt		✓	Representative Metcalf	✓	
Representative Nelson	✓				
Representative Wieland	✓				

Total (Yes) 17 No 6

Absent 1

Floor Assignment R. Schneider

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

HB 1154, as engrossed: Appropriations Committee (Rep. Svedjan, Chairman) recommends **DO PASS** (17 YEAS, 6 NAYS, 1 ABSENT AND NOT VOTING). Engrossed HB 1154 was placed on the Eleventh order on the calendar.

2007 SENATE HUMAN SERVICES

HB 1154

2007 SENATE STANDING COMMITTEE MINUTES

Bill/Resolution No. HB 1154

Senate Human Services Committee

☐ Check here for Conference Committee

Hearing Date: 2-27-07

Recorder Job Number: 3943, 4023

Committee Clerk Signature Mary K Monson

Minutes:

Chairman Senator J. Lee opened the hearing on HB 1154 relating to regulation of tanning facilities; and to provide a penalty.

Representative George Keiser (District #47) introduced HB 1154. His dermatologist brought this issue to him. All the dermatologists in the state have a strong sense of passion for this issue because on a daily basis they see and treat melanoma. He gave an overview of the bill. It deals with the regulation of tanning facilities and it provides a penalty (meter 03:34).

The heart of this bill and the major concern deals with lines 20-21 on page 23. Originally the bill was modeled after the Wisconsin legislation which said under a certain age you cannot use tanning facilities. The House modified this on lines 20-21 saying that a customer under 18 years of age may not be permitted to use the tanning facility until the customer provides the facility with written consent from their parent or guardian.

On page 5 the House added lines 5-9 dealing with injury reports.

Senator Heckaman – How may tanning beds in ND operate under permits and how many don't?

Rep. Keiser – Currently, there is no permitting process, no licensing process.

Senator Heckaman – So this would start the licensing process?

Rep. Keiser - This would start the licensing and permitting process.

Senator Warner – Does the Dept. of Health have any sanitation requirements for tanning parlors?

Rep. Keiser – This is an unregulated industry and there is an appropriation on this bill to implement this type of monitoring.

Senator Dever addressed the injury reports. Medical attention is a long term thins isn't it – regarding tanning. Isn't that the whole point of the whole bill?

Rep. Keiser – Yes, it is the intent of the whole bill. But, I believe, if you burn your eye, you will seek immediate attention.

Senator Ralph Kilzer (District #47) testified in support of HB 1154. Tanning booths have increased five fold since 1992. They are a $5 billion a year business now and there is no regulation. About half of the states do have some level of regulation. Tanning machines can emit up to 15 x's the concentration of bright sunlight. There is a significant risk of melanoma, especially in people who receive excess exposure in life. The early and middle teens are more likely to develop melanoma. Approximately 10,000 cases of skin cancer deaths occur in the U.S. per year and close to 8,000 of those are melanoma.

Senator Warner asked if there are any medical procedures that rely on tanning.

Sen. Kilzer – Yes, there are some inflammatory disorders that dermatologists do treat with ultraviolet. That would normally be done with a sun lamp in the dermatologist's office.

Senator J. Lee – Talked about prescription drugs that react with the sun. She asked if those with northern European ancestry would have more sensitivity to the sun.

Sen. Kilzer responded yes they are more sensitive. He said the interaction with drugs cuts across all the different classes where one or two out of each class will be sensitive.

Senator Dever asked if the light intensity in the tanning bed and sun are different.

Sen. Kilzer said there is a difference in the exposure because there is more ultraviolet in the lamps than in the sun.

Senator Dever – Is tanning basically cooking?

Sen. Kilzer – Yes tanning is basically burning.

Dr. William Cornatzer (Board Certified Dermatologist, Bismarck) testified in favor of HB 1154. (Meter 23:25) He and his son were the ones who initially brought this issue to Rep. Keiser. In answer to the question by Senator Dever he said it is not really cooking. It is radiation. What everyone needs to understand is that ultraviolet light is a form of radiation.

The tanning bed industry is not against the general regulations in this bill which will hopefully protect people from getting accidentally burned from taking medicines. There are about 100 different drugs that can cause photosensitivity reactions. Over a thousand hospitalizations yearly in the U.S. from second and third degree burns from people going to tanning beds not knowing they shouldn't be in there because of being on certain medications.

This is a general health risk.

The major reason for this bill is the increased number of cases of melanomas. These were rare cancers 25-30 years ago. It is now the most rapidly increasing cancer in the U.S. Dermatologist believes it is from increased radiation of the skin from various methods, one being exposure to tanning beds or UVA exposure as young adults.

(Meter 28:30) He referred to a long term women's health study in Norway. They have shown that women that go to tanning beds as teenagers have an 80% higher chance of getting a melanoma later in life.

In respect to the amendment he would like what the world health organization has in their position statement, that is, no one under the age of 18 should be allowed to go to a tanning bed. He would be happy with the amendment as it is with written parental consent or

notarization if the parent that is not there. He asked the committee to not change it from the House version.

He provided packet of patient and study information for the record (Attachment #1).

Senator Warner asked about a customer under the age of 14 on page 3 of the bill and if he prescribes.

Dr. Cornatzer said he prescribes ultraviolet light all the time. He has a UVB emitting light box in his office which he treats conditions such as psoriasis and eczema. Unfortunately in ND it's not easy for a person to get to a dermatologist easily for daily treatments. There is, theoretically, a reason where a doctor would have a young child go to a tanning bed to get UVA light which is not as effective treatment for the skin conditions as the UVB light. But, if they live 50 or 100 miles away from dermatologist, that is needed in the bill so they could if they need to do this under physician supervision.

Senator Heckaman said she didn't think this would do what they want it to do.

Dr. Cornatzer replied that in Wisconsin said there are more tanning beds in Wisconsin now since their legislation, but they are keeping young children out.

Senator Heckaman asked what happens with this with the home tanning beds.

Dr. Cornatzer thought, unless the service was for sale, it would be exempt.

Senator Dever asked if anything like cosmetology addresses tanning beds.

Dr. Cornatzer said it does not. There is no legislation addressing tanning beds in ND.

Senator Pomeroy asked about tanning one time a year to get ready for the prom and if there were statistics to show what risk that might be.

Dr. Cornatzer said the paper from Norway shows increased risk of melanoma. It is not a one time that makes a person get tan. To get tan for prom they need to go about a month ahead of time several times a week. He addressed other options for tanning.

Senator Dever asked if there was any history of injuries in ND.

Heidi Hietkamp (Indoor Tanning Association) testified in support of HB 1154 and to protect children. The age limitation was her only real concern.

She suggested that if the committee feels strongly that these are dangerous then maybe they should be banned for everyone (meter 43:20)

In response to Dr. Cornatzer, she had some information to give concerning studies. When you look at all of the studies four out of the twenty that have been peer reviewed, that have been recognized medically, only indicate that there is some concern about tanning beds. There is a number of studies which would contradict that.

She also had a report from a number of physicians taking a look at the increases in melanoma in American who would tell you that is the screening process.

She also takes issue that all melanomas are driven by UV rays.

She said she was they could agree to regulation and the bill as it is currently set forth. They believe the age limitations are appropriate, parents need to be involved, and young people may need to make up their own mind about what they are going to do.

Senator Warner referred to page 2 about a tanning facility "may not partake in any advertising that the tanning facility holds the license or permit issued by the Dept. to operate the tanning facility." That seems very counter intuitive.

Ms. Heitkamp – It's actually not because, in advertising, frequently if you say "I have a license, it somehow implies that it is safe and you don't have to use independent judgment.

Senator Warner – Couldn't you make a counter argument that if the regulations involved in this bill have any weight whatsoever that tanning bed would be safer than one that is not licensed.

Ms. Heitkamp – After this legislation all tanning beds would be regulated so no one would have that advantage in business.

Senator Dever – With liability concerns for manufacturers and those kinds of thing, are they careful with whom they sell tanning beds to?

Ms. Heitkamp – All tanning beds are regulated by the FDA. FDA has standards on how these beds should be maintained which is another reason why there isn't a big push to not have any regulation. There is already a fairly large amount of federal regulation. Right now there is no enforcement. This bill would provide for that enforcement in ND through the Health Department and through the local health units.

Senator Dever – It sounds like any one can operate these facilities.

Ms. Heitkamp – Any person who wants to go into this business who has the money can pursue it. What this regulation will do is eliminate the fly by nights who don't want to maintain sanitary conditions and their tanning facilities in a way that could mesh with this regulation.

There was no opposing testimony.

Kenan Bullinger (ND Department of Health) testified in a neutral manner and provided information on the fiscal impacts. (Attachment #2)

(Meter 56:20) He answered questions that were asked earlier about sanitation requirements.

Senator J. Lee asked if the amendment added to 1004 covered his concern adequately that he expressed on the bottom of page one of his testimony.

Mr. Bullinger – Yes.

Senator Dever – Do you regulate now or inspect some facilities that offer these services.

Mr. Bulling – A lot of times they are in beauty salons, fitness centers, etc. Not the facilities they regulate now.

Senator Warner – On page 3, line 11, dealing with bulbs, I assume these bulbs are at their maximum strength when new and decrease in power as they grow old. Would that be a fair assumption?

Mr. Bullinger – I'm not real sure. I assume they are replaced either if they burn out or lose their intensity.

Senator Warner – Would you anticipate your department would be charged with having a device to measure the intensity of the rays?

Mr. Bullinger – We'll certainly look into that. That bill does provide some authority to promulgate rules.

Senator Dever – The amendment put on HB1004 – should we put that in to this bill?

Mr. Bullinger – Certainly that is an option.

The hearing on HB 1154 was closed.

JOB #4023

Senator J. Lee opened HB 1154 for discussion.

Senator Heckaman – I look at this bill as a bill to license and regulate the industry than as a deterrent for young people, because the mothers are still going to sign.

Senator Warner had some discomfort with the bottom on page 3 requiring a prescription for a 14 year old to be tanned.

Senator J. Lee viewed it differently and thought it meant that they didn't want anyone under 14 having it done and the only exception would if it would be used in conjunction with some kind of appropriate medical treatment.

There was some discussion on medical reasons for tanning and the difference between UVA and UVB bulbs.

Senator J. Lee asked if the committee thought it was appropriate to amend the Department of Health amendment about license fees on to HB 1154. Discussion followed.

Senator Heckaman moved to accept the amendment about the license fee.

Senator Warner seconded the motion. Roll call vote 6-0-0. Amendment accepted.

Discussion continued on other possible amendments such as deleting the wording for those under the age of 14 years. This would be weakening the bill.

There was also discussion on not including private residences and also language dealing with public, business, and commercial.

Senator Warner moved a Do Pass on engrossed HB 1154 as amended and rerefer to Appropriations.

Motion seconded by Senator Heckaman.

Roll call vote 6-0-0. Carrier is Senator Dever.

70432.0201
Title.0300

Adopted by the Human Services Committee
February 27, 2007

2-27-07

PROPOSED AMENDMENTS TO ENGROSSED HOUSE BILL NO. 1154

Page 1, line 18, after the second underscored boldfaced period insert:

"1."

Page 1, line 21, replace "expired" with "expire"

Page 2, line 2, after the underscored period insert:

"2. The permit fee established by the department must be based on the cost of conducting routine and complaint inspections and enforcement actions and the cost of preparing and sending license renewals. Any fee collected under this section must be deposited in the department's operating fund in the state treasury and any expenditure from the fund is subject to appropriation by the legislative assembly. The department shall waive all or a portion of the permit fee for any tanning facility that is subject to local jurisdiction.

3. The department shall accept city or county enforcement of this chapter if the department determines the city or county requirements meet or exceed the requirements of this chapter and any rules adopted under this chapter."

Renumber accordingly

Date: 2-27-07

Roll Call Vote #: 1

2007 SENATE STANDING COMMITTEE ROLL CALL VOTES

BILL/RESOLUTION NO. HB 1154

Senate **HUMAN SERVICES** Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken amendment - license fees

Motion Made By Sen. Heckaman Seconded By Sen. Warner

Senators	Yes	No	Senators	Yes	No
Senator Judy Lee, Chairman	✓		Senator Joan Heckaman	✓	
Senator Robert Erbele, V. Chair	✓		Senator Jim Pomeroy	✓	
Senator Dick Dever	✓		Senator John M. Warner	✓	

Total (Yes) 6 No 0

Absent 0

Floor Assignment _____

If the vote is on an amendment, briefly indicate intent:

Date: 2-27-07

Roll Call Vote #: 2

2007 SENATE STANDING COMMITTEE ROLL CALL VOTES

BILL/RESOLUTION NO. HB 1154

Senate **HUMAN SERVICES** Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number 70432.0201 Title: 0300

Action Taken Do Pass / amended / rerefer

Motion Made By Sen. Warner Seconded By Sen. Heckaman

Senators	Yes	No	Senators	Yes	No
Senator Judy Lee, Chairman	✓		Senator Joan Heckaman	✓	
Senator Robert Erbele, V. Chair	✓		Senator Jim Pomeroy	✓	
Senator Dick Dever	✓		Senator John M. Warner	✓	

Total (Yes) 6 No 0

Absent 0

Floor Assignment Senator Dever

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

HB 1154, as engrossed: Human Services Committee (Sen. J. Lee, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** and **BE REREFERRED** to the **Appropriations Committee** (6 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). Engrossed HB 1154 was placed on the Sixth order on the calendar.

Page 1, line 18, after the second underscored boldfaced period insert:

"1."

Page 1, line 21, replace "expired" with "expire"

Page 2, line 2, after the underscored period insert:

"2. The permit fee established by the department must be based on the cost of conducting routine and complaint inspections and enforcement actions and the cost of preparing and sending license renewals. Any fee collected under this section must be deposited in the department's operating fund in the state treasury and any expenditure from the fund is subject to appropriation by the legislative assembly. The department shall waive all or a portion of the permit fee for any tanning facility that is subject to local jurisdiction.

3. The department shall accept city or county enforcement of this chapter if the department determines the city or county requirements meet or exceed the requirements of this chapter and any rules adopted under this chapter."

Renumber accordingly

2007 SENATE APPROPRIATIONS

HB 1154

2007 SENATE STANDING COMMITTEE MINUTES

Bill/Resolution No. 1154

Senate Appropriations Committee

☐ Check here for Conference Committee

Hearing Date: 03-08-07

Recorder Job Number: 4658

Committee Clerk Signature

Minutes:

Vice Chairman Bowman opened the hearing on HB 1154.

Senator Ralph Kilzer, District 47, Bismarck, introduced HB 1154 indicating it is a bill on tanning equipment regulations. He stated that the focus of the bill today is completely different then when it was introduced. The bill was brought about because of the issue of skin cancer, the lack of regulations on tanning machines. The engrossed bill brings the tanning industry under surveillance of the State Health Department who will also talk.

Senator Bowman asked if there will be a fee charged and will there be a sticker or something indicating the business is abiding by the regulations. The response was yes there will be a permit fee and the appropriated amount may be covered by those fees.

Senator Lindaas asked if there is skin cancer because of the overuse of the equipment. The response was there are three types of cancer that can result; squamous cell carcinoma and basil cell carcinoma which are generally found early. The cancer that is most worrisome is the melanoma. Sweden, for instance, has proven conclusively there is a relationship between cancer and tanning booths. There is definitely a cause and effect relationship.

Tannon Bullinger, State Health Department, testified neutrally on HB 1154, indicating the fiscal note involves only the cost to the State Health Department to set up a license and inspection.

Senator Robinson asked is it my understanding that up to now there have been no regulations in place, they are pretty much unregulated. The response was yes that is correct. He stressed that 19-20 other states do have regulations.

Senator Bowman asked what the liability to the state is if the regulators say the business is ok and someone gets cancer. The response indicated they will work hard so those in the industry will monitor usage.

Lauren Terveen, student, representing herself asked whether there will be age limits in the use of tanning machines. The response was yes those under age 14 cannot use the equipment, those ages 14-18 need permission from a parent.

Courtney Hinkle, Student, Valley City, testified indicating it is appropriate to have this legislation but stressed not all teens are irresponsible. She asked how the permission status works. The response was that the signatures must be notorized and witnessed in the presence of someone at the facility.

Senator Bowman stressed this is being put in place for the protection of the child or young adult.

Delores Manson, Guidance Counselor, Maple Valley School, testified indicating she is a parent of a 30 plus daughter who did the tanning equipment and has had many spots removed. She believes that had she known the risks at the time, she would have been stricter with her daughter in the use of the equipment.

Vice Chairman Bowman closed the hearing on HB 1154.

2007 SENATE STANDING COMMITTEE MINUTES

Bill/Resolution No. 1154

Senate Appropriations Committee

☐ Check here for Conference Committee

Hearing Date: 03-08-07

Recorder Job Number: 4742

Committee Clerk Signature Alice Delzer

Minutes:

Chairman Holmberg opened the hearing on HB 1154 regarding tanning facilities. Discussion followed.

Senator Bowman stated that earlier testimony by mother of woman who developed skin cancer has convinced him to vote on this bill.

Senator Lindaas moved a DO PASS, Senator Krebsbach seconded. There was further discussion concerning the reason the bill was in their committee and Senator Kilzer confirmed it was because of the fiscal note.

Senator Christmann stated he would vote against the bill as he felt kids will still go outside the first hot day and get sunburned anyway so he is not convinced that this bill will solve any of these issues. **A roll call votge was taken resulting in 132 yeas, 1 nay, 0 absent. The motion carried. Senator Dever from HMS will carry the bill.**

The hearing on HB 1154 closed.

Date: 3-8-07
Roll Call Vote #: 1

2007 SENATE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 1154

Senate Appropriations Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number

Action Taken do pass ~~Do Not Pass~~

Motion Made By Lindaas Seconded By Krebsbach

Senators	Yes	No	Senators	Yes	No
Chairman Ray Holmberg	✓		Senator Aaron Krauter	✓	
Vice Chairman Bill Bowman	✓		Senator Elroy N. Lindaas	✓	
Vice Chairman Tony Grindberg	✓		Senator Tim Mathern	✓	
Senator Randel Christmann	✓	✓	Senator Larry J. Robinson	✓	
Senator Tom Fischer	✓		Senator Tom Seymour	✓	
Senator Ralph L. Kilzer	✓		Senator Harvey Tallackson	✓	
Senator Karen K. Krebsbach	✓				
Senator Rich Wardner	✓				

Total (Yes) 13 No 1

Absent 0

Floor Assignment Hms. Dever

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

HB 1154, as engrossed and amended: Appropriations Committee (Sen. Holmberg, Chairman) recommends **DO PASS** (13 YEAS, 1 NAY, 0 ABSENT AND NOT VOTING). Engrossed HB 1154, as amended, was placed on the Fourteenth order on the calendar.

2007 HOUSE HUMAN SERVICES

CONFERENCE COMMITTEE

HB 1154

2007 HOUSE STANDING COMMITTEE MINUTES

Bill/Resolution No. HB 1154

House Human Services Committee

☒ Check here for Conference Committee

Hearing Date: April 4, 2007

Recorder Job Number: 5739

Committee Clerk Signature Judy Schock

Minutes:

Chairman Pietsch: called the meeting to order, and asks the Senate to explain the amendments.

Senator Dever: first was to correct a grammatical mistake to replace the word expired with expire. As we did with the tattoo parlors initiate the same language involving the fees for the department of health to collect, and also to indicate the cities and counties that do these inspections are acknowledged and they have the authority to do that in place of the department of health.

Representative Porter: I have a couple questions for Mr. Bullinger. On page 1 line 22, would that work better from the departments stand point to put the period after annually and let you guys decide if it will be December of June? On the Senate amendments the sub division 3 that was added on page 2, line 2, number 3, is that language acceptable so that you can pass it to the public health units that just says city or county or do we need to say public health?

Kenan Bullinger, Director of the Division of food and lodging for the ND Department of Health: That would be fine. We do things on a calendar year bases. Your other question that is some what uniform with what we currently have and would be fine. I don't know if all of this will be health, sometimes it gives you the flexibility that it may be some other agency other

than health enforcing this. I think in most cases it will be the local health department. That is uniform with what we currently have in statue for other facilities we license and inspect.

Representative e Schneider: In the same section 3, how many cities or counties do you expect to take over enforcement of this?

Mr. Bullinger: We don't have a number I can only tell you on health units. After the hearing in the original bill I did a poll just to see because our original fiscal note was based on our department doing all the work. We knew after wards maybe the locals were going to be involved as well. 5 out of the 7 that I have MOU's with now would be willing to take on this statutory responsibility should this legislation pass. Those are Fargo, Bismarck, Minot, Mandan, Dickinson, and Jamestown. Devils Lake and Grand Forks are not interested. That is where we adjusted the fiscal note. This is new to all of us. This is not like the tattooing art. It is a ball park estimate on how many facilities are out there. We hear they are all over.

Representative Schneider: Section 3, how many counties do you expect to take over?

Mr. Bullinger: I heard Fargo was thinking of charging on per bed to license. We will talk about should this legislation pass. We will come up with regulations every one can live with. Industry has concerns about per bed because some of the larger firms are very reputable and isn't going to be much need to inspect. It is the other ones that aren't following the law that are going to demand more time and they are not as large. They will get by with a lesser license fee that the reputable firms. If you go per bed charge you may be undue ling putting a high license fee on those that are doing a good job. It is open for discussion. , Our average licensing fee is about 100-$110.00 for restraints, bars, and taverns. Some are a little less and some are higher. A ball park figure is about $100.00.

Representative Porter: Inside of the permanent section of the law than in order to avoid the complications of municipality or public health unit. Under sub division 3 if we said they have to

be licensed by the facility not by the bed, would that take care of concerns in the industry? Right now all we are saying the county has to have the base line of this law; they can do what ever they want. They could even put someone out of business with the fees especially per bed. I guess what it comes down to if we say in that sub division 3 that there can't be a per bed charge, than all you really have to do is just raise their facility charge, or set per facility charge based on the number of beds of so much for so many beds. I don't think we should allow them to do a per bed charge. If they charge 100.00 dollars per bed and someone has 30 beds, their annual license fee would be 3,000 dollars, and really never having to do anything, but to walk in once a year and inspect them. It does see like a potential over burdening on a now unregulated business.

Mr. Bullinger: I agree with you. We have never put limitations on that before, or how they assess their fee. I try to encourage them to be reasonable. On the average they are higher than we are. I don't know if they would be in favor of limitations. I don't have strong feelings one way or the other. I fully understand where you are coming from. Some times I think we need to devise the system of a variegated fee schedule. I don't know how you do it. We may do a flat fee on the state level.

Representative Schneider: In charging per beds I see the republicans adopted those under administrative rules procedure. If the requirements are met or exceed could the county come in and charge a higher rate?

Mr. Bullinger: That is what we do. Right now we do all of our fee settings. Just last session it was changed where they were established in statute. They do not have to go by our fees. Generally the language is they can establish their own fee. We will establish the fee in administrative rule. We don't hold them to our fee that we establish in administrative rule. They are given the flexibility to have more stringent ordinances if they want.

Representative Porter: I would be interested in the department looking at language that would somewhat give us more guidance in how fees will be charged. That there isn't a lot of wiggle room. I also think if we are going into a whole new area with a whole new set of regulations into an industry that not been regulated to this point. We certainly don't want it to be wide open to all of a sudden having undo burden of government and taxes placed upon them.

Senator Dever: I don't see that as necessary at this point. It is something we could do next session if it becomes a problem. I am curious Representative Porter's thinking of language to put in the statute or some guidance to what they would consider to put into rule?

Representative Porter: I think since we are seeing that they can exceed our requirements which do include the freeze to do statute.

Mr. Bullinger: There are still people who input into the fee process. I don't think a local is going to abuse that authority. I am not aware of problems with that in the past. They have the option if the fees are too high to have a local hearing for that ordinance. If you don't put it into statue we certainly will try to address that in the administrative rule. I don't know how to address this, and I fully understand where you are coming from.

Chairman Pietsch: think about the language and we will reschedule. The committee is adjourned.

2007 HOUSE STANDING COMMITTEE MINUTES

Bill/Resolution No. HB 1154

House Human Services Committee

☐ Check here for Conference Committee

Hearing Date: April 6, 2007

Recorder Job Number: 5797

Committee Clerk Signature Judy Schack

Minutes:

Chairman Pietsch: Call the meeting to order for HB 1154. Mr. Bullinger do you mind answering a few questions? We had some discussion you had to take your administrative rules in order for them to be effective. If you could tell us what you have to prepare to take things to the administrative committee.

Kenan Bullinger, Division Food and Lodging of ND Department of Health: Our fees are now are established through the administrative rule process as of 2005 session. They were previously established by statute. Any time we take a look at our fees and whether there is a need to increase we take a look at our cost for administrating the programs that are mandated by law. They are reasonably set, and in some cases may not be as high as they should be. There has been debate in past legislative sessions whether there should be general funds support to our programs, or should they be fully supported by fee. Some legislators have felt that the consumer should pay something for the service we provide. The balance of our budget is through the establishment of fees. We try to set and established fee that is reasonably close to paying for cost of administrative program. The same hold true for the local health department. You asked me to take a look at some amendments. I did draft some amendments. (See attached.) I did copy them to the local health department and at least three

of those responded. They seemed a bit surprised that they would be told to set their fees based on the cost of administrating the program, because they always do those themselves as well. The board should be able to provide that service with out burdening the industry with the full cost of administering the program. So they do through their boards get some money to operate with out putting the full charge on the industry. I went back after the last meeting and met with our health officer to see what she thought, and she said if you wanted to add language that direct the locals to asses their fees on the cost of administrating the programs and that puts some limitations on them without setting a dollar amount limitation. My response is from the locals, one from Bismarck, they establish their fees through an adoption of ordinance before the city commission, the necessary fees are to off set program costs. Fargo had no problem with the language as long as they do not set a specific amount limit that will end up having our department subsides the license cost. If a limit was set we may have to ask you division to implement the law unless they provide money in state aid for us to do so. They were quite clear.

Representative Porter: What happens in the case of local public health, Fargo, or Bismarck looking at this and after you have put your rules in place and said we will go out and do it for $100.00. They come back and say we are going to do it for $10.00 a bed. Than you have two different kinds of triggers out there across the state, one at the local level and one at the state level. The other thing I was wondering like in Grand Forks they say no we don't even want to get into this, we are going to carve this piece out and you can do it. What happens if Fargo does it too.

Mr. Bullinger: WE have run into those situations in the past. We have always had great cooperation from the local health department. It is not often they throw up their hands saying they don't want anything to do with that. We had no complaints when Fargo wanted to take

over West Fargo, even though it generated higher license fees because of it. Some jurisdictions that they just were not going to do this work, we will throw it back at the state. We will do what we have to. I understand they have added and FTE for our division to handle the increased work load, it is not funded but we will try to increase our presence out there with that FTE and try to off set that cost of that through some license fees.

Representative Porter: On page 5 under the injury report section, in the house we added physicians and medical professions so that if there were incidences that the owner didn't know about that the department would eventually find out bout them. As I look at it now we are making a statement in the law that they may not know if someone was injured. A person does not know until a day later when they go too the doctor. He says he need to send a report up to the health department. The way it reads in there the owner has to do that also. There is no mechanism for the owner to know that it had happened. Do we need to add language after the owner of the tanning facility, with knowledge of the injury, shall report the injury to the department? We could make it clear if they don't have knowledge they really didn't have a reason to report. Or is it clear that is how the rules would be promulgated, unless it happens where it is an acute injury at the facility.

Mr.Bullinger: I think you are accurate in wondering if the owners are going to be notified. Ol bet in most cases they won't be notified. I like you added the owner may never know and if it is only the owner reporting back to the department we never hear about it. Adding the medical profession to that is good. The whole purpose of it this is to try to figure out what went wrong. The rules will address the frequency and will address the time. Possibly we can build something into the rules to that will further enforce this. I think it is fine the way it is.

Representative Porter: If we just added after that little piece on the owner of the facility prior to the word shall and just say with knowledge of the injury shall report that injury to the

department, than everyone is under the same, including the medical profession. Let's say it happens in the summer than the person comes in, in July with second degree burns where did it happen? If the medical profession never really gets down to asking the question where did this happen, or they don't offer the information that could technically be a violation of the injury report, because the physician or the medical profession didn't report it even though the patient didn't tell them where it happened. I scan see that as a grey area of the reporting process. I think it would flow better if everyone had to have the knowledge of the injury prior to the reporting requirement kicking in.

Dave Peske, ND Medical Association: As you recall the dermatologist here in Bismarck that did a lot of the work on this bill and we were deferring to their expertise and desires on this. On a closer reading on the injury report it started to raise some question about the mechanics. I appreciate the suggestion for that section to add that. The second question I have about it is on line 16, it says the physician medical professional owners shall send a copy of the report to the injured individual. As you know the medical professional is going to be creating a medical record of that individual that they treat. I am not so sure again on the mechanics if once you have created a medical record you need to sent a report to that same patient. Maybe that is another area you would want tot think about.

Representative Schneider: what ever they send as a report to the department, could they just send it to the patient?

Mr. Peske: That is the mechanics I am questioning, would it be better for the physician to send it or the department to send it to the patient?

Representative Porter: Currently when reports are required, what is the mechanics of those and is there specific HIPPA language that we are missing here?

Mr. Bullinger: In the food division FYI, in my division everything that we deal with is open records. Nothing is at closed records. We are getting into an area that if we are going to be receiving information to my division we will probably have to take a look at it making sure that information is protected. Right now I have nothing that is. We deal with the facility.

Representative Porter: I don't think at least on the house side that we had Mr. Mullen review that new piece as far as reports and HIPPA compliance.

Senator Dever: I think you raise some good points that if you are going to have a patients name on a medical record that is going to become public information we should have that reviewed.

Mr. Peske: I tend to agree just in general if the state law says you shall release a record of a patient that allows a provider to release it and not run into HIPPA trouble because the state law directs them to do that. The difference is Mr Bullinger pointed out is that our food poisonings are reportable disease or condition.

Representative Porter: Inside of this I guess are a couple of things we need to look at, the HIPPA compliance because we are now introducing Mr. Bullinger's division to medical records. We also need to look at the open records law portion of it to make sure we aren't suddenly having medical records, public documents that anyone can go up and grab the injury reports off of someone and have it be public records. We need Mr. Bullinger review with Mr. Mullen and than at our next meeting Mr. Mullen can come and present the information to make sure we have that.

Chairman Pietsch: Are there any questions on the amendments. The wording on 2 and 3 are identical to what we passed in 1004. We did talk about changing page 1, 22 letting them decide what month they want to stagger the month of license of inspection. I will ask they wait to reschedule us until we get the information.

Senator Dever: If he is going to provide the injury reports, if he is going to provide some amendment, maybe in that amendment he could also address the mechanics of the knowledge of.

Chairman Pietsch: The committee is adjourned.

2007 HOUSE STANDING COMMITTEE MINUTES

Bill/Resolution No. HB 1154

House Human Services Committee

☒ Check here for Conference Committee

Hearing Date: April 11, 2007

Recorder Job Number: 5908

Committee Clerk Signature Judy Schaack

Minutes:

Chairman Pietsch: We will call the committee to order on HB 1154. WE have so far agreed with line 1, 18, inserting that one. Page 1, line 21 we were going to change the word expired with expire. Last time we had page 1, line 22 we would put a period after annually, and delete on June 30. On page 2, line 2 & 3 we agreed that 2 and 3 were okay, and than we were getting to the point of having to have more clarification on page 5, where we were talking about the injury report.

Kenan Bullinger, ND Department of Health: I think there were HIPPA concerns. There was discussion th last time we met on confidentiality, and HIPPA requirements and you asked me to visit with Mike Mullen Assistant Attorney General, about that. I have purposed amendments as put together by Mike. See attached amendments. There is not too much in the way of HIPPA that is a concern here. We would keep any reports of injury confidential in our division. In addition Dave Peske has worked on some as well.

Dave Peske, ND Medical Association: I have purposed amendments also. See attached. This is an attempt to clarify the injury reporting issues. Lines 14-18 we would not know how to explain to physicians what their duties are. How does the tanning facility owner know that the physician might have or vise versa? We are not clear on what is every ones duties are. In an

attempt to clarify that the first part is adding a new sub section f, handing it to each customer on things to watch for. That puts the onus on the customer who perceives there has been an injury. Rather than them going to the physician, and having the physician try and figure out if the injury was from the tanning facility, laying on the beach or riding the tractor, and than having another piece of paper work to file, and also sending a copy to the injured individual. When seeing a physician there is already a record being created. The information in the report shall be considered confidential. If it is not confidential that may make an injured customer reluctant to submit any reports, having their name spread from the health department elsewhere, and it becomes a public record. The department can use that form to interact with the owner of the facility where the injury took place. They can use that for the bases for inspection or corrections. I don't think the department cares to create a roster of additional injury reporting requirement. They just want to know when a tanning facility has faulty equipment that they can fix to protect the public.

Senator Dever: As I understand this relieves the doctor of the responsibility to report it. What I am looking at is in the second amendment where it says information contains in the report shall be considered confidential. The department utilizes that to take corrective action. I am wondering of the intent of the confidentiality is to protect the identification of the individual. It almost seems to me that there might be circumstances where the public has a need to know where the problem is with the facility. Part of that should be confidential and part of it should be available.

Mr. Peske: That is a good point. I would defer that to the department and I think you have the intent that is ours and that the name of the individual is confidential information. What the department does with it is the same as if you were reporting an under done hamburger a restraint that has caused a problem.

Senator Dever: This says that all the information contained in the report is confidential so it almost seems to me prevent the department from publicizing what the problem was.

Mr. Bullinger: One of the main purposes of the injury reporting is to look into what caused the injury, and try to prevent it from happening again. I am not sure I am interested in compiling a long laundry list of data. We do want to address the situation immediately. Were they exposed to long, was someone not monitoring the exposure, and were they tanning to frequently? Limiting it to a consumer to report is the best way. Someone may not have health insurance and will not see a physician. We are requiring them to post and I am sure we will get good compliance. People don't always read the precautions, and they may not read are to report if they are subject to injury. The important thing is we are notified. How we are notified I really don't care.

Heidi Heitkamp: I have been representing the indoor tanning bed association. I hope confidentiality would not mean that the tanning bed owners would not know who filed the complaint. That would not be fair to the tanning bed owners. They need a chance to respond to what ever claims are being made. Some one could be a serial tanner going from bed to bed and end up with a bad result. I would be concerned about confidentiality extended so that someone accused of causing this injury was not given an opportunity to respond.

Mike Mullen, Assistant Attorney General: With regards to the overall issue regarding HIPPA, there are two provisions. One permits a cover entity such as a hospital or clinic to disclose health information if the disclosure is required by law. There is another section that permits disclosure of covered entity for public health activities including surveillance of injury or illness. This case it would be injury. HIPPA permits the disclosure, and second the department of health is a covered entity under HIPPA because it does provide some health care services and the whole health department is a covered entity. So all of the protected

health information the department receives is already confidential. So I don't think you need to put that in this amendment. Under HIPPA the department of health can use or disclose the protected health information in order to carry out their activities, if it would be confidential. I would need to look further about if I could disclose that. If the department made a public disclosure they would simply say that a female customer at a tanning facility was burned or injured. They don't have to disclose the name of that customer to the public. The identity of the person could still be disclosed to the tanning facility.

Mr. Bullinger: I don't know how we are going to do a proper investigation unless we can disclose that individuals name to the tanning facility. They have records of their usage. Without providing a name we are not going to be able to investigate. They will have the date, time and what machine they used. The attorney generals office doesn't have any, you can go either way on the amendments, but in respect to the amendment that I helped draft for the department of health we did try to address some of the ambiguity questions that Mr. Peske has raised.

Chairman Pietsch: Did you get a chance to look at the Health Department ones.

Mr. Peske: I did get them this morning. The issue we are trying to address is the ambiguity in the reporting requirements. Mr. Mullen's amendment does help clarify that. It does not however address the duties of the owner of the tanning facility, which is in the existing language. How does the physician know that the owner of the tanning facility hasn't already submitted the report to the health department? It is the mechanical issues we are concerned about. I included that phrase shall be considered confidential in my proposal just to raise this discussion about whether it should be or can be or not. We too know that the HIPPA requirements are all right here.

Chairman Pietsch: Could we combine those two?

Mr. Mullen: Yes, but not in the next 10 minutes.

Representative Porter: When we looked at the injury report language it was in the house it was felt that by only having that requirement only on the owner of the tanning facility you would end up in a situation that if you didn't have a mandatory report in mechanism would trigger on health care professionals you could end up in situations where the owner of the tanning facility did not know that there was an injury. We were looking at the health department the responsibility of regulating this industry. If the owner of the facility had no idea the person went to the doctor and no one reports there will be injuries no one knows about. The owner of the facility and the health department won't know as the regulatory agency. So the purpose of what was sent to the senate if we are going to regulate this industry, whoever has the knowledge of the injury needs to be responsible in putting a report into the department so the department can do their duties of regulating the industry and making sure it is safe for the consumer. In the end the reason for the bill was to make the industry safer and more responsible. If we weaken the reporting mechanism and make it non mandatory for anyone who has knowledge of the injury, than we are also weakening the ability of the department to regulate the industry. If there are no reports how is the health department suppose to make sure it is safe for the customer. That is where we were coming from the mandatory reporting requirement. Even taking our existing knowledge and adding with knowledge of the injury, because of all the other HIPPA and confidentiality things are covered in another portion of the law.

Senator Dever: The department amendment doesn't require the owner of the facility to provide a report.

Representative Porter: You are right and I don't like that either. I like our language that we put into the bill. I think we need to add after the word facility, with knowledge of the injury so

that who ever has the knowledge has to report so the department can do their job making sure the facility is safe for others to use. If they get treatment and someone else knows it was because of a tanning facility, how would the health department do their jobs if it was not reported?

Mr. Bullinger: I agree with Representative Porter. We hope that what you pass as laws and what we can propagate as reasonable administrative rules will limit the numbers of injuries. So we don't have to deal with the issue so much knowing there will be some. We need notification of those injuries by all parties involved, those with knowledge of it. I don't care if I get three notices on the same injury at least I am going to be assured that I am getting notified of the injury so we can do our job.

Mr. Peske: I too agree with Representative Porter comments. I think adding with knowledge is an improvement to the language. Look at the top of my sheet sub section d. I would hope Mr. Bullinger would agree that perhaps addressing that issue in the rules. How will that make the tanning facility cop able for causing that injury when having done or used these things. Maybe you want those reports too.

Mr. Bullinger: I think an investigation is going to be quite comprehensive. We will go at great lengths to try to determine what caused the injury, and what may have happened. We will explore all avenues. This is new for us, new for all of us to regulate. There are some states that have passed some legislation. I have copies of Wisconsin's legislation.

Chairman Pietsch: Do you both kind of agree if we would end up on the 0200 if we went on line 6 and after the word facility add with knowledge of the injury? Would that do everything for us, and the rest go into administrative rules?

Representative Porter: I think that given the fact that Mr. Mullen is here and the other reportable injuries in the other language that exits in the century code, we should try to keep it

the same as what we have. He has heard our discussion on who we think should report the injury is the person that gets the knowledge of the injury.

Chairman Pietsch: That is the jest of what we want him to look at?

Representative Porter: Yes, plus he needs the answer to the question on what information or could actually become public. Than at our next meeting we can have a new piece of language to look at.

Senator Dever: If you wanted the facility to maintain a copy of the report and I think it needs to be clear that they have to be provided a copy of the report.

Mr. Bullinger: We can do that in statute or rule.

Representative Porter: That language may just need to go. I think what happened was we took a piece that was just back to the owner; we expanded it to who ever has the knowledge. I don't think we took that last sentence out and maybe should have been.

Senator Dever: How does that all fit together with the fact that sometimes it is not the health department doing the inspection but the local public health unit. Do they do the investigation?

Mr. Bullinger: Yes they will, and they will be at the table when we prom agate our rules with the industry.

Senator Dever: I can see the possibility of a 18 year old coming home on Mom and Dad's insurances they have been over exposed. The question is asked where did you get your tan, and they say one place and they actually went to three. You need to ask that question.

Mr. Peske: I would again ask for the collective wisdom of the committee. The phrase in the existing language says the physician medical profession or the owner shall send a copy of that report to the injured individual. If the physician has sent a report to the health department because they have seen an injured individual, do you think it is necessary for the doctor to also

send a copy of the report to the injured individual? Will the health department send them a report?

Representative Porter: I think again that language that remained after we added other required reporters when it was just about the owner of the facility and the individual.

Chairman Pietsch: We did have a lot of problems rewording that.

Representative Porter: I think when Mr. Mullen puts it into play to coincide with other existing reported those redundancies won't be there.

Chairman Pietsch: One of the things we didn't cover you will prepare that for the next meeting. Also on page 1 where Mr. Peske added under the advertising notice, do you want to take a look at that if we want that added on our amendments.

Representative Porter: One of the things that simplifies that maybe just part of the poster that says, if you are injured here is where you can report it.

Chairman Pietsch: Like Mr. Mullen said not everyone reads the rules.

Mr. Pomeroy: Doesn't it assume where the writing says, these are shared with the person who is tanning. But that the owner is supposed to show that person, so it is not just on the wall. Another place in here we are saying the owner or an employee, I don't know of anyplace in there where it says what training that employee needs. It might just be something the owner has when the owner has to be gone. Is that going to be a concern of ours?

Mr. Bullinger: We will discuss that through the administrative rule process and see what kind of training. I don't want to place a lot undue burden on the industry for training staff.

Chairman Pietsch: Think about those things and will bring the proposal. The committee is adjourned.

2007 HOUSE STANDING COMMITTEE MINUTES

Bill/Resolution No. HB 1154

House Human Services Committee

☒ Check here for Conference Committee

Hearing Date: April 16, 2007

Recorder Job Number: 6037

Committee Clerk Signature	Judy Lehock

Minutes:

Chairman Pietsch: We will call the meeting to order on HB 1154. She goes over and explains the amendments and questions they had talked about in prior meetings. We asked Mr. Mullen and Mr. Peske to work together before this meeting.

Mike Mullen, Assistant Attorney General: I have done three options of amendments for you. See attached. I tried to cover the discussions at the last meeting. I did not use Mr. Peske's suggestion for the new paragraph adding to the information that the tanning facility owner would have to disclose. What ever you decide to do about that. I didn't think that was necessary.

Senator Dever: As I read the note in option 2, most laws require reporting an injury or illness did not require the person causing the injury or illness to make a report. We have a class B misdemeanor in this. It is almost that if the owner is required to report something that might implicate him there might be amendments consideration?

Mr. Mullen: there could be, generally the law doesn't require a person who causes an injury to report it to a government agency, with a few special exceptions.

Representative Porter: I like option 1 and 3. I tend to like 3 a bit more than 1. I think the owner of a facility has the knowledge that someone was injured at their facility that they hand

them a form and say here fill out and report it to the health department. That gives them the immunity of that reporting section and that misdemeanor charge. It also from the department stand point being in charge of the safety of the consumer covers all the bases to make sure if something bad does happen that it somehow gets back to the regulatory agency so they can fix the bad things. I think up to this point we have agreed on everything except the reporting injury.

Chairman Pietsch: Mr. Mullen referred to Mr. Peske's proposal. We have added this to our agreement list, is that right?

Dave Peske, with Medical Association: Just to reiterate with what Mr. Mullen said, the language in option 1 is the same in all options, and we are comfortable with that. Your selection with option 3 is fine with us. On the subsection F, which was intended to just be something that was printed the saloon would prepare with the list of medication etc. etc. It is not that big an issue for us if you want to keep it or amend it.

Chairman Pietsch: In administrative rules involving the sheet you would include that?

Mr. Bullinger: Yes we can include that.

Senator Dever moves the Senate recede from the senate and further amendment, seconded **by Representative Porter.** The roll was taken with 6 yeas 0 nays and 0 absent.

Representative Pietsch will carry the bill to the floor.

REPORT OF CONFERENCE COMMITTEE
(ACCEDE/RECEDE)

Bill Number 1154 (, as (re)engrossed): Date: 4/4/07

Your Conference Committee House Human Services

attend	For the Senate:	YES	NO	attend	For the House:	YES	NO
✓	Sen Olson			✓	Rep Pietsch		
✓	Sen Erbele			✓	Rep Porter		
✓	Sen Pomroy			✓	Rep Schneider		

recommends that the (SENATE/HOUSE) (ACCEDE to) (RECEDE from)

the (Senate/House) amendments on (SJ/HJ) page(s) 982 - 982

____, and place _____ on the Seventh order.

____, adopt (further) amendments as follows, and place _____ on the Seventh order:

____, having been unable to agree, recommends that the committee be discharged and a new committee be appointed.

((Re)Engrossed) _____ was placed on the Seventh order of business on the calendar.

DATE: _____

CARRIER: _____

LC NO. of amendment
LC NO. of engrossment
Emergency clause added or deleted
Statement of purpose of amendment

MOTION MADE BY: _____

SECONDED BY: _____

VOTE COUNT ___ **YES** ___ **NO** ___ **ABSENT**

Revised 4/1/05

REPORT OF CONFERENCE COMMITTEE
(ACCEDE/RECEDE)

Bill Number 1154 (, as (re)engrossed): Date: 4/6/07

Your Conference Committee House Human Services

attend	For the Senate:	YES	NO	attend	For the House:	YES	NO
✓	Sen Olson				Rep Pietsch		
✓	Sen Erbele				Rep Porter		
✓	Sen Pomroy				Rep Schneider		

recommends that the (SENATE/HOUSE) (ACCEDE to) (RECEDE from)

the (Senate/House) amendments on (SJ/HJ) page(s) 982 - 982

____, and place _____ on the Seventh order.

____, adopt (further) amendments as follows, and place _____ on the Seventh order:

____, having been unable to agree, recommends that the committee be discharged and a new committee be appointed.

((Re)Engrossed) _____ was placed on the Seventh order of business on the calendar.

DATE: 4/6/07

CARRIER: _____

LC NO. of amendment
LC NO. of engrossment
Emergency clause added or deleted
Statement of purpose of amendment

MOTION MADE BY: _____

SECONDED BY: _____

VOTE COUNT ___ YES ___ NO ___ ABSENT

Revised 4/1/05

REPORT OF CONFERENCE COMMITTEE
(ACCEDE/RECEDE)

Bill Number 1154 (, as (re)engrossed): Date: 4/11/07

Your Conference Committee House Human Services

For the Senate:	YES	NO	For the House:	YES	NO
Sen Olson			Chairman Rep Pietsch		
Sen Erbele			Rep Porter		
Sen Pomroy			Rep Schneider		

recommends that the (SENATE/HOUSE) (ACCEDE to) (RECEDE from)

the (Senate/House) amendments on (SJ/HJ) page(s) 982 - 982

____, and place _____ on the Seventh order.

____, adopt (further) amendments as follows, and place _____ on the Seventh order:

____, having been unable to agree, recommends that the committee be discharged and a new committee be appointed.

((Re)Engrossed) _____ was placed on the Seventh order of business on the calendar.

DATE: _____

CARRIER: _____

LC NO. of amendment
LC NO. of engrossment
Emergency clause added or deleted
Statement of purpose of amendment

MOTION MADE BY: _____

SECONDED BY: _____

VOTE COUNT ___ YES ___ NO ___ ABSENT

Revised 4/1/05

Conference Committee Amendments to Engrossed HB 1154 (70432.0202) - 04/16/2005

That the Senate recede from its amendments as printed on page 982 of the House Journal and page 650 of the Senate Journal and that Engrossed House Bill No. 1154 be amended as follows:

Page 1, line 18, after the second underscored boldfaced period insert:

"1."

Page 1, line 21, replace "expired" with "expire" and remove "on June thirtieth"

Conference Committee Amendments to Engrossed HB 1154 (70432.0202) - 04/16/2005

Page 2, line 2, after the underscored period insert:

"2. The permit fee established by the department must be based on the cost of conducting routine and complaint inspections and enforcement actions and the cost of preparing and sending license renewals. Any fee collected under this section must be deposited in the department's operating fund in the state treasury and any expenditure from the fund is subject to appropriation by the legislative assembly. The department shall waive all or a portion of the permit fee for any tanning facility that is subject to local jurisdiction.

3. The department shall accept city or county enforcement of this chapter if the department determines the city or county requirements meet or exceed the requirements of this chapter and any rules adopted under this chapter."

Conference Committee Amendments to Engrossed HB 1154 (70432.0202) - 04/16/2005

Page 5, line 5, replace "an individual requires medical attention due to use of a" with "a customer of a tanning facility reports a sunburn injury to that facility resulting from the use of its tanning device, the owner shall provide the customer with written information on how to report the alleged injury to the state department of health. If a health care provider treats a patient for a sunburn injury and determines, in the exercise of professional judgment, that the injury occurred as a result of using a tanning device at a tanning facility, the health care provider shall report the circumstances of the injury to the state department of health. A health care provider making or not making a report in good faith pursuant to this section is immune from liability for making or not making a report."

Page 5, remove lines 6 through 9

Renumber accordingly

REPORT OF CONFERENCE COMMITTEE
(ACCEDE/RECEDE)

Bill Number 1154 (, as (re)engrossed): Date: 4/16/07

Your Conference Committee House Human Services

For the Senate:	YES / NO		For the House:	YES / NO	
Sen Olson	✓		Rep Pietsch	✓	
Sen Erbele	✓		Rep Porter	✓	
Sen Pomroy	✓		Rep Schneider	✓	

recommends that the (SENATE/HOUSE) (ACCEDE to) (RECEDE from)

the (Senate/House) amendments on (SJ/HJ) page(s) 982 - 982
Conf. further amend

___, and place _____ on the Seventh order.

___, adopt (further) amendments as follows, and place _____ on the Seventh order:

___, having been unable to agree, recommends that the committee be discharged and a new committee be appointed.

((Re)Engrossed) _____ was placed on the Seventh order of business on the calendar.

DATE: 4/16/07
CARRIER: Pietsch

LC NO. of amendment
LC NO. of engrossment
Emergency clause added or deleted
Statement of purpose of amendment

MOTION MADE BY: Sen Olson

SECONDED BY: Rep Porter

VOTE COUNT 6 YES 0 NO 0 ABSENT

Revised 4/1/05

REPORT OF CONFERENCE COMMITTEE

HB 1154, as engrossed: Your conference committee (Sens. Dever, Erbele, Pomeroy and Reps. Pietsch, Porter, Schneider) recommends that the **SENATE RECEDE** from the Senate amendments on HJ page 982B, adopt amendments as follows, and place HB 1154 on the Seventh order:

That the Senate recede from its amendments as printed on page 982 of the House Journal and page 650 of the Senate Journal and that Engrossed House Bill No. 1154 be amended as follows:

Page 1, line 18, after the second underscored boldfaced period insert:

"1."

Page 1, line 21, replace "expired" with "expire" and remove "on June thirtieth"

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"2. The permit fee established by the department must be based on the cost of conducting routine and complaint inspections and enforcement actions and the cost of preparing and sending license renewals. Any fee collected under this section must be deposited in the department's operating fund in the state treasury and any expenditure from the fund is subject to appropriation by the legislative assembly. The department shall waive all or a portion of the permit fee for any tanning facility that is subject to local jurisdiction.

3. The department shall accept city or county enforcement of this chapter if the department determines the city or county requirements meet or exceed the requirements of this chapter and any rules adopted under this chapter."

Page 5, line 5, replace "an individual requires medical attention due to use of a" with "a customer of a tanning facility reports a sunburn injury to that facility resulting from the use of its tanning device, the owner shall provide the customer with written information on how to report the alleged injury to the state department of health. If a health care provider treats a patient for a sunburn injury and determines, in the exercise of professional judgment, that the injury occurred as a result of using a tanning device at a tanning facility, the health care provider shall report the circumstances of the injury to the state department of health. A health care provider making or not making a report in good faith pursuant to this section is immune from liability for making or not making a report."

Page 5, remove lines 6 through 9

Renumber accordingly

Engrossed HB 1154 was placed on the Seventh order of business on the calendar.

2007 TESTIMONY

HB 1154

NORTH DAKOTA LEGISLATIVE ASSEMBLY

House Bill 1154

Good morning Madam Chairman Price and members of the House Human Services Committee. For the record my name is Ralph Kilzer State Senator for district 47 in Bismarck. I was happy to sign to house bill 1154 which is the 1st attempt to limitations of a harmful substance. I introduce this from a public health perspective. In door tanning is rapidly growing industry in our country. On an average day in the United States more than 1 million people partake of treatment in a tanning saloon. 70% of these of these girls are Caucasian girls and women between the ages of 16 and 49. Of the 30 million people that tan indoors in the United States annually, 2.3 million are teens.

There are risks with indoor tanning.

- The US Department of Health and Human Services has declared ultra violet radiation from the sun an artificial sources, such has tanning beds and sun lamps, as a known carcinogen (cancer causing substance.)
- Indoor tanning lamps emit ultra violet A and ultra violet B radiation at levels that are far higher than the sun. New high pressure sun lamps emit doses that can be as much as 15 times that of the sun.
- Exposure to ultra violet light is a known risk factor for melanoma.
- A Swedish study presents strong evidence that in door tanning increases the risk of melanoma especially when in door tanning begins at an early age.
- Medical research shows that exposure to ultra violet A radiation is associated with an increased risk for skwamus cell carcinoma and basal cell carcinoma, the two most common types of skin cancer.

About half of the states regulate indoor tanning use by teens, despite the call from the World Health Organization to prohibit teens from indoor tanning because of the danger.

Support for regulating youth access to indoor tanning comes from The World Health organization, The American Academy of Dermatology, the AMA, and the American Academy of Pediatrics.

Some people say that tanning booths with the ultra violet radiation have a health benefit because vitamin D is activated. However, vitamin D is readily accessible in a couple glasses of milk per day and it is also very easily available in fish products and even cod liver oil, if you can tolerate the taste. Vitamin D is one of the fat soluble vitamins, which remains stored in the body for a long period of time and there for it is not necessary to replenish this vitamin on a daily or weekly basis. I mentioned previously that excessive ultra violet exposures are associated with increased incidents of skin cancer these are some fact regarding skin cancer:

- More than 1 million new cases of skin cancer will be diagnosed in the U.S this year.
- There will be about 112,000 new cases of melanoma, the deadliest form of skin cancer in 2007.
- One American dies of melanoma almost every hour. In 2006 790, 010 deaths have been attributed to melanoma.
- Melanoma is the 2nd most common cancer in women age 20-29
- An estimate 10,710 people will die of skin cancer this year. ~~79,010~~ 7,900 from melanoma and ~~28,000~~ 2,800 from other cancers, especially skwamus cell, carcinoma, and basal cell carcinoma.

These were the mortality figures and the morbidity figures are equally impressive. If you request an appointment wit a dermatologist in Bismarck you will have to wait 6 months. That speaks to the high morbidity of the excessive ultra violet exposure and that's the reason why the dermatologists are solidly behind this measure. Of course if people would use less tanning and less exposure to the sun there would be less exposure to the carcinogens and you and I would not have to wait so long for dermatology appointments. I appreciate your support for this bill I will be glad to stand for any questions

American Cancer Society

ACS News Center

print
close

WHO Warns Teens on Tanning Beds

No One Under 18 Should Use Them, Agency Says

Article date: 2005/03/29

The World Health Organization (WHO) has issued a report warning people younger than 18 to stay away from tanning beds because they can raise the risk of skin cancer.

The global health agency issued the advisory because many teens, especially girls, like to use the beds to get a tan before summer starts.

"There has been mounting concern over the past several years that people, and in particular teenagers, are using sunbeds excessively to acquire tans which are seen as socially desirable," according to Kerstin Leitner, PhD, the WHO assistant director-general for environmental health. "However, the consequence of this sunbed usage has been a precipitous rise in the number of skin cancer cases."

More Tanning Means More Skin Cancer

Skin cancer is the most common type of cancer in the United States. According to American Cancer Society estimates, more than 1 million cases of basal cell or squamous cell skin cancers occur every year. These types of skin cancer are highly curable, but about 1,000 -2,000 Americans die from them each year.

Melanoma, however, is more dangerous. This type of skin cancer strikes more than 59,000 people in the US each year and kills more than 7,000. Melanoma is becoming more common in the US and other countries around the world, according to WHO statistics, and the popularity of tanning and tanning beds is part of the reason.

Like tanning in the sun, tanning in a bed exposes the skin to damaging ultraviolet (UV) radiation. This exposure raises the risk of developing skin cancer, even if a person doesn't get burned.

There is no evidence that tanning in a bed is any safer than tanning in the sun -- in fact, some tanning beds release much stronger UV light than the sun does. And at least one study has shown that women who tan in beds are more likely to develop melanoma than those who don't.

UV exposure in childhood is thought to be especially dangerous.

The WHO warned that skin cancer isn't the only possible consequence of too much tanning. Excessive UV exposure can also cause eye damage (including cataracts) and premature skin aging, and may even harm the immune system.

Leitner said the agency has a clear message: "Avoid excess exposure to UV and when you have to be in the sun, protect your skin."

ACS News Center stories are provided as a source of cancer-related news and are not intended to be used as press releases.

In Support of House Bill 1154

As Pediatricians of the state of North Dakota, we find it important to reduce the risks inherent to children. It is important that we protect the health and well being of adolescents and young adults as well. Therefore, we feel because of the increased of skin problems and disease, being exposed to harmful ultraviolet light for unnecessary reasons should not be permitted. The duties of this bill state a customer under sixteen years of age should not be permitted to use the tanning facility and we agree with that.

Sincerely,

Twogood MD

Todd Twogood MD, FAAP

President of the North Dakota American Academy of Pediatrics (NDAAP

Testimony

House Bill 1154

House Human Services Committee

Wednesday, January 10, 2007; 8 a.m.

North Dakota Department of Health

Good morning, Chairman Price and members of the House Human Services Committee. My name is Kenan Bullinger, and I am the director of the Division of Food and Lodging for the North Dakota Department of Health. I am here today to provide information on the fiscal impacts of House Bill 1154.

The fiscal impacts of this legislation were difficult to calculate, as the exact number of tanning facilities operating in North Dakota is unknown. In addition, the legislation does not mandate tanning facility inspections or inspection frequency. In order to adequately enforce the proposed provisions in this legislation, a regulatory agency, either state or local, will have to provide on-site inspections. The costs of inspection and the costs of administrative rule adoption and implementation are the main components of the requested fiscal note.

The North Dakota Department of Health and several local health departments currently carry out a number of regulatory inspections for a variety of businesses in the state, including restaurants, lodging facilities, child-care facilities, schools and grocery stores. The regulatory infrastructure to carry out the provisions of this legislation is in place. The challenge will be the added inspection time, reports and travel needed to conduct inspections of the numerous tanning facilities throughout the state. A yearly inspection of two hours in length, including time for travel and writing the report, for an estimated 650 tanning facilities would equate to about 2,800 hours or .75 FTE. Rulemaking, salary, operating and implementation costs for the 2007-2009 biennium would be $74,583.

The bill allows the department to establish a fee but does not indicate if the fees are to be deposited into the general fund. For the department's Food and Lodging Program, fees are deposited in the department's operating fund and used to pay for the inspections. The fiscal note was written assuming the fees are deposited into the general fund, thus allowing a general fund appropriation for the program.

This concludes my testimony. I would be happy to answer any questions you may have.

Testimony

House Bill 1154

House Human Services Committee

Wednesday, January 10, 2007; 8 a.m.

North Dakota Department of Health

Good morning, Chairman Price and members of the House Human Services Committee. My name is Mary Ann Foss, and I am the director of the Division of Cancer Prevention and Control for the North Dakota Department of Health. I am here today to provide information on House Bill 1154.

More than 1.3 million cases of skin cancer are diagnosed every year in the United States. Melanoma is the deadliest form of skin cancer, causing nearly 8,000 deaths each year. In North Dakota, about 87 people are diagnosed with melanoma each year.

Ultraviolet (UV) radiation is the most recognized cause of all types of skin cancer, including melanoma. The sun and tanning lamps are both sources of UV radiation. In fact, recent studies have shown that tanning beds have the capacity to emit levels of UV radiation many times stronger than the mid-day sun.

The World Health Organization has linked sun bed tanning among young people to melanoma. According to the agency's conclusions, there is a 75 percent increase in the risk of melanoma among those who first used sun beds in their teens or 20s.

Twenty-five states have regulations restricting youth access to tanning beds. For example, New Jersey prohibits children younger than 14 from using tanning beds. New Hampshire and North Carolina require a doctor's consent for that age group, and Wisconsin has banned indoor tanning for anyone younger than 16.

This concludes my testimony. I would be happy to answer any questions you may have.

Testimony on HB 1154
Presented by Heidi Heitkamp
Representing the Indoor Tanning Association

Madam Chairman Price, members of the Human Services Committee, for the record my name is Heidi Heitkamp and I am representing today the Indoor Tanning Association. Thank you for this opportunity to appear before your committee and present testimony.

Background information

As background, the Indoor Tanning Association (www.theITA.com)is a national trade association representing all major manufacturers, suppliers and distributors of indoor tanning equipment as well as professional tanning facilities nationwide.

Many of the controls provided in the HB 1154 are already standard practice in the industry or are already required by the Food and Drug Administration (FDA) under (21 CFR 1040.20) attached

FDA regulations require visible warning signs, use of eyewear, maximum timer intervals specified by regulation and instructions to users to avoid or minimize injury. FDA's Warning label requirement is found in section (d) of 21CFR 1040.20. This label must be on an exterior surface of the product....."*so as to be legible and readily accessible to view by the person being exposed immediately before use of the product.*" Further, the Indoor Tanning Association is working with FDA right now on revisions to the warning label to make it even more readable and that those changes should be made in the next few years.

The timers are under the control of the staff and cannot be over-ridden by the customer. There are strict limits on the output of the equipment.

In addition, the FDA has spent a great deal of time and energy determining maximum exposure times The FDA also requires a warning sign on each device that must be clearly legible by the customer.

Although not required by the FDA, it is standard industry practice is the use of "informed consent" forms. When any customer comes to an indoor tanning facility, they are warned about the potential dangers of overexposure to ultraviolet light. The warning is conveyed by having each customer read and sign what we call an "informed consent" form. Insurance carriers for tanning salons require the use of such a form. Further, giving clients an honest assessment of the potential benefits and risks associated with UV light exposure is the right thing to do.

Health Concerns and Claims of Increase Cancer Risk

The public is, almost daily, informed of new reports of medical research reporting that this product or that product increases the risks of cancer. As is the case in most reports of this type there is also a body of literature and research which disputes some of the conclusions. That is also true in the case of tanning beds.

Without spending a great deal of time on these studies that may be useful to you in your review of HB 1154.

1. A summary of the entire peer reviewed studies that have been performed on the topic. As you will see from that summary 18 of the 22 studies concluded that there was no association between indoor tanning and melanoma.
2. A New York Times article dated July 20, 2004 entitled "A Dermatologist Who's Not Afraid to Sit on the Bench." Dr. Ackerman, the subject of this article and a renowned expert in the field of dermatology, argues that the research that exposure to ultraviolet rays causes melanoma is inconsistent and fails to make the case. In addition the doctor's comments on page 2 of the article about the epidemic of melanoma are particularly insightful.
3. A New York Times article dated August 9, 2005 entitled "Melanoma is Epidemic. Or Is It?" This article presents the current debate in the dermatological community regarding whether in fact the increased numbers of melanoma represent an epidemic of skin cancer or an epidemic of skin cancer screening. A a recent study published by The British Medical Journal found that since 1986 skin biopsies have risen by 250%, which is the figure nearly the same as the rise in the incident of early-stage melanoma. But during that same time there was no change in the melanoma death rate and the incidence of advanced disease also did not change.

The Position of the Indoor Tanning Association on HB 1154

The Indoor Tanning Association has no issue with the licensure provided for in this Bill. As outlined above, the provisions in HB 1154 are already required by the federal government or are standard operating procedures in the indoor tanning business.

Consequently, the Indoor Tanning Association will urge a do pass on the Bill provided HB1154 is amended (on page 3 line 19 and 20 of the bill) to strike the language of current section 23-39-05 (1) (a.) which provides: "A customer under 16 years of age is not permitted to use the facility." and replace it with the following language the following language:

Before any person under age 18 (eighteen) years of age uses a tanning device, he/she shall give the tanning facility a statement, signed by his or her parent or legal guardian, stating that the parent or legal guardian has read and understood the warnings given by the tanning facility, and that they consent to the minor's use of the tanning device and agrees that the minor will use the protective eyewear. A customer under the age of 14 will not be permitted to use the facility.

In support of this amendment I offer the following arguments:

1. Currently 25 states and 4 counties regulate tanning facilities for minors. After debate in all of those states, only Wisconsin has adopted a bill which creates an absolute ban on 14 and 15-year-olds using the facility. In every other state which regulates facilities, state legislatures have agreed to allow 14 to 18-year-olds to use tanning beds with parental consent. Most notably in Minnesota, where local tanning facilities will face the most competition, minors under the age of 16 are allowed to use tanning devices provided the operator witnesses a parent or guardian's signature on a warning statement. House Bill 1154, by creating an absolute prohibition for 14 and 15-year-olds, presents the most radical regulation in the country. See attached NCSL spreadsheet.
2. As the bill is currently drafted there are no additional protections for minors between the ages of 16 and 18. The amendment being proposed requires that minors between these ages also receive parental consent.
3. This amendment places the responsibility for child health squarely on the shoulders of the parents, where this responsibility belongs. It has been suggested that one of the advantages of this HB 1154 is that it empowers parents to protect their teenagers by having the government say no instead of the parents. I believe this is the absolute worst reason to pass this bill. The North Dakota Legislature in past years, when asked to enact a law requiring minors to wear bicycle helmets, rejected that law on the basis that the enforcement of bicycle helmets belongs in the hands of the parents. I believe that same logic applies today with the use of tanning beds.
4. In North Dakota, minors 14 and over are given great responsibilities. These responsibilities include a driving permit, hunting privileges, contact sports, and care for smaller children (babysitting). I believe that 14 and 15-year-old girls, together with their parents and with adequate information, are capable of making informed decisions about their use of tanning beds.
5. Finally, try as we might, we can never make the world completely safe for our children. Parents, teachers, schools, and the government will never be able to create a risk-free world for children. Instead we must give our children the tools they need to make informed decisions about their safety today and in the future. If we constantly attempt to remove any and all risk by government regulation, we take these decisions out of the hands of our children and their parents and give these decisions to the government. That activity provides a message to kids that the government and not day are responsible for their safety. Only in the most extreme situations should this be done.

Again thank you for this opportunity to appear on HB 1154 and to present this amendment. I look forward to working with the Committee as it further deliberates on this Bill and I would be glad to answer any questions you might have.

United States Federal Regulations: 21CFR 1040.20

(a) Applicability. (1) The provisions of this section, as amended, are applicable as specified herein to the following products manufactured on or after September 8, 1986.
(i) Any sunlamp product.
(ii) Any ultraviolet lamp intended for use in any sunlamp product.
(2) Sunlamp products and ultraviolet lamps manufactured on or after May 7, 1980, but before September 8, 1986, are subject to the provisions of this section as published in the FEDERAL REGISTER of November 9, 1979 (44 FR65357).
(b) Definitions. As used in this section the following definitions apply:
(1) "Exposure position" means any position, distance, orientation, or location relative to the radiating surfaces of the sunlamp product at which the user is intended to be exposed to ultraviolet radiation from the product, as recommended by the manufacturer.
(2) "Intended" means the same as "intended uses" in 801.4.
(3) "Irradiance" means the radiant power incident on a surface at a specified location and orientation relative to the radiating surface divided by the area of the surface, as the area becomes vanishingly small, expressed in units of watts per square centimeter (W/cm2).
(4) "Maximum exposure time" means the greatest continuous exposure time interval recommended by the manufacturer of the product.
(5) "Maximum timer interval" means the greatest timer interval setting on the timer of a product.
(6) "Protective eyewear" means any device designed to be worn by users of a product to reduce exposure of the eyes to radiation emitted by the product.
(7) "Spectral irradiance" means the irradiance resulting from radiation within a wavelength range divided by the wavelength range as the range becomes vaninshingly small, expressed in units of watts per square centimeter per nanometer (W/(cm2/nm)).
(8) "Spectral transmittance" means the spectral irradiance transmitted through protective eyewear divided by the spectral irradiance incident on the protective eyewear.
(9) "Sunlamp product" means any electronic product designed to incorporate one or more ultraviolet lamps and intended for irradiation of any part of the living human body, by ultraviolet radiation with wavelengths in air between 200 and 400 nanometers, to induce skin tanning.
(10) "Timer" means any device incorporated into a product that terminates radiation emission after a preset time interval.
(11) "Ultraviolet lamp" means any lamp that produces ultraviolet radiation in the wavelength interval of 200 to 400 nanometers in air and that is intended for use in any sunlamp product.

(c) Performance requirements. (1) Irradiance ratio limits. For each sunlamp product and ultraviolet lamp, the ratio of the irradiance within the wavelength range of greater than 200 nanometers through 260 nanometers to the irradiance within the wavelength range of greater than 260 nanometers through 320 nanometers may not exceed 0.003 at any distance and direction from the product or lamp.
(2) Timer system. (i) Each sunlamp product shall incorporate a timer system with multiple timer settings adequate for the recommended exposure time intervals for different exposure positions and expected results of the products as specified in the label required by paragraph (d) of this section.
(ii) The maximum timer interval(s) may not exceed the manufacturer's recommended maximum exposure time(s) that is indicated on the label required by paragraph (d)(1)(iv) of this section.
(iii) No timer interval may have an error greater than 10 percent of the maximum timer interval of the product.
(iv) The timer may not automatically reset and cause radiation emission to resume for a period greater than the unused portion of the timer cycle, when emission from the sunlamp product has been terminated.
(v) The timer requirements do not preclude a product from allowing a user to reset the timer before the end of the preset time interval.
(3) Control for termination of radiation emission. Each sunlamp product shall incorporate a control on the product to enable the person being exposed to terminate manually radiation emission from the product at any time without disconnecting the electrical plug or removing the ultraviolet lamp.
(4) Protective eyewear. (i) Each sunlamp product shall be accompanied by the number of sets of protective eyewear that is equal to the maximum number of persons that the instructions provided under paragraph (e)(1)(ii) of this section recommend to be exposed simultaneously to radiation from such product.
(ii) The spectral transmittance to the eye of the protective eyewear required by paragraph (c)(4)(i) of this section shall not exceed a value of 0.001 over the wavelength's range of greater than 200 nanometers through 320 nanometers and a value of 0.01 over the wavelength range of greater than 320 nanometers through 400 nanometers, and shall be sufficient over the wavelength greater than 400 nanometers to enable the user to see clearly enough to reset the timer.
(5) Compatibility of lamps. An ultraviolet lamp may not be capable of insertion and operation in either the "single contact medium screw" or the "double contact medium screw" lamp holders described in American National Standard C81.10-1976, Specifications for Electric Lamp Bases and Holders_Screw Shell Types, which is incorporated by reference. Copies are available from the American National Standards Institute, 1430 Broadway, New York, NY 10018 or available for inspection at the Office of the Federal Register, 1100 L St. NW, Washington, DC 20408.
(d) Label requirements. In addition to the labeling requirements in Part 801 and the certification and identification requirements of 1010.2 and 1010.3, each sunlamp product and ultraviolet lamp shall be subject to the labeling requirements prescribed in this paragraph and paragraph (e) of this section.
(1) Labels for sunlamp products. Each sunlamp product shall have a label(s) which contains:
(i) A warning statement with the words "DANGER_Ultraviolet radiation. Follow instructions. Avoid overexposure. As with natural sunlight, overexposure can cause eye and skin injury and allergic reactions. Repeated exposure may cause premature aging of the skin and skin cancer. WEAR PROTECTIVE EYEWEAR; FAILURE TO MAY RESULT IN SEVERE BURNS OR LONG-TERM INJURY TO THE EYES. Medications or cosmetics may increase your

sensitivity to the ultraviolet radiation. Consult physician before using sunlamp if you are using medications or have a history of skin problems or believe yourself especially sensitive to sunlight. If you do not tan in the sun, you are unlikely to tan from use of this product."
(ii) Recommended exposure position(s). Any exposure position may be expressed either in terms of a distance specified both in meters and in feet (or in inches) or through the use of markings or other means to indicate clearly the recommended exposure position.
(iii) Directions for achieving the recommended exposure position(s) and a warning that the use of other positions may result in overexposure.
(iv) A recommended exposure schedule including duration and spacing of sequential exposures and maximum exposure time(s) in minutes.
(v) A statement of the time it may take before the expected results appear.
(vi) Designation of the ultraviolet lamp type to be used in the product.
(2) Labels for ultraviolet lamps. Each ultraviolet lamp shall have a label which contains:
(i) The words "Sunlamp_DANGER_Ultraviolet radiation. Follow instructions.
(ii) The model identification.
(iii) The words "Use ONLY in fixture equipped with a timer."
(3) Label specifications. (i) Any label prescribed in this paragraph for sunlamp products shall be permanently affixed or inscribed on an exterior surface of the product when fully assembled for use so as to be legible and readily accessible to view by the person being exposed immediately before the use of the product.
(ii) Any label prescribed in this paragraph for ultraviolet lamps shall be permanently affixed or inscribed on the product so as to be legible and readily accessible to view.
(iii) If the size, configuration, design, or function of the sunlamp product or ultraviolet lamp would preclude compliance with the requirements for any required label or would render the required wording of such label inappropriate or ineffective, or would render the required label unnecessary, the Director, Office of Compliance, (HFZ-300), Center for Devices and Radiological Health, on the Center's own initiative or upon written application by the manufacturer, may approve alternative means of providing such label(s), alternate wording for such labels, or deletion, as applicable.
(iv) In lieu of permanently affixing or inscribing tags or labels on the ultraviolet lamp as required by 1010.2(b) and 1010.3(a), the manufacturer of the ultraviolet lamp may permanently affix or inscribe such required tags or labels on the lamp packaging uniquely associated with the lamp, if the name of the manufacturer and month and year of manufacture are permanently affixed or inscribed on the exterior surface of the ultraviolet lamp so as to be legible and readily accessible to view. The name of the manufacturer and month and year of the manufacture affixed or inscribed on the exterior surface of the lamp may be expressed in code or symbols, if the manufacturer has previously supplied the Director, Office of Compliance (HFZ-300), Center for Devices and Radiological Health, with the key to such code or symbols and the location of the coded information or symbols on the ultraviolet lamp. The label or tag affixed or inscribed on the lamp packaging may provide either the month and year of manufacture without abbreviation, or information to allow the date to be readily decoded.
(v) A label may contain statements or illustrations in addition to those required by this paragraph if the additional statements are not false or misleading in any particular; e.g. if the do not diminish the impact of the required statements, and are not prohibited by this chapter.

(e) Instructions to be provided to users. Each manufacturer of a sunlamp product and ultraviolet lamp shall provide or cause to be provided to purchasers and, upon request, to others at a cost not to exceed the cost of publication and distribution, adequate instructions for use to avoid or to minimize potential injury to the user, including the following technical and safety information as applicable:
(1) Sunlamp products. The users' instructions for a sunlamp product shall contain:
(i) A reproduction of the label(s) required in paragraph (d)(1) of this section prominently displayed at the beginning of the instructions.
(ii) A statement of the maximum number of people who may be exposed to the product at the same time and a warning that only that number of protective eyewear has been provided.
(iii) Instructions for the proper operation of the product including the function, use, and setting of the timer and other controls, and the use of protective eyewear.
(iv) Instructions for determining the correct exposure time and schedule for persons according to skin type.
(v) Instructions for obtaining repairs and recommended replacement components and accessories which are compatible with the product, including compatible protective eyewear, ultraviolet lamps, timers, reflectors, and filters, and which will, if installed or used as instructed, result in continued compliance with the standard.
(2) Ultraviolet lamps. The users' instructions for an ultraviolet lamp not accompanying a sunlamp product shall contain:
(i) A reproduction of the label(s) required in paragraphs (d)(1)(i) and (2) of this section, prominently displayed at the beginning of the instructions.
(ii) A warning that the instructions accompanying the sunlamp product should always be followed to avoid or to minimize potential injury.
(iii) A clear identification by brand and model designation of all lamp models for which replacement lamps are promoted, if applicable.

(f) Test for determination of compliance. Tests on which certification pursuant to 1010.2 is based shall account for all errors and statistical uncertainties in the process and, wherever applicable, for changes in radiation emission or degradation in radiation safety with age of the product. Measurements for certification purposes shall be made under those operational conditions, lamp voltage, current, and position as recommended by the manufacturer. For these measurements, the measuring instrument shall be positioned at the recommended exposure position and so oriented as to result in the maximum detection of the radiation by the instrument.

CLAIM: *"Indoor tanning is linked to melanoma skin cancer."*

FACT: The truth is that 18 of the 22 studies ever conducted on this topic - including the largest and most recent - show ***no association*** between indoor tanning and melanoma. The four that allege a connection did not adequately control for confounding variables such as how much time a person spent outdoors and his or her history of outdoor sunburns. Individuals who use tanning salons are more likely to spend more time outdoors in the sun than individuals who don't. Unless researchers control for this fact, the results cannot be relied upon. In addition, melanoma's relationship with UV light is unclear. Melanoma is more common in indoor workers than in outdoor workers. Melanoma also appears most often on parts of the body that are not regularly exposed to the sun. Thus, sunburn – not tanning – appears to be the link, if any, between melanoma and ultraviolet light.

INDOOR TANNING IS NOT LINKED TO MELANOMA: Epidemiological Studies To Date Assessing the Relationship Between Indoor Tanning Facilities and Melanoma Skin Cancer.

Author	Year	Country	Results	Comments
Klepp & Magnus	1979	Norway	No association	Small sample size.
Adam et al	1981	England	Increase in risk	Small study. Fair-skinned sample not applicable to the U.S. . Does not control variables.
Holman et al	1982	Australia	No association	Larger study.
Gallagher et al	1986	Canada	No association	Larger study.
Elwood et al	1986	England	No association	Small sample size.
Holly et al	1987	USA	No association	First U.S. study.
Osterlind et al	1988	Denmark	No association	Tanning bed users actually had lower risk than non-tanners.
Swerdlow et al	1988	Scotland	Increase in risk	Small study. Wide variation in results is unexplained.
Zanetti et al	1988	Italy	No association	Wide variation in results.
MacKie et al	1989	Scotland	No association	Fair-skinned sample. Wide variation in results.
Dubin et al	1989	USA	No association	Included medical use of tanning equipment.
Beitner et al	1990	Sweden	No association	Larger study. Did not control For variables.
Walter et al	1990	Canada	No association#	Only risk was home units.
Autier et al	1991	Belgium	Increase in risk	Relative risk increased 4.1 times for males, but 1.8 times for females. No explanation. Results of this study conflict with Autier's 2002 data which show no association.
Garbe et al	1993	Germany	No association	Results varied widely. Did not control for variables.
Dunn-Lane et al	1993	Ireland	No association	Small study. Variables uncontrolled.
Westerdahl et al	1994	Sweden	No association	Results varied. Variables uncontrolled.**
Autier et al	1994	Belgium	No association	Some showed a reduction in risk. Some showed a minor increase.
Holly et al	1995	USA	No association	Included medical use of tanning equipment.
Chen, et al	1998	USA	No association	Only risk was home units.
Westerdahl et al	2000	Sweden	Increase in risk	Risk declined for those who tanned most frequently. Result is unexplained.
Autier, et al	2002	Belgium	No association	No association in any category.

Impartial Analysis of Epidemiological Studies

In 1989, Dr. Anthony J. Swerdlow and Dr. Martin Weinstock, both of the Brown University School of Medicine, published a paper examining 19 of the studies listed in the chart. Drs. Swerdlow and Weinstock, who are not affiliated with the indoor tanning industry and were not funded by the industry, concluded *"At this time, the published Data are insufficient to determine whether tanning lamps cause Melanoma."* The authors cite the following reasons:

1. **Lack of Relevant Intensity and Output Data.** According to Swerdlow and Weintock, *"The published studies gave no information on the intensity and spectral outputs of the tanning lamps to which exposure had occurred. Furthermore, because the prevalent type of lamp has changed over time, there is some uncertainly in the extrapolation from historical exposure in the population today"*. What this means is that the authors of the studies did not account for the differences in sunbeds, lamps and exposure times, which means they could not calculate total irradiance values. Also the authors refer to the high UVB lamps used in the early days of the tanning industry compared to the combinations used today.

2. **Recall Bias Potential.** According to Swerdlow and Weinstock, *"All of the studies depended on recall of exposures by the study participants and this recall may potentially be biased."* For example, many researchers believe patients with melanoma might exaggerate their past exposures or recall more of them than control participants. It is also possible that such a recall bias cold affect the outcome in other ways.

3. **Studies Specificity Regarding Exposure.** According to Swerdlow and Weinstock, *"Many of the studies reported only a comparison between persons who were ever exposed to tanning lamps and those who were never so exposed or between undefined tanning lamps."*

4. **Failure to Control Lamp and Exposure Location Variables.** According to Swerdlow and Weinstock, *"Relatively few of the reports described their variables on tanning beds and the analysis of the data in detail or with precision. For example, some included medical in addition to cosmetic UV lamp exposure in their analyses, without distinction and others did not and for several reasons it was not clear whether medical exposure had been included. Ideally, both of these sources and occupational exposures would be included in the data collection and analysis."*

5. **Possibility of Confounding Errors.** According to Swerdlow and Weinstock, *"Interpretation is also complicated by the possibility of the confounding. For instance, sun exposure, particularly recreational sun exposure is a potentially confounding variable because it seems likely that tanning lamp users may also be*

more likely to sunbathe. In addition, sun sensitivity and socioeconomic-related factors are also potentially confounding variables"

6. **Publication Bias.** According to Swerdlow and Weinstock, *"There may be substantial publication bias in the area of literature. Case-control studies that support the null hypothesis (tanning lamps are not associated with the later development of melanoma or that tanning lamps may be beneficial) may be less likely to mention this aspect of their data or to describe in detail the resulting publication than those that found an association between sunbed use and melanoma.*

7. **Inadequate Sample Size.** According to Swerdlow and Weinstock, *Many studies appear to have low power to detect a plausible size of association"*

The New York Times

July 20, 2004

I BEG TO DIFFER

A Dermatologist Who's Not Afraid to Sit on the Beach

By GINA KOLATA

Dr. A. Bernard Ackerman, a dermatologist, spends much of his time diagnosing the potentially deadly cancer melanoma and other skin diseases.

But when he returned from a recent trip to Israel, he was, well, deeply tanned. Burnished brown, in fact. Dr. Ackerman did not use sunscreen on his trip. He did not give any thought to the hundreds of moles that speckle his body. He did not even put a hat on his bald head.

Other dermatologists may worry about getting melanoma from exposure to ultraviolet rays. But Dr. Ackerman, 67, a renowned expert in the field and the emeritus director of the Ackerman Academy of Dermatopathology in New York, said the link between melanoma and sun exposure was "not proven." He has scrutinized, one by one, the widely held precepts about melanoma and the sun, and found the evidence wanting. "The field is just replete with nonsense," he said. For example, it is commonly assumed that painful or blistering sunburns early in life set the stage for the skin cancer later on. But while some studies show a small association, Dr. Ackerman says, others show none. And even studies that do show an effect disagree on when the danger period for sunburns is supposed to be.

Taken as a whole, Dr. Ackerman argues, the research is inconsistent and fails to make the case. Common wisdom also has it that sunscreens protect against melanoma. But Dr. Ackerman points to a recent editorial in the journal Archives of Dermatology concluding that there was no evidence to support that idea. Finally, many people assert that the more intense a person's sun exposure, the greater the risk of melanoma. For example, Dr. Darrell S. Rigel, a New York dermatologist, points out that the incidence of melanoma increases as distance to the equator decreases. Dr. Rigel, a past president of the American Academy of Dermatology and the lead editor of "Cancer of the Skin," a major textbook in the field, cites this as a compelling reason to conclude that sun exposure causes the skin cancer.

But it is not compelling to Dr. Ackerman. Epidemiological data on melanoma, he says, are imprecise and inaccurate. In searching for the causes of other cancers, he argues, epidemiological data have led researchers astray, and by their nature they cannot demonstrate cause and effect. Stay out of the sun, Dr. Ackerman advises, but do it to avoid premature aging of the skin. If you are very fair, avoiding sunlight will also help prevent squamous cell carcinoma, a less dangerous cancer. But it would be a mistake, he says, to assume that avoiding sunlight or using sunscreens will offer protection from melanoma.

Dr. Ackerman has been enamored of the skin and its diseases since his earliest days as a resident at Columbia. Studying dermatology, to him, was like taking courses in art history. "If you know a

certain artist you can recognize him again," he said. "So it is with lesions in the skin. A lesion is like a painting or a piece of sculpture." He has spent most of his career in academia and has published 625 research papers. His list of honors and awards includes this year's the Master Award, given to one person a year by the American Academy of Dermatology.

In 1999 he started his own academy, supported by AmeriPath, a company that owns pathology laboratories. "I had nothing to sell - I was always in university life," Dr. Ackerman said. "If you'll excuse the expression and not think I'm a tart, they bought me." His academy, he says, is now the world's largest training center for dermatopathology. Dr. Ackerman, who is paid a flat salary, and his six associates examine more than 100,000 specimens and have done more than 4,000 consultations each year. Dr. Ackerman continues to teach and write, and also to ask for data and question his field's conventional wisdom. Challenging the link between sun and melanoma is part of this pattern.

Dr. Ackerman even questions whether the "epidemic" of melanoma proclaimed by many dermatologists exists. The definition of the cancer, he says, has changed over time, leading doctors to diagnose, remove and cure cancerous growths that once would not have been called melanoma. "The criteria today, clinically and histopathologically, are diametrically different from those 30 years ago," he said. In medical school, he continued, "we were taught that melanoma is a big, black, fungating tumor that kills. Who would have believed then that you can recognize melanoma for what it is when it is small and flat and the size of the fingernail on your pinky? You would have said they were insane."

Anyone who argues that sun exposure causes melanoma, Dr. Ackerman says, needs to explain why blacks and Asians get melanoma almost exclusively on skin that is not exposed to sunlight: the palms, soles, nails and mucous membranes. Even in whites, the most common melanoma sites - the leg in women, the trunk in men - are hardly the most sun-exposed body parts. It is not a popular argument. Dr. Rigel, reached by telephone in Hawaii, where he was vacationing, said it was perverse of Dr. Ackerman to pick the data apart. Melanoma, Dr. Rigel said, can occur "where the sun doesn't shine." But that is because sunlight suppresses immune cells in the skin's surface that ordinarily hold cancer at bay, he said. He himself stays pale, even in Hawaii, that land of intense sunlight. "I'm a dermatologist," he explained.

Dr. Ackerman does not buy the immune-system argument. It is a hypothesis to support the hypothesis that sun exposure causes melanoma, he says. But it is not evidence. Of course, Dr. Ackerman adds, he could be wrong. "If the evidence were compelling, I'd be the first to capitulate," he said. "I'd say: 'I tip my hat to you. Well done.' "

August 9, 2005

Melanoma Is Epidemic. Or Is It?

By GINA KOLATA

The nation is in the grip of what looks like a terrifying melanoma epidemic: melanoma is being diagnosed at more than double the rate it was in 1986, increasing faster than any other major cancer.

But why the numbers are increasing is a contentious subject, so touchy that one dermatologist called it "the third rail of dermatology."

Many dermatologists argue that melanoma, the most deadly of the skin cancers, is in fact becoming more common. And they recommend regular skin cancer screening as the best way to save lives. But some specialists say that what the numbers represent is not an epidemic of skin cancer but an epidemic of skin cancer screening, and a new study lends support to this view.

In the study, published in the current issue of The British Medical Journal, Dr. H. Gilbert Welch of the Department of Veterans Affairs in White River Junction, Vt., and Dartmouth Medical School and his colleagues analyzed melanoma's changing incidence and death rate over time.

The researchers used Medicare data to track the swift rise in melanoma cases since 1986 and data compiled by the National Cancer Institute to track the death rate and the number of people with early and late-stage disease.

They found that since 1986, skin biopsies have risen by 250 percent, a figure nearly the same as the rise in the incidence of early stage melanoma. But there was no change in the melanoma death rate. And the incidence of advanced disease also did not change, the researchers found.

Dr. Welch and two colleagues, Dr. Steven Woloshin and Dr. Lisa M. Schwartz, argue that if there was really an epidemic of melanoma - for example, if something in the environment was causing people to get the skin cancer, scientists should see increases in cancers at all stages. This is what happened with lung cancer caused by smoking, and with other cancers caused by toxic substances.

The fact that the increase was seen only in very early stage disease was a tip-off that the epidemic might be less than it seemed, Dr. Welch said.

And that, he says, leads to a difficult question. The point of screening for melanoma is to reduce the death toll from the cancer. But if screening has not altered the number of patients with advanced disease or lowered the death rate, what is its benefit?

"That's the million dollar question," Dr. Welch said. "It certainly raises questions about whether we're doing any good."

The researchers hastened to add that people who notice suspicious moles or spots should not hesitate to see a doctor. But skin cancer screening, they said, is directed at healthy people who have no reason to suspect that anything is wrong.

The federal Preventative Services Task Force, which makes screening recommendations, has said that there was insufficient evidence to recommend either for or against skin screening.

But the American Cancer Society recommends regular skin screening, as does the American Academy of Dermatology, which sponsors Melanoma Mondays and free skin screening clinics that see more than 200,00 people a year.

Speaking for the dermatology academy, one of its past presidents, Dr. Darrell Rigel, a dermatologist in New York, said it only made sense to look for melanomas and remove them before they spread. "As dermatologists, we see people die every day from melanoma," he said. "And there's another thing we know with melanoma that's very clear. The earlier you find it and treat it, the better the survival."

More and more people are having skin biopsies, Dr. Rigel said, but he questioned Dr. Welch's conclusion that the biopsies were leading to excessive diagnoses of melanoma. "I would say the inverse is more likely," Dr. Rigel said. "There are more melanomas and therefore more biopsies."

At the American Cancer Society, Dr. Len Lichtenfeld, an oncologist, said his group reviewed the same data as Dr. Welch and came to a different conclusion. Screening, he said, appears to be saving lives.

As evidence Dr. Lichtenfeld pointed to a trend in the data indicating that the death rate from the disease rose slightly year by year until about a decade ago. That is consistent with an increase in serious cases of melanoma.

Now, he said, "there has been a suggestion in the data that the death rates in the Medicare age group are going down," an effect that would be expected if screening was working.

He added, "We agree that some of the melanomas are biologically indolent, but we also feel that when we look at the trend in the data and the suggestion of decreased mortality that there has been a benefit from increased surveillance for the disease."

Dr. Welch disagrees. He said the cancer society was "taking tiny, tiny differences" in death rates from year to year and "putting a huge microscope on it."

In fact, he said, the death rate has been basically flat since 1986, although it bounces around slightly from year to year as a result of statistical fluctuations.

"We don't disagree about the data," Dr. Welch said. "We disagree about the interpretation. We are not arguing that there is zero change in disease burden. We are arguing that most of the newly diagnosed cases are the result of increased screening."

In a 1997 article, two dermatologists, Dr. Robert Swerlick and Dr. Suephy Chen of Emory University and the Atlanta Veterans Affairs Medical Center, wrote that while some people might be saved by screening, there also are risks from a melanoma diagnosis.

"After a patient has received the diagnosis of melanoma, obtaining insurance can be extremely difficult," they wrote. "The diagnosis of melanoma also results in heightened scrutiny of all first-degree relatives and family members of the patient, and if increased surveillance leads to increased diagnosis, this process may also put them at risk for the diagnosis of melanoma."

Others who study cancer screening said that Dr. Welch's arguments were convincing and that he had raised issues about the national melanoma epidemic that could not easily be dismissed.

Dr. Barnett Kramer, associate director of the Office of Disease Prevention at the National Institutes of Health, said that, of course, the ideal way to know if a screening program works is to do a randomized clinical trial, assigning some people to screening and not others, then seeing if the screening saved lives. Absent such a study, he said, he finds Dr. Welch's paper convincing.

"It's doesn't look like our melanoma awareness campaigns have made an impact on mortality or on late-stage disease," Dr. Kramer said.

Dr. Russell Harris, a professor of medicine at the University of North Carolina and a member of the Preventive Services Task Force, said the new paper "should certainly make us worry about screening."

That also is the view of Dr. A. Bernard Ackerman, emeritus director of the Ackerman Academy of Dermatopathology in New York. Dermatologists have gone too far, he said, with screening clinics, removing innocuous moles and diagnosing melanoma too freely.

It makes sense for a doctor to look at your skin during a regular physical exam, Dr. Ackerman said, but screening programs have led to an excessive zeal for skin biopsies and for diagnosing melanoma.

"There has been a mania for taking off these moles that are of no consequence," Dr. Ackerman said. "We're talking about billions and billions of dollars being spent, based on hype."

While there may be questions about screening programs, Dr. Swerlick said that few in his field wanted to discussion their merits. He and Dr. Chen tried to open the debate themselves a few years ago but were met with hostility or disdain, he said.

"My colleagues in private practice know what we have written and they can't imagine that it could be correct," Dr. Swerlick said.

"This is a very touchy subject," he added.

And he appreciates why. "Many well-intentioned people have focused their clinical careers on this," he said, "and I can understand how unnerving it might be to be faced with the prospect that their efforts have been directed toward something ineffectual."

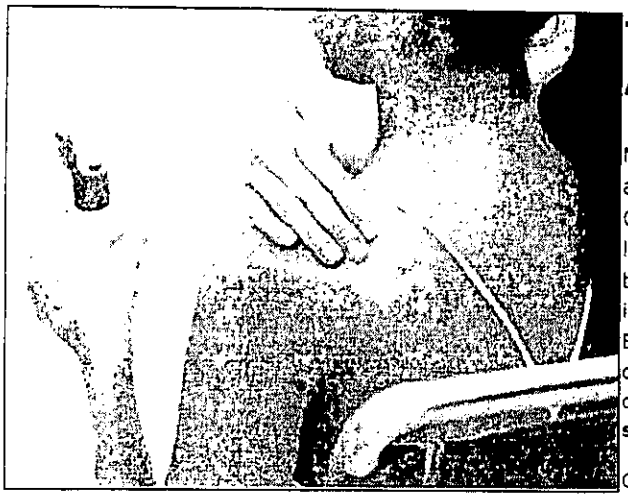
For his part, Dr. Welch says that early detection "is a double-edged sword and people need to remember that."

A few people might be saved because a cancer is found early, he said, but many, many more will be thrown into the medical mill when there is nothing wrong with them.

"People should realize that is the price we pay for screening," Dr. Welch said, and although screening is widely promoted, "we ought to know whether it helps."

http://www.nytimes.com/2005/08/09/health/09skin.html?pagewanted=print

NATIONAL CONFERENCE of STATE LEGISLATURES



Tanning Restrictions for Minors A State-by-State Comparison

Most skin damage from the sun occurs before age 18 and, according to the University of Texas MD Anderson Cancer Center, many youth will total 50 percent to 80 percent of their lifetime sun exposure during childhood. Research shows that blistering sunburns and overexposure during childhood greatly increase the chances of developing skin cancer later in life. Because sun exposure in childhood and the teenage years can be so damaging, policymakers in some states are regulating minors' use of tanning facilities (like tanning beds). Currently, at least **25 states and 4 counties** regulate tanning facilities for minors.

Childhood overexposure to the sun is causing cancer fatalities at very young ages. According to the Charlie Guild Melanoma Foundation, Melanoma is the most common cancer for men and women between the ages of 20 and 29. For women 25-29, it is the leading cause of cancer death. In women 30-34, it is the second leading cause of cancer death.

Sun exposure causes most nonmelanoma skin cancers. The American Cancer Society (ACS) estimates that over a million people a year are diagnosed with this type of cancer. Nonmelanoma rarely spreads to other parts of the body and, if detected early, is treatable and has excellent survival rates.

Melanoma is also treatable if caught early, but because it is likely to spread to other parts of the body, it is also very dangerous and potentially fatal. ACS estimates that there will be 62,190 new cases of Melanoma this year and 7,910 people will die. Risk factors for Melanoma include sun exposure and sunburn, blistering sunburns during childhood or teenage years, fair skin, freckles, moles, and a family history of melanoma. ACS recommends avoiding sunlight between 10 am and 4 pm when the sun's rays are strongest, avoiding tanning devices and sun lamps, using and re-applying sunscreen when exposed to UV rays, covering skin with clothing and wearing hats and sunglasses.

Updated August 2006

Tanning Restrictions for Minors

State	Statute	Age Restriction	Parent must Accompany Minor	Parent must sign written permission
Arizona	Ariz. Admin. Code R12-1-1414 A2	under 18		Written permission from a parent of guardian required for someone under 18 to use the facility.
California	Cal. Bus. and Prof. Code § 22706 (b) (3) and (4)	under 14; 14-18		Written permission required for ages 14-18. Children under 14 prohibited.
Connecticut	Conn. Public Act No. 06-195	under 16		Written permission from parent of guardian required for a person under 16 to use tanning facilities.
Florida	Fla. Stat. Ann. § 381.89 (1998)	under 14; 14-18	Parents must accompany children under 14 on all visits	Written permission required for ages 14-18.
Georgia	Ga. Code Ann. § 31-38-8 (1996)	under 18		Written permission required for those under 18.
Illinois	Ill. Admin. Code Title 77; Sec.	under 14; 14-18		Children under 14 are prohibited; parent must sign a conscent form in the presence

	795.190 (c)			of the facility operator if child is 14-18 years old.
Indiana	Ind. Code Ann. § 25-8-15.4-15 and 16	under 16; 16-18	Parent must accompany children under the age of 16	Parent of minors aged 16-18 must sign a risk waiver in the presence of the tanning device operator.
Kentucky	Ch. 103 of the Acts of 2006 (HB 151)	under 14; 14-18	Parent must accompany children under the age of 14	Parents of minors age 14-18 must sign a statement that they read and understand the warnings and certify that their child will use protective eye wear.
Louisiana	La. Rev. Stat. Ann. § 40:2701 to 40:2718 (2005)	under 14; 14-18	Parent must accompany children under the age of 14	Parent must sign risk waiver for minors 14-18.
Maine	10-144 Dept. of Human Services ch. 223 12A (3) (f)	under 18		People under the age of 18 must present written consent form signed by a parent or legal guardian; parents/guardians must have been supplied with standard warning materials.
Massachusetts	Mass. Gen. Laws Ann. ch. 111 Public Health § 211	under 14; 14-17	Parent must accompany children under the age of 14	Parent must sign prior written consent for minors age 14-17.
Michigan	Mich. Comp. Laws Ann. § 333.13407	under 14; 14-18	Parent must accompany children under the age of 14	Parent must present a statement similar to other customers that they read and understand the risks tanning poses to their child and that the child will wear protective eye wear before someone under 18 may tan.
Minnesota	Minn. Stat. Ann. § 325H.08	under 16		Tanning device operator must witness a parent or guardian sign a warning statement.
Mississippi	Agency Regulations, Division of Radiological Health 801.AA.12 (c) (5)	under 16		No one under 16 allowed to use tanning devices without written consent from a parent or legal guardian.
New Hampshire	N.H. Rev. Stat. Ann. § tit. XXX 313-A:31	under 14; 14-18	A licensed Physician must authorize use of the device and parent or guardian must be present for each use for kids under 14.	A parent or guardian must sign written consent to use the facility and verify the age of the minor for those 14-18 years old. Parent must sign in the presence of the operator and be present for the initial use of the device. Written permission is only good for 12 visits. Minor must present age verification when using the device.
New Jersey	N.J. Rev. Stat. § C. 26:2D-82.1	under 14; 14-18		Children under the age of 14 prohibited from using the device; parents of minors age 14-18 must sign documentation stating that they have read and understand the warnings.
New York	N.Y. Public Health Law ch. 573	under 14; 14-18		Children under 14 prohibited; minors age 14 to 18 must have signed permission from a parent or guardian to use the facilities; the signature must be obtained by the facility operator in person and is only valid for

				twelve months.
North Carolina	N.C. Gen. Stat. § 104E-9.1	under 13		Children under 13 are prohibited from using tanning devices without a physician's written prescription specifying the nature of the medical condition requiring the treatment, the number of exposures and the time of exposure.
Ohio	Ohio Admin. Code 4713-19-09 (B)	under 18		Facility operators must obtain written consent from a parent or legal guardian before each tanning session (signed at the facility) that authorizes the number of sessions the minor may purchase. For that number of sessions, the minor may sign for themselves.
Oregon	OAR 333-119-0090 (2)	under 18		People under the age of 18 must have a parent or legal guardian's signature authorizing their use of the device and stating that they understand the risks involved. Signature must occur before the tanning facility operator.
Rhode Island				
South Carolina	S.C. Code Ann. § ch. 61, sec. 106-4.5	under 18		People under the age of 18 must have written permission from a parent or guardian signed in the presence of the tanning facility operator.
Tennessee	Tenn. Code Ann. § 68-117-104	under 14; 14-18	Parents or guardians of children under 14 must accompany the child, sign a statement that they understand the risks, and sign a statement defining their relationship with the child.	People under 18 must be accompanied by a parent or guardian who signs the consent form or present a notarized statement of consent and a statement of their relationship with the minor.
Texas	Tex. Health and Safety Code Ann. § 145.008	under 13; 13-15; 16-18	Under age 13, a physician must recommend it's use and a parent must be present while the device is used. For children ages 13-15, a parent must be present at the facility while the device is in use.	For minors 16-17 years old, a parent must sign stating that they understand the warnings and consent to the device's use.
Wisconsin	Wis. Code Ann. § 255.08 (9)(a)	under 16		No one under age 16 is permitted to use tanning devices.

Source: The Charlie Guild Melanoma Foundation and NCSL, 2006
Note: List may not be comprehensive but is representative of the state laws that exist. NCSL appreciates additions and corrections.
More Resources: Cancer Information

Denver Office: Tel: 303-364-7700 | Fax: 303-364-7800 | 7700 East First Place | Denver, CO 80230 | Map
Washington Office: Tel: 202-624-5400 | Fax: 202-737-1069 | 444 North Capitol Street, N.W., Suite 515 | Washington, D.C. 20001

REJECT THE TAN BAN IN N.D.
BY Tom Dennis for the Herald
January 8, 2007

Column: OUR OPINION
Skiing is more dangerous. Hunting is more dangerous. Heck, youth hockey and high school football send many more young people to emergency rooms, by far.
So, why are some lawmakers in Bismarck talking about preventing 16-year-olds from using tanning facilities? For one thing, because they can. Tanning has a Coppertone aroma of vanity about it that makes it harder for freedom-lovers to defend and easier for health police to attack.
For another thing, because tanning is associated with cancer - the big C, a letter that prompts almost as much outrage and condemnation in modern society as a scarlet A did in years past. But in this case, the link between tanning and cancer shouldn't be enough for the state to step in.
That's because skin cancer is not lung cancer, sunlight is not cigarette smoke, and smoking is not tanning. In other words, the evidence used to ban smoking among young people and crack down on it in public places isn't nearly as strong regarding the risks of getting a tan.
* Skin cancer is not lung cancer. The Centers for Disease Control estimates 440,000 deaths each year in the United States are associated with smoking. In addition to lung cancer, the causes of death include heart disease, pulmonary disease and other illnesses aggravated by smoking.
In contrast, "the American Cancer Society estimates there will be about 10,710 deaths from skin cancer in 2006," the society's Web site reports.
In North Dakota, that translates into 20 to 30 skin-cancer deaths a year. And remember, a tanning-bed law would help only a much smaller number - namely, those who would develop skin cancer as a result of visiting tanning salons as a teen.
Is it worth restricting the freedom of tens of thousands and usurping parents' authority to maybe, possibly, benefit a few?
* Sunlight is not cigarette smoke. The sunlight/skin cancer link, it turns out, is complicated. Here's how an MSNBC story summarized the data in August:
"There's no doubt that sun exposure increases the rate of basal and squamous cell carcinomas. ... Having them removed frequently can be bothersome and even disfiguring, but they almost never threaten your life.
"With melanoma, the potentially deadly skin cancer, the role of the sun gets murkier. ... A review article in this week's New England Journal of Medicine concludes that the strongest risk factors for melanoma are a family history, multiple 'nevi' skin lesions and a previous history of the disease. Exposure to ultraviolet light, the harmful rays from the sun, are a more distant 'additional risk factor.'"
* Smoking is not **tanning**. Then, there is the recent bombshell that "a role for sunlight and vitamin D in cancer prevention (emphasis added) is strongly suggested by epidemiologic obserations." That's not MSNBC speaking; it's an editorial in the April 2006 issue of the Journal of the National Cancer Institute, commenting on the startling new research about vitamin D's role in human health.
In August, a USA Today story summarized that research this way: "Even if too much sun leads to skin cancer, which is rarely deadly, too little sun may be worse." By the way, people in Northern climates in winter are said to be especially vulnerable to vitamin D deficiency.
No, this isn't an ad for the **tanning** industry. It's a suggestion that banning teenagers from visiting salons is an overreaction. The state should have to clear a high bar before it restricts a free people's lawful activities; and in the matter of the risks of **tanning** salons, North Dakota's not over that bar yet.

NBC: What's wrong with a little sun?

The battle over how much is too much is not about facts

COMMENTARY

By Robert Bazell

Chief science and health correspondent

NBC News

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The heresy: the sun can be healthy. The heretic: Dr. Michael Holick of Boston University, a seemingly gentle, but combative scientist-physician who studies the beneficial effects of Vitamin D, produced by our skin when exposed to the sun.

Report a story about Holick's research and a reporter can expect to get — as I did — a rocket in the name of the president of the American Academy of Dermatology (AAD) alleging that the information endangers America's health.

This battle is not about facts.

It is more akin to arguments that erupt over advice that a drink or two of alcoholic beverages a day can help the heart. If we give those who are addicted an excuse, the argument goes, we're handing them a ticket to excess.

To understand the debate, one must appreciate the AAD's enormous success in recent years persuading Americans to either avoid the sun altogether or to slather on a lot of sun block if they can't. Then, along comes Holick alleging that the campaign has gone overboard leaving millions of Americans Vitamin D deficient.

Not long ago medical wisdom held that Vitamin D deficiency only matters if severe enough to produce rickets, a horrible disintegration of the bones seen in children living in severe poverty. But research by Holick and others in recent years proves that Vitamin D plays a key role in avoiding osteoporosis, the bone thinning that often occurs with aging.

In addition, every cell and tissue in the body requires Vitamin D so a lack of it can increase the risk for conditions including heart disease, breast and prostate cancer and high blood pressure.

Many experts now say we need at least 1,000 international units a day of Vitamin D, and it is almost impossible to ingest that much from the typical American diet. Large doses of supplements or moderate sun exposure are the alternatives. One can argue the sun is the far more natural alternative.

Even Holick's critics agree his science is sound. But that did not stop the dermatologists from pressuring him to resign from the Dermatology Department at Boston University. (He remains on the faculty in the endocrinology department).

"The concern," argues Dr. Thomas Kupper, a dermatologist at Brigham and Women's Hospital who speaks for the AAD, is that if "people hear 10 or 15 minutes is OK, then a little more is better and then 30 to 40 minutes becomes an hour and then an hour-and-a-half."

Holick's response: "They're promoting abstinence and abstinence campaigns usually don't work."

The argument gets even trickier when we consider how dangerous the sun really is. There is no doubt that sun exposure increases the rate of basal and squamous cell carcinomas. These are called skin cancer. Having them removed frequently can be bothersome and even disfiguring, but they almost never threaten your life.

Murky role

With melanoma, the potentially deadly skin cancer the role of the sun gets murkier. Research also shows that people who build up and maintain a constant tan such as those who work outdoors are less at risk from melanoma than those who get sudden, rapid exposure. A history of sunburns can be especially dangerous.

A review article in this week's New England Journal of Medicine concludes that the strongest risk factors for melanoma are a family history, multiple "nevi" skin lesions that can become melanoma, and a previous history of the disease. Exposure to ultraviolet light, the harmful rays from the sun are a more distant "additional risk factor." People often get melanoma on parts of the body never exposed to the sun.

Scientists are elucidating the specific genes that make up that family history. Just last week researchers from the National Cancer Institute, and other institutions, reported in the journal Science that inherited variations in a gene called MC1R can increase a person's risk for melanoma up to 17-fold. In the not too distant future, we may have blood tests to reveal who is truly at risk for melanoma from sun exposure.

Meanwhile, there is no escaping the data proving a little bit of skin exposure is actually beneficial — no matter what the dermatologists say.

Attachment #1

My name is Paula Brosseau. I am a 35 year old married, mother of 2 young boys in elementary school.

I was recently diagnosed with multiple abnormal skin lesions and melanoma. I contribute my skin condition to, among other things, patronizing tanning salons during my teens. I now take extraordinary precautions to avoid long term exposure to sunlight. My husband accuses me of contently following my boy's and applying too much sunscreen to their exposed skin during the summer months.

I agree with Senator Kilzer's proposed legislation to make it illegal for those 16 and younger to use the services of a tanning salon. I don't believe that those in their teens are capable of understanding the implications of increased exposure to ultraviolet rays. Quite frankly, I personally feel that those under 30 years of age are incapable of such logic either, but I can't do anything about that.

Thank you for the opportunity to express my short but heart-felt opinion with this letter.

Sincerely,

Paula Brosseau

Paula Brosseau

World Health Organization

The World Health Organization recommends that no person under 18 should use a sunbed

Today, the World Health Organization (WHO) is highlighting that sunbed use poses a risk of skin cancer, and that no person under 18 years of age should use a sunbed. It is known that young people who get burnt from exposure to UV will have a greater risk of developing melanoma later in life, and recent studies demonstrate the direct link between the use of sunbeds and cancer.

WHO highlights its recommendations as many people, especially young women in developed countries, prepare to get a tan in anticipation of summer.

Worldwide, WHO says, there are an estimated 132 000 cases of malignant melanoma (the most dangerous form of skin cancer) annually, and an estimated 66 000 deaths from malignant melanoma and other skin cancers. These figures continue to rise: in Norway and Sweden, the annual incidence rate for melanoma is estimated to have more than tripled in the last 45 years, while, in the United States, the rate has doubled in the last 30 years. Growth in the use of sunbeds, combined with the desire and fashion to have a tan, are considered to be the prime reasons behind this fast growth in skin cancers.

Worldwide, the incidence of melanoma varies more than 150-fold. The highest rates are found mainly in those nations where people are fairest-skinned and where the sun tanning culture is strongest: Australia, New Zealand, North America and northern Europe. One in three cancers worldwide is skin-related; in the United States, that figure is one in two. There are an estimated 1.1 million annual cases of skin cancer in the United States.

"There has been mounting concern over the past several years that people and in particular, teenagers are using sunbeds excessively to acquire tans which are seen as socially desirable. However, the consequence of this sunbed usage has been a precipitous rise in the number of skin cancer cases," said Dr Kerstin Leitner, WHO Assistant Director-General responsible for environmental health. "We are therefore calling attention to this fact and we would hope that this recommendation will inspire regulatory authorities to adopt stricter controls on the usage of sunbeds."

Some sunbeds have the capacity to emit levels of ultraviolet (UV) radiation many times stronger than the mid-day summer sun in most countries. At present, however, only a few countries have effective regulations on sunbeds or their use. Belgium, France and Sweden have legislation, limiting the maximum proportion of UV-B (the most dangerous component of UV radiation) in the UV output to 1.5% (a similar level of the carcinogenic UV that is emitted by the sun). In France the regulations require all UV radiation-emitting appliances to be declared to the health authority, minors under the age of 18 are banned from their use, trained personnel must supervise all commercial establishments and any claim of health benefit is forbidden. The State of California in the United States prohibits anyone under 18 from using sunbeds/tanning salons. Often, however, effective implementation of regulations remains a challenging issue. WHO encourages countries to

formulate and reinforce laws in order to better control the use of sunbeds such as the ban of all unsupervised sunbeds operations.

Some of the main consequences of excess UV exposure include skin cancers, eye damage and premature skin ageing. A study in Norway and Sweden, for example, found a significant increase in the risk of malignant melanoma among women who had regularly used sunbeds. Furthermore, excessive UV exposure can reduce the effectiveness of the immune system, possibly leading to a greater risk of infectious diseases.

Acute effects of UV radiation on the eye include cataracts, pterygium (a white coloured growth over the cornea) and inflammations of the eye such as photokeratitis and photoconjunctivitis. This is why protective goggles are recommended when using a sunbed.

Only in very rare and specific cases, WHO counsels, should medically-supervised sunbed use be considered. Medical UV devices successfully treat certain skin conditions such as dermatitis and psoriasis. These treatments should only be conducted under qualified medical supervision in an approved medical clinic and not unsupervised either in commercial tanning premises or at home using a domestic sunbed.

WHO's recommendation on sunbed usage is part of its overall efforts to protect the health of those people who could be overexposed to UV radiation. WHO, along with its partners, the International Commission on Non-Ionizing Radiation Protection, the United Nations Environment Programme and the World Meteorological Organization, have elaborated the Global Solar UV Index, which is now used in many countries including Argentina, Australia, Czech Republic, Finland, France, Germany, Greece, Israel, Mexico, Norway, Poland, Portugal, Spain, Sweden and Switzerland, and has recently been adopted for general usage in the United States and Canada.

"In all of our actions, we are clear: avoid excess exposure to UV and, when you have to be in the sun, protect your skin. Malignant melanomas, other cancers and conditions are the consequence of not taking the proper precautions," added Dr Leitner.

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STUDY

Youth Access Laws

In the Dark at the Tanning Parlor?

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Objective: To compare laws governing youth access to UV irradiation at indoor tanning facilities with laws governing youth access to tobacco.

Design: Tobacco and UV irradiation youth access laws were assessed via correspondence with public health offices and computerized legal searches of 6 industrialized nations with widely differing skin cancer incidence rates.

Setting: National, provincial, and state legal systems in Australia, Canada, France, New Zealand, the United Kingdom, and the United States.

Participants: Public health, legal, information science, and medical professionals and government and tanning industry representatives.

Main Outcome Measures: Statutes specifying age restrictions for the purchase of indoor tanning services or tobacco products.

Results: The 5 English-speaking countries with common law–based legal systems unilaterally prohibit youth access to tobacco but rarely limit youth access to UV irradiation from tanning salons. Only very limited regions in the United States and Canada prohibit youth access to indoor tanning facilities: Texas, Illinois, Wisconsin, and New Brunswick prohibit tanning salon use by minors younger than 13, 14, 16, and 18 years, respectively. In contrast, French law allows minors to purchase tobacco but prohibits those younger than 18 years from patronizing tanning salons.

Conclusions: Youth access laws governing indoor tanning display remarkable variety. Uniform indoor tanning youth access laws modeled on the example of tobacco youth access laws merit consideration.

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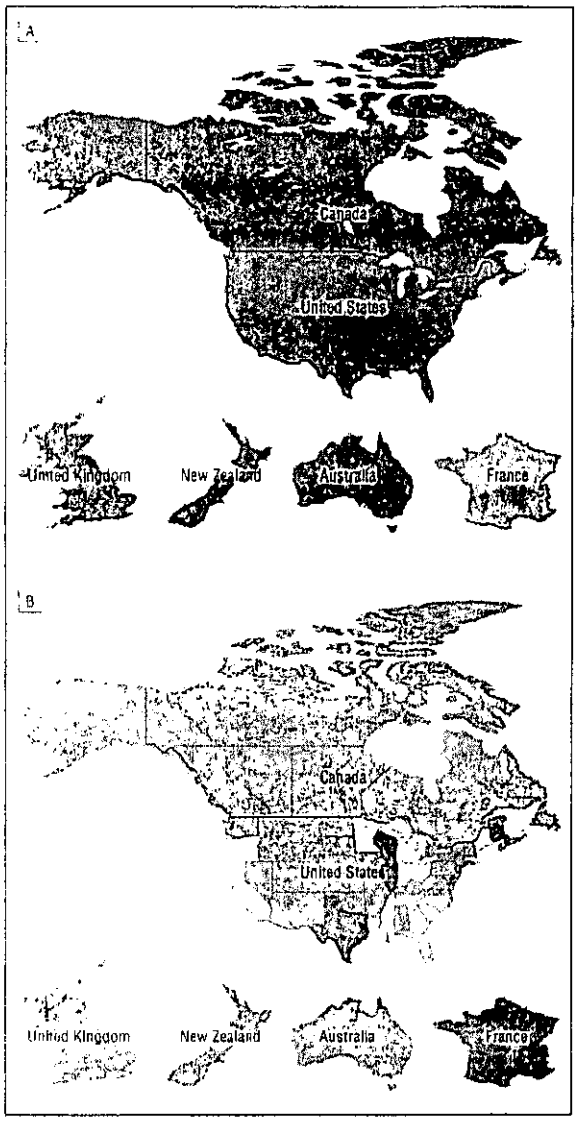
THE NUMBER of minors using tanning devices is surprisingly large and increasing. The $5 billion tanning salon industry counts more than 2.3 million teenagers among its estimated North American consumer base of 28 million.[1,2] Studies assessing indoor tanning by minors in the past decade confirm widespread use: In 1991, 34% of 1008 suburban Minnesota high school students reported using commercial tanning facilities (lifetime prevalence of 51% for girls and 15% for boys).[3] Fifty-seven percent of 1252 Swedish students aged between 14 and 19 years reported sunbed use 4 or more times during the previous year.[4] In the US Midwest, 12.5% of female 17- to 19-year-olds answering telephone questionnaires in 1994 reported using indoor tanning devices 6 or more times in the past year.[5] In 1998, a US population-based telephone survey found that 10% of children aged 11 to 18 years reported using tanning sunlamps in the previous year.[6] And in 1999, a large US cross-sectional study using self-reported questionnaires found nearly 10% of respondents aged 12 to 18 years reported using a tanning bed in the previous year.[7]

See also pages 436 and 520

While teenagers may seek indoor tanning because tanned skin is portrayed socially as beautiful and healthy, indoor tanning equipment may cause cutaneous and ocular burns, immune system suppression, polymorphous light eruptions, and drug- and cosmetic-induced photosensitivity.[8-11] A recent US case-control study has demonstrated a significant association of any use of tanning devices with increased skin cancer incidence: squamous cell carcinoma odds ratio (OR), 2.5 (95%



A, Distribution of tobacco youth access laws: Red indicates areas where the purchase of tobacco by minors younger than a specified age is prohibited. Green indicates areas where tobacco purchase by minors is unrestricted. B, Distribution of UV irradiation youth access laws: Red indicates areas where the use of indoor tanning facilities by minors younger than a specified age is prohibited. Yellow indicates areas where written guardian consent or guardian accompaniment is required for the use of indoor tanning facilities by minors younger than a specified age. Green indicates areas where indoor tanning facility use by minors is not restricted.

confidence interval [CI], 1.7-3.8); basal cell carcinoma OR, 1.5 (95% CI, 1.1-2.1).[11] Tanning device use has also been implicated in increasing melanoma risk,[12-17] despite methodological challenges encountered in associating tanning device use and melanoma.[13] While the dangers of indoor UV irradiation and outdoor UV exposure are difficult to compare, indoor tanning readily produces DNA mutation and burns, and may involve equipment that emits levels of UV-A radiation up to 10 times higher than those occurring in natural sunlight.[14,18,19] Since youth is an especially critical period during which UV irradiation increases skin cancer risk,[11,20,21] altering the tanning behavior of minors is an important goal in disease prevention.[11,13,22]

Laws protecting the health and safety of children reflect changing societal attitudes. As an example, child labor laws in the United States first emerged in the mid-19th century, but these laws were not widespread until the early 1900s and were not effectively enforced until the mid-20th century.[23,24] The US regulation of tobacco sales to minors has similarly evolved, culminating with a 1992 federal law requiring each state to ban the sale of tobacco to minors as a condition for receiving federal grants for substance abuse prevention and treatment.[25] Pursuant to that law, all US states ban the sale of tobacco to minors.[26] Unlike indoor tanning youth access laws, tobacco youth access laws have been extensively studied and chronicled.[26] The aim of the present study was to assess youth access laws for indoor tanning and to compare these with tobacco youth access laws.

METHODS

The search for youth access laws focused on English-speaking industrialized nations with common law–based legal systems and well-developed legal information networks but widely divergent skin cancer rates. The French legal system was included to illustrate the contrast that French youth access laws provide (**Figure**). Youth access laws were assessed via (1) computerized searches of Internet information sources and legal databases; (2) correspondence with regional health departments and ministries, professional societies, and tanning industry representatives; and (3) verifiable information canvassed from attendees of scientific meetings where preliminary search results were presented in poster format.

For the computerized search, we used the proprietary legal search engines LEXIS, WESTLAW, and CCINFOWEB; the Internet search engines Yahoo! and Google; and the terms "tanning," "sunbed," "solarium," "radiation," "tanning or 'indoor tanning' w/s (minor or child or parent)," and "skin care." Legal information from government and other relevant Web sites was compiled independently by 4 of the authors and compared. Information was also requested from the health departments of all US states, Canadian provinces, and other organizations and individuals, including the American Academy of Dermatology, the British Association of Dermatologists, the Indoor Tanning Association, the North American Alliance of Tanning Salon Owners, International Smart Tan Network, law firms representing the tanning industry, and attendees of the 62nd Annual Meeting of the Society for Investigative Dermatology, May 9-12, 2001, Washington, DC, and the Sixth Annual Meeting of the Dermatoepidemiology Association, June 9-11, 2001, Noordwidjkerhout, the Netherlands, where preliminary legal search results were presented as posters. A list of Web sites used in the data collection appears at the end of this article. Accessibility to all Web sites was verified on February 7, 2003.

Computerized searches for information on enforcement plans for youth access indoor tanning regulations used the natural language (non-Boolean) function of WESTLAW for the terms "tanning parlors," "salons," "regulations," "minors," "youth access," "parental consent forms," "penalties," "enforcement," "sting operations," and "undercover operations." This search was done in the ALLNEWSPLUS database, the broadest available news database in WESTLAW, and repeated with Yahoo! and Google search engines. Statutes regarding tobacco youth access laws were accessed using the same search engines and the Boolean search phrase "(tobacco or smok!) w/s minor."

RESULTS

The purchase of tobacco products by minors is heavily restricted in all regions of the 5 English-speaking countries but not in France (Figure, A). Our search reconfirmed previous findings[26] that all 50 states in the United States and most regions of the other surveyed nations prohibit the purchase of tobacco products by those younger than 18 years. Purchasers of tobacco must be at least 16 years old in the United Kingdom and 19 in Alaska, Alabama, Utah, and the Canadian provinces of Ontario and British Columbia.

In contrast to tobacco youth access laws, only France and limited regions of the United States and Canada prohibit youth access to indoor tanning (Figure, B). Since 1997, France has prohibited the use of tanning facilities by those younger than 18 years.[27] In the United States, only 3 states, Wisconsin, Illinois, and Texas, prohibit tanning parlor use by those younger than 16, 14, and 13 years, respectively. Eighteen states and 3 counties within 2 additional states require written guardian consent for teenage minors of various ages to use indoor tanning facilities. Eight of the 18 states requiring guardian consent additionally require guardian accompaniment of children younger than either 14 or 16 years to the tanning facility (**Table 1**). In 2002, Tennessee enacted legislation requiring notarized guardian signatures on consent forms if parents are not present with the minor at the tanning facility. Higher consent standards are required of the medical profession. Medical treatment of those younger than 18 years with artificial UV irradiation for skin disease such as psoriasis or cutaneous T-cell lymphoma requires guardian consent for therapy in all US states except Louisiana.[28]

Noncompliance with statutes governing youth access to indoor tanning is generally considered a misdemeanor punishable by fines up to $2000 and/or incarceration up to 60 days and may result in revocation of a tanning facility's license (see http://www.uchsc.edu/tanning/index.htm). Georgia and Texas impose the harshest criminal penalties, allowing for incarceration for up to 1 year for vendor noncompliance, while Texas and South Carolina allow the highest civil penalties, up to $25 000. No enforcement plans for indoor tanning youth access laws were found.

Only 1 province in Canada limits tanning facility access by minors: New Brunswick prohibits tanning facility use by those younger than 18 years (Figure, B; Table 1). The United Kingdom has no existing laws restricting minor access to tanning salons. Similarly, New Zealand and Australia have no restrictions on minors' access to tanning salons, and these countries have the highest rates of melanoma and nonmelanoma skin cancer of those surveyed (male age-adjusted melanoma incidence rate per 100 000 person-years: Australia, 40.5; New Zealand, 36.7; United States, 13.3; Canada, 8.2; France, 6.8; United Kingdom, 3.8).[29]

The Australian Standard for Solaria recommends a minimum age of 18 years for tanning facility use without parental consent and a minimum age of 15 years with parental consent.[30] However, unlike youth access laws, these recommendations are voluntary and carry no penalties for noncompliance. Likewise, several European nations (Spain, Germany, and Sweden) and international organizations have adopted or are considering age limit recommendations for tanning device use, (eg, the European Society of Skin Cancer Prevention [www.euroskin.org], the International Commission on Nonionizing Radiation Protection [www.icnirp.de], the International Electrotechnical Commission [www.iec.ch], and the European Committee for Electrotechnical Standardization [www.cenelec.be]). See http://www.uchsc.edu/tanning/index.htm for legal updates and further details.

COMMENT

More than 100 years ago, unrevealing fashions and shade-seeking behavior routinely limited UV radiation exposure for most of the population. Many credit French fashion designer Coco Chanel for making tan skin chic in the 1920s.[31] Throughout the 20th century, skin cancer incidence has increased, reflecting the popularity of revealing fashions and the increased sun-seeking behavior allowed by increased leisure time, outdoor activity, and travel.[32]

Tobacco youth access restrictions are surprisingly old: by 1890, 26 US states had banned the sale of tobacco to minors.[33] By contrast, indoor tanning regulations are few and recent: in 2003 only 3 states ban younger subsets of minors from patronizing tanning salons despite widely accepted evidence that youth is the most critical period for UV exposure elevating skin cancer risk.[8] Why several recent attempts to increase regulation of youth access to indoor tanning have met with severe compromise[34] and defeat (**Table 2**) deserves further analysis.

The disparity between indoor tanning and tobacco youth access laws might be explained by several factors: (1) the relatively small morbidity and mortality of tanning compared with smoking; (2) the less addictive nature of tanning compared with tobacco use; (3) the novelty of the tanning industry (starting in the 1970s); and (4) the lack of publicity of the carcinogenic properties of UV irradiation (eg, no US Surgeon General warning on the hazards of indoor tanning). Nonetheless many parallels between tobacco use and indoor tanning are evident: (1) Just as the tobacco industry had no standard on a minimum age for tobacco use until recently, the tanning industry has no standard on a minimum age for indoor tanning. (2) The tobacco and indoor tanning industries each represent major business interests that have derived financial benefits from allowing minors unlimited access to their carcinogenic products. (3) Just as the tobacco industry developed before science demonstrated the harm of smoking, the tanning industry also has evolved ahead of recent research showing harm. (4) Adverse effects of smoking and UV irradiation, including cancer, may emerge only after decades and in only a subset of users. Thus, multiple parallel factors may serve as barriers to the introduction of youth access regulations for these carcinogens.

While tobacco youth access laws remain controversial public health measures,[35] such laws have been reported to effectively aid reducing teen smoking up to 40%.[36] Youth access restrictions may prove even more effective for indoor tanning than for smoking for the following reasons: (1) Many underage smokers obtain cigarettes from parents, friends, and strangers or by theft, whereas similar social sources for indoor tanning do not

Table 1. Age Restrictions on Tanning Bed Users

Location	Parent Must Accompany Child*	Child Must Present Written Parental Consent*	Statute
Countries			
France	No use for those <18	No use for those <18	Décre 97-617, www.legifrance.gouv.fr/html/frame_lois_regIt.htm
Canadian Provinces			
New Brunswick	No use for those <18	No use for those <18	New Brunswick Reg 92-12 under the Radiological Health Protection Act (1992)
US States			
California	<14	14-17	CAL BUS & PROF CODE §22706(b)(3) and (4) (1997)
Florida	<14	14-17	FLA STAT ANN Chap 381.89 (1998).
Georgia	Not required	<18	GA CODE ANN §31-38-8 (1996)
Illinois	No use for those <14	14-17	ILL ADMIN CODE Title 77, §795.190(c)(2001)
Indiana	< 16	< 18	IND CODE ANN §25-8-15.4-15 to -16 (1999) and IND ADMIN CODE Title 820, §5-1-31 (2000)
Louisiana	< 14	14-17	LA REV STAT ANN §40:2714 (1992)
Maine	Not required	< 18	CODE ME R 10-144 Chap 223, §12.A(3)(f) (1996)
Massachusetts	<14	14-17	MASS GEN LAWS ANN Chap 111 §211 (1996) and MASS REGS CODE Title 105, §123.003(D)(2) (2001)
Michigan	< 14	<18	MICH COMP LAWS ANN §333.13407 (Supp 2001)
Minnesota	Not required	<16	MINN STAT ANN §325H.08 (1995)
Mississippi	Not required	<16	MISS REG 801.AA.12(c) (5) (1989)
North Carolina	Not required	<18	NC ADMIN CODE Title 15A, §11.1418 (2001)
Ohio	Not required	<18	OHIO ADMIN CODE §4713-19-09(B) (2001)
Oregon	Not required	<18	OR ADMIN R 333-119-0090 (2) (2000)
Rhode Island	Not required	<18	RI CODE R 23-68-TAN, §9.5 (1998)
South Carolina	Not required	<18	SC CODE ANN REGS 61-106-4.5 (2001)
Tennessee	<14	14-17, parent must accompany to sign consent or a notarized signature is required	TENN CODE ANN §68-117-104 (3), (4) (1996); SENATE BILL 2030, HOUSE BILL 3121 (2002)
Texas	No use for those <13; parental accompaniment required for those 13-15	16-17	TEX HEALTH & SAFETY CODE ANN §145.008(f, g) (2001)
Wisconsin	No use for those <16	No consent required for those >16	WIS CODE ANN §255.08 (9)(a) (1999)
US Counties			
Montgomery County, Maryland	<18	Parent must accompany child <18	MONTGOMERY COUNTY CODES, §51A-13 (b)(3) (1989)
Salt Lake and Utah counties, Utah	Not required	<17	SALT LAKE CITY-COUNTY, UTAH, Health Regulation No. 25, Commercial Tanning Facilities, §7.3(F) (1986); UTAH COUNTY, UTAH, Commercial Tanning Regulation 99-01 (1999)

*Numbers represent ages in years.

exist. (2) Indoor tanning requires significantly more time and interaction between vendor and buyer than does purchasing tobacco, which leaves both parties to an indoor tanning transaction more exposed to law enforcement. (3) Professional tanning organizations may adopt policies to promote the integrity of the tanning industry by limiting youth access, while no similar professional tobacco vendor associations exist.

Under the law, minors require adult guidance in many areas of activity because they have yet to obtain full autonomy and decision-making capacity. Without restrictions, youth may accept the risk-taking behavior of tanning without weighing long-term health risks. At a minimum, uniform youth access restrictions on tobacco and indoor UV irradiation will reinforce public health education on these carcinogens, spur research on the efficacy of these measures, and call attention to the importance of improving compliance.[37] While youth access laws in isolation may fail, the addition of other proven carcinogen control strategies, including taxes, educa-

Table 2. Recently Defeated Legislation Proposing Restrictions on Youth Access to Indoor UV Irradiation

State	Bill
Missouri	House Bill 66, 91st General Assembly (introduced January 3, 2001), would have required a person younger than 14 years to be accompanied by a parent or legal guardian when using a tanning device. It would also have required persons between the ages of 14 and 18 years to provide the written consent of a parent or legal guardian.
New York	Assembly Bill 3234, 224th Annual Legislative Session (introduced January 30, 2001), would have required the parent or legal guardian of a person younger than 18 years to sign the warning statement already required for customers of tanning facilities.
Pennsylvania	Senate Bill 783, 185th General Assembly (introduced April 5, 2001) would have required persons younger than 18 years to provide the written consent of a parent or legal guardian before using tanning facilities. House Bill 795 (introduced February 20, 2001) would have required persons between the ages of 14 and 18 years to provide a parent's or guardian's written consent and would also have required persons 14 years or younger to be accompanied by a parent or guardian when using a tanning device.

tion, and media campaigns, may rapidly lower youth indoor tanning rates.

Our search uncovered no plans for enforcement of indoor tanning youth access laws. Enforcement decisions are generally not publicly reported and may be made on a case-by-case basis. State and local officials' decisions about how and when to enforce laws are largely subject to the discretion of the relevant officials whose decisions may in turn be constrained by budgetary and political implications. Nonetheless, the recent arrest and jailing of Eve Hibbits for allowing her children to become sunburned at an Ohio County Fair[38] may set precedent for the prosecution of those allowing or facilitating the UV burning of minors.

One criticism of youth access laws is that changes in behavior cannot be legislated. However, enacting youth access indoor tanning laws may spark societal changes that foster behavioral change. Such changes have been illustrated by the enactment of seat belt legislation. The rate of seat belt use in the United States, only 10% to 15% in the early 1980s, increased to approximately 70% following the enactment and enforcement of mandatory seat belt use laws and public education campaigns.[39,40] This example demonstrates that legislation may influence cultural attitudes toward risk-taking behavior and effectively impact public health.

Societal attitudes toward tan skin, like societal attitudes toward smoking in airplanes and restaurants or drinking alcoholic beverages and driving, are malleable. Surveys in Australia have shown that the social appeal of tan skin decreased following skin cancer education and prevention campaigns.[41] This fluctuation highlights the need to examine the efficacy of current youth access tanning restrictions where such laws exist. The present study provides a starting point for a regularly updated Internet reference on indoor tanning youth access laws. We invite submission to the authors of any missed indoor tanning youth access regulations, especially city, county, and other local ordinances. These submissions will be independently verified and posted at http://www.uchsc.edu/tanning/index.htm.

By limiting minors' access to tanning salons, we acknowledge that seeking UV radiation exposure is a carcinogenic behavior that should be carefully considered in this vulnerable population. Instituting uniform age restrictions will hinder and discourage casual, uninformed exposure to UV radiation by minors at tanning facilities and will serve as a small but important step toward reversing the rising tide of skin cancer and other UV radiation–associated disease.

In an effort to curb smoking among minors, the French Senate on February 11, 2003, approved a bill to ban the sale of cigarettes to children younger than 16 years.

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Web Sites for Data on Youth Access Regulations for Tanning Services and Tobacco Sales

www.lawschool.westlaw.com; *www.lexis.com*; www.aad.org; *www.bad.org.uk*; www.indoor-tanning.org; *www.theita.com*; www.naatso.org; *www.austlii.edu.au*; www.standards.com.au; *http://jurist.law.mq.edu.au/index.htm*; http://jurist.law.utoronto.ca/index.htm; *http://jurist.law.cam.ac.uk*; www.labour.gov.sk.ca/safety/radiation/tanning/appendix-e.htm; *www.gov.nb.ca/justice/regs/92%2D12.htm*; www.gov.ab.ca/qp/ascii/regs; *www.hse.gov.uk/pubns/indg209a.htm*; www.nrl.moh.govt.nz/icindex.html; *www.ccohs.ca/legislation/fulllist.html*

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Comment [U1]:

Use of Sunscreen, Sunburning Rates, and Tanning Bed Use Among More Than 10 000 US Children and Adolescents

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ABSTRACT

Objectives. To describe the association of sunscreen use, sunburning, and tanning bed use by age, sex, residence, and psychosocial variables associated with tan-seeking behaviors, and to compare these findings with sun protection recommendations from federal agencies and cancer organizations.

Methods. A cross-sectional study, from all 50 states, of 10 079 boys and girls 12 to 18 years of age in 1999. Data were collected from self-report questionnaires with the children of the participants from the Nurses Health Study (Growing Up Today Study).

Results. The prevalence of sunscreen use was 34.4% with girls more likely to use sunscreen than boys (40.0 vs 26.4, odds ratio: 1.86; 95% confidence interval: 1.70–2.03). Eighty-three percent of respondents had at least 1 sunburn during the previous summer, and 36% had 3 or more sunburns. Nearly 10% of respondents used a tanning bed during the previous year. Girls were far more likely than boys to report tanning bed use (14.4 vs 2.4), and older girls (ages 15–18) were far more likely than younger girls (ages 12–14) to report tanning bed use (24.6% vs 4.7). Tanning bed use increased from 7% among 14-year-old girls to 16% by age 15, and more than doubled again by age 17 (35%; $N = 244$). Multivariate analysis demonstrated that attitudes associated with tanning, such as the preference for tanned skin, having many friends who were tanned, and belief in the worth of burning to get a tan, were generally associated with sporadic sunscreen use, more frequent sunburns, and increased use of tanning beds.

Conclusions. Our findings suggest that many children are at subsequent risk of skin cancer because of suboptimal sunscreen use, high rates of sunburning, and tanning bed use. Recommendations in the United States for improved sun protection and avoidance of tanning beds and sunburning, which began in the early 1990s, have been primarily unheeded. Nationally coordinated campaigns with strong policy components must be developed and sustained to prevent skin cancer in a new generation of children and adolescents.

Key Words: melanoma • skin cancer prevention • children • epidemiology

Abbreviations: UV, ultraviolet • GUTS, Growing Up Today Study • NHS II, Nurses' Health Study II • SPF, Sun Protection Factor; OR, odds ratio • CI, confidence interval

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INTRODUCTION

Results from epidemiologic studies have shown that sun exposure is the major

environmental risk factor for the development of both melanoma and nonmelanoma skin cancers.[1–3] It has been estimated that ultraviolet (UV) radiation from the sun is responsible for at least 65% of the melanoma cases worldwide.[4] It has been suggested that limiting sun exposure during childhood and adolescence, through the use of sunscreen, could reduce the lifetime risk of developing nonmelanoma skin cancers by as much as 78%.[5]

Although skin cancers are rare in individuals under the age of 20, there is evidence to support a role of sun exposure during early life and subsequent risk of skin cancer during adulthood.[6–9] Furthermore, patterns of sun exposure seem to be important in the development of these cancers, specifically intermittent sun exposure received during the critical periods of childhood and adolescence.[9,10]

The effects of sun exposure during early life are important because most of an individual's exposure occurs during childhood and adolescence.[11,12] Children spend an estimated 2.5 to 3 hours outdoors each day[13,14] and may receive 3 times more annual UV-B rays than adults, because they have a greater opportunity for midday sun exposure during the summer months.[13,15] Health behaviors, including unprotected sun exposure, are established early in life and may "track" into adulthood.[16,17] Furthermore, there is some evidence to suggest that primary prevention programs to reduce sun exposure are beginning to have a beneficial effect on reducing skin cancer in younger age cohorts.[18]

Recent recommendations from the Centers for Disease Control and Prevention, the American Cancer Society, the American Academy of Dermatology, the Environmental Protection Agency, and the Skin Cancer Foundation, among others, have called for increased use of sun protection, minimizing sunburns, and avoiding tanning beds.[19–23]

The purpose of the current study was to assess adherence to these new recommendations, and to examine the relationship between sunscreen use, sunburning, and tanning bed use by demographics and psychosocial correlates related to tan-seeking. We hypothesized that adolescents were not adopting these recommendations and that tan-seeking behaviors were related to noncompliance. In addition, we hypothesized that tan-seeking behaviors, including use of tanning beds, would be more prevalent among female adolescents. This is the first study to jointly examine sunscreen use, sunburning, and tanning bed use in US children.

METHODS

Study Population and Survey Methods

In the current study, we analyzed the findings from white preadolescents and adolescents aged 12 to 18 years. Because children of nonwhite races have a far lower risk of skin cancer and sunburn, the focus of this study was on white children.

The Growing Up Today Study (GUTS) is a longitudinal study that was established in 1996 and originally involved the children and adolescent offspring of women participating in the Nurses' Health Study II (NHS II). NHS II is a national longitudinal cohort study of 116 671 female nurses, established in 1989. Letters were first sent to the approximately 40 000 women who participated in NHS II and who had indicated that they had a child between 9 and 14 years of age. Mothers who gave permission for their child to participate provided each child's name, age, gender, and address. These 25 000 children then were sent a packet including a letter inviting them to participate in a new study and a gender-specific questionnaire. Return of a completed questionnaire was considered consent to participate. This study was approved by the Human Subjects Committees at the Harvard School of Public Health and the Brigham and Women's Hospital in Boston, Massachusetts. Mothers who gave permission to contact their children were slightly different from those who did not grant permission in terms of mother's smoking status (8% vs 10%, respectively), age (37.7 vs 37.8 years), and body mass index (25.3 kg/m^2 vs 25.7 kg/m^2).[24]

In 1999, 16 625 adolescents of all races (ages 12–18) were eligible to complete the survey, and 94% of these were white (N = 15 627). Sunscreen questions were completed by 10 843 respondents, of whom 10 079 were white. The overall response rate for white adolescents was 65%.

Measures

We created a variable based on the child's state of residence and then categorized these into warmer states (N = 13) and cooler states (N = 37; see methodology used elsewhere).[25] In general, warmer climates included Hawaii, Southern California, the Southeast, and the Southwest defined as having the highest mean UV Index at the time of survey completion.

In 1999, 7 questions on sun protection attitudes and practices were added to the GUTS questionnaire. The questions, divided into predictors and outcomes were:

Predictors

1. What is the color of your untanned skin?
   Color of untanned skin was categorized as very fair, fair, olive, and dark.
2. How many of your friends had a tan at the end of the summer (this past summer)?
   Responses were categorized on a 5-point scale, ranging from none to all.
3. How much do you agree with the following statement?
   It's worth getting a little burned to get a good tan?

Responses were categorized on a 5-point scale, from strongly agree to strongly disagree.

4. What kind of tan is most attractive to you?
   Responses included natural skin color, a little color from the sun, a light brown suntan, a moderate brown suntan, and a very dark brown suntan.
   For these 3 psychosocial questions, we then further categorized respondents into 2 groups: all, most, some friends tanned versus none and a few; worth getting a little burned to get a good tan into strongly agree and agree versus others; and attractiveness of tan into natural color and a little color from the sun compared with a light brown suntan, a moderate brown suntan, and very dark brown suntan.

Outcomes

The primary endpoints of interest included: 1) routine use of sunscreen, 2) the presence of at least 3 sunburns during the past summer, and 3) use of a tanning booth or salon during the past year. The outcomes are further described below:

1. When you were outside on a sunny day this past summer for >15 minutes, how often did you use sunscreen or sunblock with a Sun Protection Factor (SPF) of 15 or more?
   Sunscreen use was defined as "routine" if the child reported using sunscreen always or often.[26] Sporadic use of sunscreen was defined as sometimes, rarely, and never.
2. How many times did you get a sunburn this past summer (that is, how many times did exposed parts of your skin stay red for several hours after you had been out in the sun)?
   No sunburn, 1 to 2 times, 3 or more times.
3. During the past year, how many times did you use a tanning booth or tanning salon?
   Responses ranged from never to 10 or more times.

Data Analysis Plan

Statistical analyses were performed using SAS (SAS Insitute, Cary, NC). All analyses were stratified by gender. We calculated descriptive statistics to describe sun protection practices and attitudes of the study cohort. Univariate and multivariate analyses were performed to evaluate associations between the primary endpoints and demographic factors (age, gender, and residence), skin color (very fair, fair, olive, and dark), and psychosocial factors and attitudes related to beliefs about tanning. x^2 analysis tests for categorical data were performed and regression modeling was done to identify the sets of predictor variables for the three primary endpoints. In logistic regression analysis, we evaluated the association between the predictor variables and the trend toward the occurrence of multiple sunburns.

RESULTS

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The mean age of the 10 079 respondents was 14 years of age, and girls represented 59% of the sample. Nearly one third of the cohort lived in warmer climates. Seventy-five percent of respondents had very fair or fair skin.

Summary of Practices and Psychosocial Variables

Girls used sunscreen more routinely than boys (40.0% vs 26.3%; odds ratio [OR]: 1.86; 95% confidence interval [CI]: 1.70–2.03), but were more likely to have received at least 3 sunburns the previous summer, (OR: 2.06; 95% CI: 1.83–2.32). Girls were far more likely than boys to have used a tanning booth during the past year (14.4% vs 2.4%; OR: 6.99; 95% CI: 5.65–8.65; Table 1).

View this table: TABLE 1. Sun Protection Practices and Attitudes in GUTS Cohort (n = 10 079)
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Girls were more likely than boys to state that it was worth burning to get a good tan (29.2 vs 22.8; OR: 1.39; 95% CI: 1.27–1.52) and were also more likely to report that all, most, or some of their friends tanned (89.2 vs 77.8; OR: 2.35; 95% CI: 2.10–2.63). Tanned skin was more strongly preferred by girls compared with boys (OR: 1.45; 95% CI: 1.32–1.59; Table 1).

Sunscreen Use

Only one third of the respondents reported routine use of sunscreen during the past summer. Use of sunscreen was inversely associated with age for both boys and girls. Overall, very fair children were more likely than olive-complected and dark-complected children to report routine use (49% vs 29% and 20%, respectively; $P < .001$). These relationships were consistent when stratified by gender. There were no differences between routine and sporadic users by residence. Children reporting that it was worth getting burned to get a good tan used sunscreen less frequently (21% vs 39%; OR 0.42; 95% CI: 0.37–0.46) as did those who preferred a tan versus natural or light color (31% vs 44%: OR: 0.57; 95% CI: 0.52–0.62). Univariate analyses showed strong differences between boys and girls for most variables. Multivariate analysis confirmed that girls, younger children, children with very fair skin and fair skin, children not believing that it was worth burning to get a tan, those preferring natural skin color or a little color, and having friends who were not tanned were more likely to report sunscreen use (Table 2).

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TABLE 2. Adjusted ORs for Factors Associated With Sunscreen Use, Sunburning, and Tanning Bed Use

Sunburns

Most respondents (83%; $N = 8355$) reported sunburning at least once, and 36% of children reported 3 or more burns during the previous summer (Table 1). The 3 psychosocial variables emerged as strong predictors of multiple burning. For example, 49% of multiple burners agreed that it was worth burning to get a tan compared with 31% of those who did not burn (OR: 3.24; 95% CI: 2.79–3.76). Likewise, having friends who were tanned at the end of last summer was associated with multiple burning (OR: 2.72; 95% CI: 1.32–3.18). In the multivariate analysis, the trend toward multiple burning was most common for girls, older children, those in warmer climates, children with very fair and fair skin, children who stated that it was worth getting burnt to get a tan, those who preferred tanned skin, and children whose friends tanned (Table 2).

Tanning Bed Use

Nearly 10% of respondents used a tanning bed during the previous year. Girls were far more likely to report tanning bed use and older girls (ages 15–18) were far more likely than younger girls to report tanning bed use (24.6% vs 4.7; $P < .001$). Tanning bed use increased from 7% among 14-year-old girls to 16% by age 15, and more than doubled again by age 17 (35%; $P < .001$).

A significant trend toward increased tanning bed use for olive- and dark-complected children was observed (OR: 1.90; 95% CI: 1.44–2.51). This may be partly explained by the fact that olive-skinned children were more likely than very fair children to prefer tanned skin ($P < .001$). Overall, having friends who tanned was strongly associated with tanning bed use (OR: 4.37; 95% CI: 3.18–6.00) as was stating that it was worth getting a little burned to get a tan (OR: 2.58; 95% CI: 2.26–2.96). Of those using tanning beds, 23% used sunscreen routinely compared with 35% among children who did not use tanning beds ($P < .001$).

Among girls, all 3 psychosocial variables were predictive of tanning bed use. In particular, tanning bed use among girls reporting that it was worth getting burned was nearly double than for those without this belief (22.3 vs 11.3; OR: 2.25; 95% CI: 1.94–2.60). Similarly, tanning bed use by girls was much higher when they believed that all, most, or some of their friends tanned, (OR: 3.57; 95% CI: 2.47–5.16) or if they preferred tanned skin, (OR: 4.45; 95% CI: 3.38–5.85). In the multivariate analysis, girls, older age, report of darkest untanned skin, stating that it was worth getting burnt to get a tan, having a preference for tanned skin, and having friends who were tanned remained significant (Table 2).

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DISCUSSION

Current public health recommendations endorse "safe sun" behaviors, including use of sunscreens with SPF of 15 or higher, minimizing sunburns, and avoidance of tanning beds.[17–25] In this, the largest national survey on the sun protection attitudes and practices of US children and adolescents, we find that a majority of teens are not following these recommendations. Our findings suggest that many children are at subsequent risk of skin cancer because of suboptimal sunscreen use, high rates of sunburning, and tanning bed use. Specifically, we found that during the prior summer, only 34% of teenagers used sunscreen routinely and 83% sunburned at least one time. Moreover, among female adolescents, 14% used a tanning bed at least one time. Contrary to expectations, there were few differences in sunscreen use and sunburning rates in warmer versus cooler states.

Our study demonstrates that attitudes associated with tanning, such as the preference for tanned skin, having many friends who were tanned, and belief in the worth of burning to get a tan were generally associated with sporadic sunscreen use, more frequent sunburns, and increased use of tanning beds. There seems to be a gender difference as girls are more likely to be influenced by their peer network. In particular, the very high use of tanning beds among older teenage girls merits additional study.

Limitations

Although the results presented here are self-reported, we are less concerned about bias as the respondents report 2 findings of low social desirability-suboptimal use of sunscreen and high rates of sunburning. Furthermore, because these respondents are generally from middle-class families and the children of health professionals, the rates reported in this study may be different from those for other children. However, the lack of generalizability does not invalidate the data or preclude raising general hypotheses for other groups. Third, without data on cumulative exposure and intentional sunbathing, we cannot explain the contradictory finding of higher sunburning rates and more routine sunscreen use by girls. It is possible that facial or body creams, more frequently used by girls, lull girls into a false sense of protection thus enhancing their exposure to the sun. We were also surprised that tanning booth use was higher for olive- and dark-complected

children compared with those of fairer skin, and we can only speculate that adolescents use tanning booths to maintain their tanned or darker appearance. Future studies will also need to determine whether children are applying enough sunscreen, using SPF of 15 or more, and seek to corroborate their report of sunscreen use. Finally, sunscreen use was the only type of sun protection examined, therefore overall rates of sun protection may be higher than reported.

Prevalence reported in this study is generally similar to that reported in other studies, although comparisons are limited because of variation in the wording and methodology of other surveys.[26-37] Coogan et al[27] asked a single question on the use of sun protection among 25 000 Connecticut children completing a Health Check survey and found that only 14% of boys and 20% of girls ages 13 to 18 routinely used sun protection. Tanning bed use in this current study is also similar to findings of a population-based survey in Quebec, where rates were highest among women and young people.[28] Geller and colleagues[29] surveyed lifeguards (median age 19) at poolsites in Massachusetts and Hawaii and found sunburning rates approaching 80%. However, sunburning rates of 83% in this study were markedly higher than parent reported rates of 53% for 10- to 11-year-olds in a Massachusetts coastal town.[30]

In the United States, selected small-scale interventions for skin cancer prevention in community settings,[30,38] outdoor pools[29,39] and other recreation facilities[40,41] have shown the feasibility of implementing broader programs to change sun protection behaviors. But larger public educational campaigns and especially policy changes are also needed if we are to influence behavior and change social norms.[42] After many years, such programs in the Australian State of Victoria have resulted in decreased value of a tan, although adolescents remain the most resistant to changing attitudes regarding the appeal of a tan.[43]

In 1998, the Centers for Disease Control and Prevention launched the "Choose Your Cover" campaign,[19] designed to influence social norms related to sun protection and tanned skin, and to increase awareness, knowledge and behaviors related to skin cancer prevention. Campaign planners conducted formative research with young people and found strongly held beliefs about the benefits of tanned skin, including how it can help one look younger, healthier, sexier, and thinner.[19] The glamour and attractiveness of a tan seems to be widespread and seems to be a forerunner in the pathway toward inadequate sun protection and excessive burning. Changing these beliefs is crucial in increasing the acceptability and adoption of sun protection behaviors. In addition, focus group participants viewed sunburns as inconsequential, although few teens knew that sunburns increased one's risk of skin cancer.[19]

Using multiple, mutually reinforcing strategies holds the most promise for successful sun protection educational programs. Long-term policy, for example, age restrictions on tanning bed use, and environmental changes can help encourage and support changes in attitudes and behaviors.[43] Finding few differences between the geographic regions supports a nationally based series of policies and recommendations. Such strategies may include improving sun protection education at US schools[37]; building sun safe schools,[32] parks, and facilities; and incorporating sun safety awareness into everyday events, such as

using the daily UV Index in weather, news, and other broadcasts.[42,43] Peer education programs in schools, commonly used in tobacco education but sparingly used for sun protection, holds promise for future interventions.

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Recent recommendations in the United States for improved sun protection and avoidance of tanning beds and sunburning have apparently yielded few positive results. As we look to the lessons learned from Australia, preventing skin cancer will require a long-term, sustained effort. Nationally coordinated campaigns must be developed and sustained to prevent skin cancer in a new generation of children and adolescents.

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FOOTNOTES

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A Prospective Study of Pigmentation, Sun Exposure, and Risk of Cutaneous Malignant Melanoma in Women

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Background: Although sun exposure is an established cause of cutaneous malignant melanoma, possible interactions with host factors remain incompletely understood. Here we report the first results from a large prospective cohort study of pigmentation factors and sun exposure in relation to melanoma risk. *Methods:* The Women's Lifestyle and Health Cohort Study included 106 379 women from Norway and Sweden who were aged 30–50 years in 1991 or 1992 when they completed an extensive questionnaire on personal characteristics and exposures. Linkages to national registries ensured complete follow-up through December 31, 1999. Poisson regression models were used to estimate relative risks (RRs). All statistical tests were two-sided. *Results:* During an average follow-up of 8.1 years, 187 cases of melanoma were diagnosed. Risk of melanoma was statistically significantly associated with increasing body surface area (RR for $\geq$1.79 m^2 versus $\leq$1.61 m^2 = 1.60, 95% confidence interval [CI] = 1.03 to 2.48; P_{trend} = .02), number of large asymmetric nevi on the legs (RR for $\geq$7 nevi versus 0 nevi = 5.29, 95% CI = 2.33 to 12.01; P_{trend}<.001), hair color (RR for red versus dark brown or black = 4.05, 95% CI = 2.11 to 7.76; P_{trend}<.001), sunburns per year at ages 10–19, 20–29, and 30–39 years (P_{trend}<.001, P_{trend} = .03, and P_{trend} = .05, respectively), and use of a device that emits artificial light (solarium) one or more times per month (P = .04). *Conclusions:* Our results confirm previous findings that hair color, number of nevi on the legs, and history of sunburn are risk factors for melanoma and suggest that use of a solarium is also associated with melanoma risk. Adolescence and early adulthood appear to be among the most sensitive age periods for the effects of sunburn and solarium use on melanoma risk. However, it may be too early to see the full effect of adult exposures in this cohort. [J Natl Cancer Inst 2003;95:1530–8]

Cutaneous malignant melanoma (hereafter called melanoma) imposes a considerable public health burden. The incidence of melanoma varies more than 150-fold around the world, with the highest rates occurring among white or predominantly white populations in Australia, New Zealand, North America, and northern Europe *(1)*. Rates of melanoma in Norway and Sweden have more than tripled since 1958–1962, the first years that

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reliable information was available from cancer registries; rates are now higher there than they are elsewhere in Europe *(2)* and are predicted to increase *(3)*.

Although sun exposure is the major established risk factor for melanoma *(4,5)*, geographic differences in melanoma incidence cannot be attributed solely to differences in the intensity of solar exposure. Within Europe, for example, the incidence of melanoma is higher at northern latitudes, which generally have lower solar intensities, than at southern latitudes, which generally have higher solar intensities *(2)*, although in both Norway and Sweden, an inverse relationship between melanoma incidence and latitude has been noted *(6,7)*. Hence, the effect of UV light on melanoma risk may be strongly modified by other factors, such as differences in sun sensitivity and the nature of the exposure to the sun *(8)*.

A number of studies have examined factors that influence the association between sun exposure and the risk of melanoma. An intermittent pattern of sun exposure, which is typically assessed by measures of sun-intensive activities, such as outdoor recreation or vacations, is associated with increased risk of melanoma *(9)*. In addition, many studies *(4,5,9,10)* have reported that sunburn, which is an indicator of an intermittent pattern of sun exposure, is positively associated with the risk of melanoma. Results of many studies have suggested that childhood is a critical period for sun exposure *(9)*, and ecologic studies have shown more consistent associations than case–control studies between childhood sun exposure and melanoma risk *(11)*. Host factors such as eye color, hair color, skin color, the number of nevi, and skin reaction to chronic and acute sun exposure have also been associated with the risk of melanoma *(4,12)*.

Most of what is known about the association between sun exposure and melanoma risk comes from results of case–control studies. The Nurses' Health Study is, as far as we know, the only cohort study to examine the association between sun exposure and malignant melanoma; however, a case–control design within the cohort was used in these analyses *(13,14)*. Case–control studies are limited by the potential for differential bias in recall of sun exposure between case patients and control subjects *(15,16)*. Prospective cohort studies can overcome such limitations because the exposure information is collected prior to disease occurrence. Here we report the first results from the Norwegian–Swedish Women's Lifestyle and Health Cohort Study, which was initiated in 1991. This study is the first prospective cohort study, to our knowledge, to examine the associations between pigmentation factors and sun exposure and the risk of malignant melanoma.

Subjects and Methods

Study Population

For practical reasons, women were enrolled in the Norwegian–Swedish Women's Lifestyle and Health Cohort Study in both 1991 and 1992. In Norway, a nationwide random sample of 100 000 women who were born between 1943 and 1957 (i.e., aged 34–49 years at inclusion) was drawn from the National Population Register at Statistics Norway (Oslo, Norway). In Sweden, a random sample of 96 000 women who were born between 1943 and 1962 (i.e., aged 30–50 years at inclusion) and were residing in the Uppsala Health Care Region (which comprises about one-sixth of the Swedish population) was drawn from the National Population Register at Statistics Sweden (Stockholm, Sweden).

All women received a letter inviting them to participate in the study. The letter also requested that they provide written informed consent and contained a comprehensive questionnaire that was to be completed and returned in a prepaid envelope. Identical questions relevant to the analysis presented here were included in the questionnaires sent to women in the two countries. The study was approved by the Data Inspection Boards in both countries and by the regional Ethical Committees, and all women gave written informed consent to participate.

Host Factors and Exposure Information

In the questionnaires, study participants were asked to categorize their natural hair color (dark brown/black, brown, blond, or red) and their eye color (brown, gray/green, or blue) and to categorize the number of asymmetric nevi larger than 5 mm on their legs from toes to groin (0, 1, 2–3, 4–6, 7–12, 13–24, or ≥25 nevi). A brochure that was included with the questionnaire provided color pictures with three examples of asymmetric nevi.

Participants recorded their sun sensitivity according to their reactions to both acute and chronic exposure to the sun. Regarding acute sun exposure, the questionnaire asked the women to choose from among four categories to describe how their skin reacts to heavy sun exposure at the beginning of the summer: the skin turns brown without first becoming red, the skin turns red, the skin turns red with pain, or the skin turns red with pain and blisters. The women were asked to describe how their skin reacts to long-lasting or chronic sun exposure according to four categories: the skin turns deep brown, brown, or light brown, or the skin never turns brown.

Participants were asked to report their histories of sunburn and sunbathing vacations and on the frequency of their use of a solarium (i.e., a sun bed or a sunlamp that emits artificial UV light) when they were aged 10–19, 20–29, 30–39, or 40–49 years. For each age period, the participant was asked to report the number of times per year she had been burned by the sun so severely that it resulted in pain or blisters that subsequently peeled by choosing from among five categories: never, one time per year at most, two or three times per year, four or five times per year, or six or more times per year. Participants reported the average number of weeks per year spent on sunbathing vacations in southern latitudes (typically southern Europe, e.g., Spain or Greece) or within Norway or Sweden for each age period by choosing from among five categories: never, 1 week per year, 2–3 weeks per year, 4–6 weeks per year, or ≥7 weeks per year. Participants reported their average use of a solarium during each age period by choosing from among six categories: never, rarely, one time per month, two times per month, three or four times per month, or more than one time per week. The questionnaires also contained questions about the participant's current height and weight, current and past contraceptive use, reproductive history, prevalent diseases, and lifestyle.

Follow-up and Endpoints

Start of follow-up was defined as the date of receipt of the returned questionnaire. Person-years were calculated from the start of follow-up to the date of diagnosis of primary melanoma, to the date of emigration or death, or to the end of follow-up (December 31, 1999), whichever occurred first. Each resident of Norway and Sweden is assigned a unique national registration number that includes the person's date of birth; those registration numbers are entered into the nationwide databases that were

used in this study. By linkage of cohort data to the national cancer registries in Norway and Sweden, this national registration number allowed us to identify cancer cases. Information on death and emigration was gathered by linkage to Statistics Norway and Statistics Sweden.

A total of 57 584 (57.6%) of the Norwegian women and 49 259 (51.3%) of the Swedish women returned completed questionnaires; the overall response rate was 54.5%. We excluded four women because of the lack of vital status information in the available register files, 18 women who had emigrated or died before the start of follow-up, 198 women who did not adequately answer the questions regarding sun exposure or personal characteristics (i.e., sun sensitivity of skin, hair color, eye color, and number of asymmetric nevi), and 244 women who were diagnosed with melanoma prior to the start of follow-up.

Statistical Analysis

Participants' geographic regions of residence were defined according to four categories: the southern region of Norway, the middle region of Norway, the northern region of Norway, and the Uppsala Health Care Region in Sweden. The latitudes of the population center of mass within each Norwegian county, which were provided by the Norwegian Mapping Authority, together with the observed number of melanoma cases in those counties, formed the basis for our definitions of the three Norwegian regions. The southern region of Norway includes Vest-Agder, Aust-Agder, Rogaland, Vestfold, Østfold, and Telemark counties, with population centers of mass located at 58°24′–59°31′ N; the middle region of Norway includes Oslo, Akershus, Buskerud, Hordaland, Oppland, Hedmark, and Sogn og Fjordane counties, with population centers of mass located at 59°58′–61°30′ N; the northern region of Norway includes Møre og Romsdal, Sør-Trøndelag, Nord-Trøndelag, Nordland, Troms, and Finnmark counties, with population centers of mass located at 62°44′–70°22′ N. The Uppsala Health Care Region in Sweden has the population center of mass located at 59°86′ N. Body surface area was calculated according to the formula *(17)* $\text{weight}^{0.425} \times \text{height}^{0.725} \times 71.84$ and categorized by quartiles. We combined the upper two categories of the variables concerning acute and chronic exposures to sun because of the small numbers in each category and analyzed nevus counts in three categories: 0, 1, 2–6, and ≥7 (only two categories, 0 and ≥1, were used when testing interaction effects). In the age period–specific analyses of sunburns, sunbathing vacations, and solarium use, we combined the upper categories of these variables because of small numbers. For each of the variables (sunburns, sunbathing vacations, and solarium use), new variables were constructed to combine the exposure during the three age periods that were recorded for all women (i.e., 10–19, 20–29, 30–39 years).

We used Poisson regression analysis to estimate the association between sun exposure or personal characteristics and the risk of melanoma. The statistical significance of independent variables and interaction effects was tested by using the likelihood ratio test. We tested for trends across categories of variables by assigning equally spaced values (e.g., 1, 2, 3, or 4) to the categories and treating the variables as continuous variables in the Poisson regression analysis. All analyses were adjusted for attained age (i.e., age at study entry plus the duration of follow-up), which was categorized by 5-year intervals (for analyses of women aged 40 years or older, we used only two age categories, <50 years and 50–60 years), and all multivariable models also included geographic region of residence. The analyses of personal characteristics included mutual adjustments for statistically significant variables. The multivariable models used in the analyses of sunburn, sunbathing vacations, and use of a solarium included hair color. In addition, each age-specific model for use of a solarium included the corresponding numbers of age-specific sunburns and sunbathing vacations. Results are presented as relative risks (RRs) with 95% confidence intervals (CIs). All P values are two-sided, and a 5% level of statistical significance was used.

Results

The final study sample consisted of 106 379 Norwegian and Swedish women. During an average 8.1 years of follow-up (median = 8.3 years, range = 0.01–8.6 years) corresponding to 866 668 person-years of observation, 187 incident cases of melanoma were reported to the Cancer Registries in Norway and Sweden. These incident cases occurred among 183 women for whom melanoma was their first cancer diagnosis and four women for whom melanoma was their second cancer diagnosis. All incident cancer cases were histopathologically confirmed as invasive melanoma. Characteristics of the study cohort and of the incident cases of malignant melanoma and their frequencies are summarized in Table 1. Melanomas on the lower limbs were observed most frequently, followed by melanomas on the trunk. Classification of subtypes was less frequently performed in Sweden than in Norway. Seventy-one percent of the Norwegian cases were classified as superficial spreading melanoma (Table 1).

Table 2 summarizes the associations between personal characteristics and the risk of melanoma. Calculated body surface area was positively associated with the risk of melanoma (P_{trend} = .02), as was hair color (P_{trend}<.001). Compared with women who had dark brown or black hair, women with blond hair had an approximately twofold higher risk of melanoma, whereas women with red hair had an approximately fourfold higher risk. Eye color was not associated with melanoma risk. We also found no statistically significant association between tanning of the skin after heavy or repeated sun exposure and the risk of melanoma, although an indication of a trend was seen for skin color after repeated sun exposure. The number of large asymmetric nevi on the legs was a strong predictor of melanoma risk: women with seven or more nevi had an approximately fivefold higher risk of melanoma than women with no nevi (P_{trend}<.001). Mutual adjustment for all statistically significant variables listed in Table 2 did not appreciably change any of the multivariable relative risks presented in the table (data not shown).

Risks of melanoma increased with increasing numbers of sunburns women reported having during the second, third, and fourth decade of life (Table 3). The estimated risk of melanoma was highest for women who reported having sunburns during adolescence (i.e., the 10–19-year age period), whereas no association between risk and sunburns during the fifth decade of life (i.e., the 40–49-year age period) was observed. Next, we combined the information about the number of sunburns at ages 10–19, 20–29, and 30–39 years into one new variable. Women who had one or no sunburns per year during these three periods were used as the reference category. The other categories were sunburns two or more times per year during the adult years (i.e., 20–29 years and/or 30–39 years), sunburns two or more times

Table 1. Characteristics of participants in the Norwegian–Swedish Women's Lifestyle and Health Cohort Study and of the incident cases of cutaneous malignant melanoma during follow-up from 1991–1992 through 1999

Characteristics	Norway (n = 57 311)*	Sweden (n = 49 068)*	Total (N = 106 379)*
Mean age at study entry, y (range)	41.1 (34–49)	39.6 (30–50)	40.4 (30–50)
Person-years of follow-up	468 982	397 686	866 668
Number of incident cases of melanoma	121	66	187
Mean age at diagnosis of melanoma, y (range)	45.7 (35.4–54.0)	45.3 (31.9–57.5)	45.6 (31.9–57.5)
Site of melanoma, No. (%)			
Trunk	32 (26)	19 (29)	51 (27)
Upper limb	12 (10)	10 (15)	22 (12)
Lower limb	60 (50)	29 (44)	89 (48)
Other†	17 (14)	8 (12)	25 (13)
Histologic type of melanoma, No. (%)			
Superficial spreading melanoma	86 (71)	5 (8)	91 (49)
Nodular melanoma	16 (13)	2 (3)	18 (10)
Lentigo malignant melanoma	2 (2)	0 (0)	2 (1)
Malignant melanoma, not otherwise specified	17 (14)	59 (89)	76 (41)
Body surface area in m^2‡, No. (%) (n = 103 333)			
≤1.61	13 985 (25)	11 696 (25)	25 681 (25)
1.62–1.69	13 929 (25)	11 680 (25)	25 609 (25)
1.70–1.78	14 361 (26)	11 802 (25)	26 163 (25)
≥1.79	13 896 (25)	11 984 (25)	25 880 (25)
Skin color after heavy sun exposure in the beginning of the summer, No. (%) (n = 105 595)			
Brown	14 856 (26)	11 532 (24)	26 388 (25)
Red	27 584 (49)	23 243 (48)	50 827 (48)
Red with pain	11 342 (20)	11 421 (23)	22 763 (22)
Red with pain and blisters	2999 (5)	2618 (5)	5617 (5)
Skin color after repeated sun exposure, No. (%) (n = 103 312)			
Deep brown	8797 (16)	7979 (16)	16 776 (16)
Brown	31 394 (58)	30 029 (62)	61 423 (59)
Light brown	13 453 (25)	10 129 (21)	23 582 (23)
Never brown	900 (2)	631 (1)	1531 (1)
Hair color, No. (%) (n = 103 027)			
Dark brown, black	9348 (17)	13 813 (29)	23 161 (23)
Brown	21 500 (39)	20 939 (43)	42 439 (41)
Blond	22 241 (41)	12 185 (25)	34 426 (33)
Red	1495 (3)	1506 (3)	3001 (3)
Eye color, No. (%) (n = 102 710)			
Brown	6345 (12)	6738 (14)	13 083 (13)
Gray, green, or mix	21 062 (39)	17 130 (36)	38 192 (37)
Blue	27 170 (50)	24 265 (50)	51 435 (50)
Total No. of asymmetric nevi >5 mm on legs, No. (%) (n = 100 980)			
0	47 704 (89)	38 997 (82)	86 701 (86)
1	3438 (6)	4842 (10)	8280 (8)
2–3	1595 (3)	2424 (5)	4019 (4)
4–6	416 (1)	713 (2)	1129 (1)
≥7	324 (1)	527 (1)	851 (1)

*Because of missing values, the number of women will differ in the presentation of personal characteristics below. The total number of women (n) is presented for each personal characteristic.

†Head/neck and skin unspecified.

‡Calculated according to the following formula *(17)*; $\text{weight}^{0.425} \times \text{height}^{0.725} \times 71.84$.

per year during adolescence (i.e., 10–19 years), and sunburns two or more times per year during all three age decades (i.e., 10–19, 20–29, and 30–39 years). We observed increased risk of melanoma for the upper two categories of this new variable and a statistically significant positive trend (Table 3). Collapsing the upper three categories into one gave a multivariable relative risk of 1.70 (95% CI = 1.23 to 2.34; $P = .002$) for sunburns two or more times per year for at least one of the three age decades as compared with a maximum of one sunburn per year in all three decades. No statistically significant interaction was found between this dichotomous sunburn variable and the number of nevi on the legs ($P = .84$).

We found suggestive evidence for an association between increasing risk of melanoma and increasing number of weeks women spent on sunbathing vacations at ages 30–39 years (Table 4). Although most of the point estimates and all of the trends pertaining to this association were not statistically significant, we consistently observed a risk increase of approximately 60%–70% for the highest compared with the lowest exposure category for women who took sunbathing vacations between the ages of 10 and 39 years. Increased risk, albeit not statistically significant and with no appreciable trend, was also observed when information on sunbathing vacations from these three decades of life was combined into a new variable in a way analo-

Table 2. Relative risks (RRs) and 95% confidence intervals (CIs) of cutaneous malignant melanoma according to personal characteristics*

Characteristic	No. of cases	Age-adjusted RR (95% CI)	Multivariable RR† (95% CI)
Body surface area, m^2‡ (n = 103 333)			
≤1.61	32	1.00 (referent)	1.00 (referent)
1.62–1.69	44	1.38 (0.87 to 2.17)	1.37 (0.87 to 2.17)
1.70–1.78	57	1.74 (1.13 to 2.68)	1.73 (1.12 to 2.66)
≥1.79	52	1.60 (1.03 to 2.49)	1.60 (1.03 to 2.48)
		P_{trend} = .02	P_{trend} = .02
Skin color after heavy sun exposure at the beginning of summer (n = 105 595)			
Brown	36	1.00 (referent)	1.00 (referent)
Red	100	1.45 (0.99 to 2.12)	1.45 (0.99 to 2.13)
Red with pain/red with pain and blisters	51	1.34 (0.88 to 2.06)	1.36 (0.89 to 2.08)
		P_{trend} = .21	P_{trend} = .19
Skin color after repeated sun exposure (n = 103 312)			
Deep brown	21	1.00 (referent)	1.00 (referent)
Brown	107	1.39 (0.87 to 2.22)	1.40 (0.87 to 2.23)
Light brown/never brown	51	1.62 (0.97 to 2.69)	1.60 (0.96 to 2.67)
		P_{trend} = .07	P_{trend} = .07
Hair color (n = 103 027)			
Dark brown, black	26	1.00 (referent)	1.00 (referent)
Brown	57	1.18 (0.74 to 1.88)	1.16 (0.73 to 1.84)
Blond	82	2.10 (1.35 to 3.26)	1.96 (1.25 to 3.07)
Red	14	4.13 (2.16 to 7.91)	4.05 (2.11 to 7.76)
		P_{trend}<.001	P_{trend}<.001
Eye color (n = 102 710)			
Brown	18	1.00 (referent)	1.00 (referent)
Gray, green, or mix	63	1.18 (0.70 to 1.99)	1.15 (0.68 to 1.94)
Blue	97	1.36 (0.82 to 2.25)	1.33 (0.80 to 2.20)
		P_{trend} = .17	P_{trend} = .19
Total No. of asymmetric nevi >5 mm on legs (n = 100 980)			
0	128	1.00 (referent)	1.00 (referent)
1	26	2.15 (1.41 to 3.28)	2.29 (1.50 to 3.49)
2–6	16	2.14 (1.27 to 3.60)	2.30 (1.36 to 3.87)
≥7	6	4.92 (2.17 to 11.15)	5.29 (2.33 to 12.01)
		P_{trend}<.001	P_{trend}<.001

*Poisson regression analysis. All statistical tests were two-sided.
†Multivariable models included attained age and region of residence.
‡Calculated according to the following formula *(17)*: $weight^{0.425} \times height^{0.725} \times 71.84$.

gous to that described above for sunburns (Table 4). Collapsing the upper three categories of this new variable gave a multivariable relative risk of 1.51 (95% CI = 0.95 to 2.40; P = .07) for sunbathing vacations one or more weeks per year in at least one of the three age decades as compared with never going on sunbathing vacations in any of the three decades. No statistically significant interaction was found between this dichotomous variable for sunbathing vacations and the number of nevi on the legs (P = .58).

We had limited power to examine the association between the use of a solarium during adolescence and melanoma risk because only 2% of the women in the study reported having such exposure. However, we found that compared with women who never used a solarium at ages 20–29 years, women who reported using a solarium once or more per month during that age period had a relative risk of melanoma of 2.58 (95% CI = 1.48 to 4.50; P_{trend} = .006) (Table 5). Use of a solarium at ages 30–39 years and 40–49 years also appeared to be associated with a risk, although not a statistically significantly increased risk, of melanoma (Table 5). In a multivariable analysis of the combined variable for solarium use during the 10–39-year age period, women who used a solarium one or more times per month in at least one of the three decades between ages 10 and 39 had a statistically significantly higher risk of melanoma than women who had never or rarely used a solarium during those three decades (RR = 1.55, 95% CI = 1.04 to 2.32; P = .04) (Table 5).

The multivariable models in Tables 3–5 include hair color as a measure of sun sensitivity. Additional adjustment for skin color after repeated sun exposure gave similar results and did not affect the conclusions (data not shown).

Discussion

Results of our prospective analysis suggest that hair color, the number of large asymmetric nevi on the legs, and body surface area are important personal characteristics that contribute to the risk of melanoma. The number of sunburns was also an important predictor of melanoma risk, and the strongest effects were associated with the number of sunburns women experienced during adolescence; there was similar, albeit weaker, evidence for an association between the number of sunbathing vacations taken in Norway, Sweden, or more southern latitudes and melanoma risk. Using a solarium one or more times per month, particularly during the 20–29-year age period, adjusted for numbers of sunburns and sunbathing vacations, was statistically significantly associated with melanoma risk.

The incidence of melanoma observed in our study was higher among the Norwegian women than among the Swedish women. The crude incidence rates of melanoma, which we calculated from the data presented in Table 1, were 25.8 cases per 100 000 person-years of follow-up for the Norwegian women and 16.6 cases per 100 000 person-years of follow-up for the Swedish

Table 3. Relative risks (RRs) and 95% confidence intervals (CIs) of cutaneous malignant melanoma according to annual number of sunburns during different age periods*

Age period and number of sunburns	Frequencies, No. (%)	No. of cases	Age-adjusted RR (95% CI)	Multivariable RR† (95% CI)
10–19 years (n = 95 472)				
0	21 747 (23)	22	1.00 (referent)	1.00 (referent)
≤1/year	52 452 (55)	94	1.80 (1.13 to 2.86)	1.64 (1.03 to 2.62)
≥2/year	21 273 (22)	55	2.70 (1.65 to 4.44)	2.42 (1.46 to 4.02)
			P_{trend}<.001	P_{trend}<.001
20–29 years (n = 97 442)				
0	20 346 (21)	28	1.00 (referent)	1.00 (referent)
≤1/year	58 458 (60)	102	1.29 (0.85 to 1.96)	1.24 (0.81 to 1.88)
≥2/year	18 638 (19)	43	1.76 (1.09 to 2.84)	1.69 (1.04 to 2.76)
			P_{trend} = .02	P_{trend} = .03
30–39 years (n = 94 850)				
0	30 588 (32)	48	1.00 (referent)	1.00 (referent)
≤1/year	54 199 (57)	99	1.15 (0.82 to 1.63)	1.15 (0.81 to 1.62)
≥2/year	10 063 (11)	27	1.71 (1.07 to 2.74)	1.71 (1.06 to 2.76)
			P_{trend} = .04	P_{trend} = .05
40–49 years‡ (n = 45 269)				
0	20 031 (44)	43	1.00 (referent)	1.00 (referent)
≤1/year	22 260 (49)	44	0.92 (0.61 to 1.41)	0.92 (0.61 to 1.41)
≥2/year	2978 (7)	6	0.94 (0.40 to 2.21)	0.96 (0.41 to 2.27)
			P_{trend} = .74	P_{trend} = .77
Combined, 10–39 years (n = 90 633)				
≤1/year, 10–39 years	64 807 (72)	99	1.00 (referent)	1.00 (referent)
≥2/year, 20–29 years and/or 30–39 years	5873 (6)	13	1.47 (0.82 to 2.62)	1.54 (0.86 to 2.75)
≥2/year, 10–19 years	7357 (8)	20	1.82 (1.13 to 2.95)	1.66 (1.02 to 2.70)
≥2/year, 10–39 years	12 595 (14)	34	1.83 (1.24 to 2.70)	1.79 (1.20 to 2.68)
			P_{trend}<.001	P_{trend} = .002

*Poisson regression analysis. All statistical tests were two-sided.

†Multivariable models included attained age, region of residence, and hair color.

‡Included only women who were aged 40 years or older when answering the questionnaire.

women. These incidence rates are in accordance with crude incidence rates reported for Norwegian and Swedish women for 1993 through 1997 (23.3 cases per 100 000 person-years for Norwegian women and 17.3 cases per 100 000 person-years for Swedish women) *(3)*. Age-adjusted incidence rates of melanoma have been consistently higher among Norwegian than among Swedish women since the 1960s.

We observed a strong association between hair color and melanoma risk but not between eye color and melanoma risk. These results are consistent with results of a pooled analysis of data derived from published case–control studies, in which the reported relative risks were 2.38 (95% CI = 1.90 to 2.97) for individuals who have red hair compared with those who have black or dark brown hair and 1.55 (95% CI = 1.35 to 1.78) for individuals who have blue eyes compared with those who have brown eyes *(12)*. However, the association we observed between cutaneous sensitivity to the sun (i.e., burning or tanning) and melanoma risk was much weaker than that reported in a retrospective Australian study *(18)*. Our findings, that hair color but not eye color was statistically significantly associated with melanoma risk, agree with those of two Danish case–control studies *(19,20)*; in addition, the association between melanoma risk and cutaneous sun sensitivity reported in those two studies was also much weaker than that for hair color. A Swedish case–control study *(21)* also found that hair and eye color and skin type were statistically significantly associated with melanoma risk, although the associations were considerably weaker for eye color and skin type than for hair color, whereas an early Norwegian case–control study *(22)* that used hospital-based control subjects found that tolerance to sun exposure, but not hair or eye color, was associated with melanoma risk. We speculate that hair color may be the best measure (combining accuracy of measurement and predictive capacity) of sun sensitivity in homogeneous fair-skinned populations, such as those of Scandinavia. By contrast, reported sun sensitivity may be a less reliable measure of sun sensitivity in these populations because it depends on an individual's experience with repeated and quite heavy sun exposure, which many Scandinavian subjects may not have.

In agreement with the results of several case–control studies *(23–25)*, the results of our cohort study show that the number of asymmetric nevi larger than 5 mm on the legs was the strongest host risk factor for melanoma. The participants self-reported such nevi on their legs, guided by color pictures of dysplastic nevi in a brochure that was enclosed with the questionnaire. The method we used for this self-reporting has been shown to have limited accuracy for the diagnosis of one or more dysplastic nevi, with an estimated sensitivity of 29% and a specificity of 85% *(26)*. Hence, the relative risk of 5.3 for melanoma in the presence of seven or more large nevi on the legs that we observed in our study may underestimate the excess risk. Increased surveillance and more frequent excision of suspected lesions might, on the other hand, spuriously inflate the risk of melanoma among subjects with asymmetric nevi. However, such an effect seems unlikely because all incident cases were histopathologically confirmed invasive malignant melanomas.

Our results confirm the positive association between past history of sunburn and melanoma reported previously by the majority of case–control studies *(9,10)*. Our effect estimates were higher for sunburns that occurred during adolescence than for those that occurred later in life; however, it may be too early to

Table 4. Relative risks (RRs) and 95% confidence intervals (CIs) of cutaneous malignant melanoma according to the average number of weeks per year spent on sunbathing vacations to southern latitudes or within Norway or Sweden during different age periods*

Age period and annual weeks on sunbathing vacation	Frequencies, No. (%)	No. of cases	Age-adjusted RR (95% CI)	Multivariable RR† (95% CI)
10–19 years (n = 93 418)				
0	45 298 (48)	77	1.00 (referent)	1.00 (referent)
1 week/year	19 921 (21)	35	1.10 (0.74 to 1.65)	1.21 (0.80 to 1.83)
2–3 weeks/year	20 086 (22)	32	1.02 (0.67 to 1.54)	1.09 (0.71 to 1.65)
≥4 weeks/year	8113 (9)	20	1.56 (0.95 to 2.55)	1.67 (1.01 to 2.74)
			P_{trend} = .22	P_{trend} = .12
20–29 years (n = 96 029)				
0	26 460 (28)	41	1.00 (referent)	1.00 (referent)
1 week/year	28 723 (30)	55	1.28 (0.85 to 1.92)	1.36 (0.90 to 2.05)
2–3 weeks/year	32 997 (34)	53	1.08 (0.71 to 1.62)	1.13 (0.74 to 1.70)
≥4 weeks/year	7849 (8)	19	1.67 (0.96 to 2.88)	1.79 (1.03 to 3.11)
			P_{trend} = .26	P_{trend} = .18
30–39 years (n = 93 845)				
0	24 293 (26)	33	1.00 (referent)	1.00 (referent)
1 week/year	28 858 (31)	56	1.42 (0.93 to 2.19)	1.49 (0.97 to 2.30)
2–3 weeks/year	33 144 (35)	65	1.43 (0.94 to 2.18)	1.45 (0.95 to 2.21)
≥4 weeks/year	7550 (8)	16	1.56 (0.86 to 2.84)	1.63 (0.89 to 2.97)
			P_{trend} = .10	P_{trend} = .08
40–49 years‡ (n = 45 211)				
0	13 806 (31)	23	1.00 (referent)	1.00 (referent)
1 week/year	12 801 (28)	36	1.70 (1.01 to 2.87)	1.87 (1.11 to 3.18)
≥2–3 weeks/year	18 604 (41)	31	1.01 (0.59 to 1.73)	1.06 (0.61 to 1.81)
			P_{trend} = .87	P_{trend} = .98
Combined, 10–39 years (n = 88 450)				
0, 10–39 years	15 799 (18)	21	1.00 (referent)	1.00 (referent)
≥1 week/year, 20–29 and/or 30–39 years	27 851 (31)	53	1.42 (0.86 to 2.36)	1.45 (0.87 to 2.40)
≥1 week/year, 10–19 years	1751 (2)	3	1.37 (0.41 to 4.59)	1.46 (0.43 to 4.92)
≥1 week/year, 10–39 years	43 049 (49)	79	1.44 (0.89 to 2.34)	1.56 (0.95 to 2.56)
			P_{trend} = .27	P_{trend} = .13

*Poisson regression analysis. All statistical tests were two-sided.
†Multivariable models included attained age, region of residence, and hair color.
‡Included only women who were aged 40 years or older when answering the questionnaire.

Table 5. Relative risks (RRs) and 95% confidence intervals (CIs) of cutaneous malignant melanoma according to solarium use during different age periods*

Age period and solarium use	Frequencies, No. (%)	No. of cases	Age-adjusted RR (95% CI)	Multivariable RR† (95% CI)
10–19 years (n = 85 847)				
Never	84 182 (98)	152	1.00 (referent)	1.00 (referent)
Rarely or ≥1 time/month	1665 (2)	4	1.65 (0.61 to 4.47)	1.52 (0.56 to 4.12)
			P = .36	P = .44
20–29 years (n = 89 142)				
Never	71 133 (80)	123	1.00 (referent)	1.00 (referent)
Rarely	11 618 (13)	19	1.16 (0.70 to 1.92)	1.11 (0.67 to 1.85)
≥1 time/month	6391 (7)	18	2.32 (1.35 to 3.99)	2.58 (1.48 to 4.50)
			P_{trend} = .009	P_{trend} = .006
30–39 years (n = 87 890)				
Never	44 338 (50)	78	1.00 (referent)	1.00 (referent)
Rarely	28 383 (32)	51	1.03 (0.72 to 1.48)	0.93 (0.64 to 1.34)
≥1 time/month	15 169 (17)	36	1.40 (0.93 to 2.10)	1.42 (0.93 to 2.16)
			P_{trend} = .15	P_{trend} = .19
40–49 years‡ (n = 41 409)				
Never	17 345 (42)	27	1.00 (referent)	1.00 (referent)
Rarely	14 514 (35)	33	1.46 (0.88 to 2.43)	1.39 (0.82 to 2.33)
≥1 time/month	9550 (23)	22	1.48 (0.84 to 2.60)	1.67 (0.93 to 2.99)
			P_{trend} = .14	P_{trend} = .08
Combined, 10–39 years (n = 79 616)				
Never/rarely, 10–39 years	65 239 (82)	111	1.00 (referent)	1.00 (referent)
≥1 time/month 10–19, 20–29, or 30–39 years	14 377 (18)	34	1.45 (0.98 to 2.14)	1.55 (1.04 to 2.32)
			P = .07	P = .04

*Poisson regression analysis. All statistical tests were two-sided.
†Multivariable models included attained age, region of residence, hair color, and the corresponding number of age-specific sunburns and weeks on annual summer vacations.
‡Included only women who were aged 40 years or older when answering the questionnaire.

see the full effect of sunburns later in life in our cohort of women. Systematic reviews of case–control studies *(10,11)* have not found evidence of an overall stronger effect of sunburns in early life than in later life. Furthermore, the reported dose–response gradients of melanoma risk with frequency of sunburn were comparable during childhood and adulthood in a recent large multicenter case–control study from Europe *(27)*. However, it is possible that the case–control studies have underestimated the effects of sunburn during childhood and adolescence because of high recall error from the very long recall period for most subjects. All of our study subjects were younger than 50 years when they answered the questionnaire, giving a shorter recall period than in many case–control studies *(9)* that include subjects up to 70 years old or older.

Sun exposure during sunbathing vacations is usually intense and intermittent, and results of previous case–control studies *(10)* suggest that there is a positive association between the incidence of melanoma and high levels of intermittent sun exposure. We recorded the number of sunbathing vacations in Norway and Sweden (at latitudes higher than 58° N, where UV levels are low, even in summer) and those in southern latitudes in the same variable, which may explain the lack of a strong association between sunbathing vacations and melanoma in our study. Previous Scandinavian studies show inconsistencies in their results on sunbathing and melanoma risk. One Swedish study *(21)* and a Danish study *(28)* found associations between vacations spent in sunny places and melanoma risk, whereas another Swedish study *(29)* did not.

Our results provide stronger evidence than those of other studies that solarium use is associated with an increased risk of melanoma; we found that overall, regular (i.e., one or more times per month) solarium use at any age was associated with a statistically significant 55% increase in risk of melanoma after adjustment for sun sensitivity and measures of sun exposure. Although other studies *(30–34)* have reported positive associations between melanoma risk and exposure to artificial UV light, these associations often apply to specific subgroups of the study population (e.g. the youngest subjects with melanoma), or they have not been adjusted for possible confounding with sun exposure. A recent review *(35)* concluded that there was insufficient evidence to determine whether or not tanning lamps cause melanoma. The more consistent and overall statistically significant association between melanoma risk and solarium use observed in our study, which may be due to the relative youth of our cohort, adds substantially to the existing evidence that artificial UV light for recreational tanning increases risk of melanoma.

Our study has several important strengths. First, because all physicians, hospital departments, and histopathologic laboratories in Norway and Sweden are obliged to report malignant diseases to the cancer registries, and the cancer registries match regularly against the death registers at Statistics Norway and Statistics Sweden, respectively, we had a complete follow-up and histopathologic confirmation of all incident cases of melanoma. Second, our study had a prospective design, such that detailed information on host factors and sun exposure was collected prior to melanoma diagnosis. Error in measurement of these factors is inevitable in epidemiologic studies of skin cancer *(26,36,37)* but can be assumed to be non-differential in the present study. By contrast, measurement error in case–control studies may be influenced by a diagnosis of skin cancer and therefore may differ in degree between cases and controls *(15,16)*.

Among the limitations of our study were the comparatively small number of cases, the limited detail about the exposure measurements, and the relatively short follow-up period for solar and artificial UV light exposure during midlife. In addition, we did not adjust for the multiple comparisons made in this study. Instead, we chose to evaluate the individual associations on their own merits and with respect to results from prior studies. Finally, because our cohort included only women, our results may not be generalizable to both sexes. In Norway and Sweden, incidence rates of melanoma tend to be slightly higher among women than among men *(3)*. However, previous case–control studies *(9)* have not focused on whether there are sex differences in the associations between pigmentation characteristics or sun exposure and the risk of melanoma.

The results of our cohort study suggest that public health recommendations for melanoma prevention should include a combination of information on inherent predisposition and the effects of exposure to UV radiation. Hair color and large asymmetric nevi on the legs were the most important host factors associated with risk, and our results for sunburn, sunbathing vacations, and use of a solarium support current recommendations for the avoidance of UV exposure, especially intermittent exposure, either from natural or from artificial sources. Although our study cohort is still too young to fully assess whether UV exposure during adolescence is more critical than UV exposure during adulthood for melanoma risk, there is great potential to explore this question and the important issue of interactions between risk factors in future follow-up studies of these Norwegian and Swedish women.

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NOTES

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Getting Burned by Tanning Beds

Melanoma Survivors Support Tough Regulations for Indoor Tanning

Patient Profile

Two women from Pennsylvania live in a constant state of dread and uncertainty about the future. Foremost on their minds is the worry that they may not live long enough to raise their children. Getting melanoma has completely changed their lives.

One can hear the anger in their voices when they ask why they were not informed of the risks associated with tanning-bed use. Roxanne Smith and Diana Schaffer fervently hope that their state government will take the action needed to regulate indoor tanning in Pennsylvania so that others will know the risks.

To help convince their legislators and others of these risks, these women agreed to share their experiences with the American Academy of Dermatology (Academy).

Roxanne Smith, 46

"I Would Never Have Used Tanning Beds If I Had Known the Risks"

In 1996, Roxanne Smith lived a healthy lifestyle. She did not smoke, never drank, and exercised regularly. She firmly believed in avoiding risky behaviors.

Encouraged by a friend who regularly used tanning beds, Roxanne believed that the look of a tan fit her healthy lifestyle. For four years, she frequented tanning salons in Pennsylvania.

Roxanne never thought that she was at risk for skin cancer. She has brown hair and brown eyes, fewer than 15 moles, rarely burns, and does not have a family history of skin cancer.

However, while using tanning beds, Roxanne did notice changes on her skin. She developed seborrheic keratoses (non-cancerous lesions that may resemble a mole and vary in color from light tan to black), skin tags, and a blotchy complexion. She was not aware that these changes, while common in aging skin, typically do not occur until much later in life —

usually after midlife. Roxanne was in her 30s.

The skin changes did not deter her. To maintain that "healthy looking" tan, Roxanne kept using tanning beds. However, a woman she knew who also was using tanning beds decided it was time to quit after she developed similar changes on her skin. Looking back, Roxanne wishes she, too, had stopped tanning then. Today, she wonders if she would have been diagnosed with melanoma if she had stopped using tanning beds sooner.

Roxanne is convinced that tanning-bed use caused her melanoma. Roxanne says, "I have three sisters. One is a redhead who has many freckles and moles. Two are blonde. We all received the same amount of sun exposure growing up. I am the only one who used tanning beds, and I am the only one with melanoma."

Several other women whom Roxanne met through tanning salons also have developed skin cancer. The friend who encouraged Roxanne to try tanning beds has been diagnosed with stage III melanoma.

Living with melanoma has profoundly affected Roxanne's life. She and her husband can no longer enjoy their sailboat and decided to sell it. All summer long, Roxanne swelters in pants and long sleeves. She worries that her 10-year-old daughter does not apply enough sunscreen. When she gets a headache or feels sore after exercising, she fears that it is a sign the melanoma has returned or spread.

Roxanne knows that her life will never be carefree again. She urges her state legislators to pass legislation that will inform people of the risks of indoor tanning, so that others do not have to suffer the same fate.

Diana Shaffer, 24
"Why Do We Let Tanning Beds Kill People?"
When Diana Shaffer started using tanning beds at the age of 14, she had no idea that the beds exposed her to dangerous ultraviolet (UV) light. She was told that as long as she wore eye protection and waited 24 hours between sessions everything would be okay. She followed these two guidelines. After eight years of using tanning beds, Diana was diagnosed with melanoma.

Diana firmly believes that tanning beds caused her melanoma. "I think I became addicted to tanning," she recalls. "In the beginning, I went two or three times a week. Before I knew it, I was going more often. I wanted to go everyday after school because it was relaxing." Despite turning "crispy brown" and warnings from her mother that she should stop, Diana continued to tan. "I always thought that I was not tan enough."

At age 24, she wonders why people can legally continue to tell customers that tanning beds are safe — even healthy. Not long ago, while shopping for furniture she recalls that a salesperson tried to sell her a tanning bed. She declined, explaining that she has been diagnosed with melanoma. The salesperson persisted saying it was safe because the light bulbs had been approved by the U.S. Food and Drug Administration (FDA).

After this experience Diana asked, "Why do we continue to let tanning

prohibits anyone under the age of 18 from using a tanning bed. Diana invites everyone reading this who wants the look of a tan to use a self-tanning lotion or spray-on tan — never a tanning bed. Diana pleads, "Don't believe that if you use a tanning bed you will not be the one who gets skin cancer. Ask yourself, 'Why wouldn't I get skin cancer?'"

Tougher Laws Needed

The Academy supports these women's pleas and endorses the World Health Organization's (WHO) recommendation that no person under the age of 18 should use a tanning bed.

State legislators in Texas, California, and Tennessee have worked vigorously to enact tough legislation restricting the use of indoor tanning facilities, especially among minors. The Academy encourages more states to consider the WHO recommendation and urges states to enact and enforce regulations that prohibit indoor tanning for minors.

The American Academy of Dermatology Association supports the following requirements for indoor tanning facilities:

- No minor should be permitted to use tanning devices.
- A Surgeon General's warning should be placed on all tanning devices.
- No person or facility should advertise the use of any ultraviolet A or ultraviolet B tanning device using wording such as "safe," "safe tanning," "no harmful rays," "no adverse effect," or similar wording or concepts.

Roxanne and Diane adamantly believe these requirements should be the law in Pennsylvania. As laws, these regulations will save lives and prevent countless people from living every day with the fear and uncertainty that a life-threatening disease brings.

An educational program brought to you by the American Academy of Dermatology.

Page last updated 10/4/06

Attachment. # 2

Testimony

House Bill 1154

Senate Human Services Committee

Tuesday, February 27, 2007; 9:00 a. m.

North Dakota Department of Health

Good morning, Chairman Lee and members of the Senate Human Services Committee. My name is Kenan Bullinger, and I am the director of the Division of Food and Lodging for the North Dakota Department of Health. I am here today to provide information on the fiscal impacts of House Bill 1154.

The fiscal impacts of this legislation were difficult to calculate, as the exact number of tanning facilities operating in North Dakota is unknown. In addition, the legislation does not mandate tanning facility inspections or inspection frequency. In order to adequately enforce the proposed provisions in this legislation, a regulatory agency, either state or local, will have to provide on-site inspections. The costs of inspection and the costs of administrative rule adoption and implementation are the main components of the fiscal note.

The North Dakota Department of Health and several local health departments currently carry out a number of regulatory inspections for a variety of businesses in the state, including restaurants, lodging facilities, child-care facilities, schools and grocery stores. The regulatory infrastructure to carry out the provisions of this legislation is in place. The challenge will be the added inspection time, reports and travel needed to conduct inspections of the numerous tanning facilities throughout the state. In phone calls made to all the local health units a few weeks back, it is estimated that around two-thirds of the currently operating tanning facilities will be inspected by the local health units. The balance, around 250 such firms, will be licensed and inspected by the North Dakota Department of Health. A yearly inspection of two hours in length, including time for travel and writing the report, for an estimated 250 tanning facilities would equate to about 1,180 hours or .5 FTE. Salary and operating costs for implementation and rulemaking for the 2007-2009 biennium would be $32,281.

Previously, the Department of Health had two concerns with the bill. The bill allows the department to establish a fee but does not provide the ability for the department to use the fees to cover expenses. In addition, the bill makes no mention of accepting local jurisdiction if the local requirements meet or exceed the requirements of state

law. Because this legislation passed the House without opportunity for amendments, language was added to Section 7 of the Department's appropriation bill, House Bill 1004, to address those concerns. Copies of that added language are attached to this testimony.

This concludes my testimony. I am happy to answer any questions you may have.

From Engrossed House Bill No. 1004

SECTION 7. A new section to chapter 23-39 of the North Dakota Century Code is created and enacted as follows:

License fees. The fees established by the department must be based on the cost of conducting routine and complaint inspections, enforcement action, and preparing and sending license renewals. License fees collected pursuant to this chapter must be deposited in the department's operating fund in the state treasury and any expenditure from the fund is subject to appropriation by the legislative assembly. The department shall waive all or a portion of the license fee for any tanning facility that is subject to local jurisdiction.

The department shall accept city or county enforcement of this chapter if the department determines the city or county requirements meet or exceed the requirements of this chapter and any rules promulgated under this chapter.

By Dept of Health

Engrossed HB 1154 - First Engrossment with Senate Amendments -- Proposed Amendments

Page 5, replace lines 14-18 with:

"**23-39-06. Injury reports**. If a health care provider has determined, in the exercise of professional judgment, that a patient has received a sunburn injury as a result of exposure to UV solar radiation from a sunlamp or sunbed, the health care provider shall report the circumstances of the injury to the state department of health. A person making a report under this section who is acting in good faith is immune from liability for any damages which may be caused by that act."

Page 5, OLD VERSION of lines 14-18:

Lines 14-18: ~~If an individual requires medical attention due to use of a tanning facility, any physician, medical professional or the owner of that tanning facility shall report that injury to the department in writing and send a copy of that report to the injured individual. The owner of the tanning facility shall retain a copy of the report for at least three years~~.

Other laws requiring reporting injury or disease –

43-17-41. Duty of physicians and others to report injury - Penalty.
1. Any physician, physician assistant, or any individual licensed under chapter 43-12.1 who performs any diagnosis or treatment for **any individual suffering from any wound, injury, or other physical trauma**:
a. Inflicted by the individual's own act or by the act of another by means of a **knife, gun, or pistol** shall as soon as practicable report the wound, injury, or trauma to a law enforcement agency in the county in which the care was rendered; or
b**. Which the individual performing diagnosis or treatment has reasonable cause to suspect** was inflicted in violation of any criminal law of this state, shall as soon as practicable report the wound, injury, or trauma to a law enforcement agency in the county in which the care was rendered.

25-17-04. Testing and reporting requirements. **The physician attending a newborn child, or the birth attendant** in the case of an out-of-hospital birth, shall cause that newborn child
to be subjected to testing for metabolic diseases, in the manner prescribed by the state department of health. **A physician attending a patient with a metabolic disease shall report the case to the state department of health**. *The testing requirements of this section do not apply if the parents of a newborn child object to the testing on the grounds that testing for metabolic diseases conflicts with their religious tenets and practices.*

CHAPTER 23-07
REPORTABLE DISEASES

23-07-01. State department of health - Collection of public health information.

The state department of health shall designate the diseases or conditions that must be reported. Such diseases or conditions may include contagious, infectious, sexually transmitted, or chronic diseases or any illness or injury which may have a significant impact on public health.

23-07-01.2. Rules. The department may adopt rules under chapter 28-32 for the efficient enforcement of this chapter.

23-07-02. Who to report reportable diseases. Except as otherwise provided by section 23-07-02.1, the following persons or their designees **shall report to the state department of health any reportable disease coming to their knowledge**:
1. All health care providers, including physicians, physician assistants, nurse practitioners, nurses, dentists, medical examiners or coroners, pharmacists, emergency medical service providers, and local health officers.
2. The director, principal manager, or chief executive officer of:
a. Health care institutions, including hospitals, medical centers, clinics, long-term care facilities, assisted living facilities, or other institutional facilities;

A person making a report in good faith is immune from liability for any damages which may be caused by that act.

23-07-02.1. Reports of human immunodeficiency virus infection - Penalty. Every attending physician treating an individual known by the physician to have a diagnosis of human immunodeficiency virus infection, acquired immune deficiency syndrome, or human immunodeficiency virus-related illness, including death from human immunodeficiency virus infection, **shall make a report** on that individual to the state department of health.

23-07-03. Report of cases of sexually transmitted disease. The superintendent of a hospital, dispensary, or charitable or penal institution, in which there is a case of sexually transmitted disease, or the superintendent's designee, **shall report** such case to the nearest health officer having jurisdiction. The report must be made in the form and manner directed by the state department of health.

Mr Parker

Engrossed HB 1154 - First Engrossment with Senate Amendments
Regulation of Commercial Tanning Facilities

Proposed Amendments for Conference Committee consideration.

Page 2, add subsection f:

23-39-03. Advertising – Notice – Warning sign – Tubes – Prohibited claims.

...

2. A tanning facility shall give to each of the tanning facility's customers written notice of the following:

a. Failure to wear the eye protection provided by the facility may result in damage to the customer's eyes and may cause cataracts;

b. Overexposure to a tanning device causes burns;

c. Repeated exposure to a tanning device may cause premature aging of the skin and may cause skin cancer;

d. Abnormal skin sensitivity or burning of the skin while using a tanning device may be caused by:

1. Certain foods;
2. Certain cosmetics;
3. Certain medications, including tranquilizers, diuretics, antibiotics, high blood pressure medicines, and birth control pills; ~~and~~

e. An individual who takes a drug should consult with a physician before using a tanning device; and

f. An individual, or someone on behalf of the individual, who suffers burning of the skin, damage to the eyes, or other acute injury requiring medical attention by a healthcare professional while using a tanning device in this facility, may report these injuries to the ND Department of Health on forms available from the Division of Food and Lodging Inspections.

Page 5, replace lines 14-18 with:

23-39-06. Injury reports. The department shall develop a form for the purpose of receiving reports of injuries resulting from a customer's use of a commercial tanning facility as described in subsection subsection 2 of section 23-39-03. Information contained in the report shall be considered confidential, and may be utilized by the department to direct the owner of the tanning facility in which the reported injury occurred to take corrective action to address the cause of the reported injury.

Lines 14-18: ~~If an individual requires medical attention due to use of a tanning facility, any physician, medical professional or the owner of that tanning facility shall report that injury to the department in writing and send a copy of that report to the injured individual. The owner of the tanning facility shall retain a copy of the report for at least three years.~~

April 11, 2007
ND Medical Association

HB 1154 - First Engrossment with Senate Amendments –

Proposed Amendments regarding reporting injuries

Option 1 – Only M.D. (or other provider) reports injury

This is the most commonly used method for reporting injury and disease; a health care provider reports an injury to the Department of Health.

Option 2 – Both (1) M.D. reports injury; *AND*

(2) Tanning facility owner reports injury

This option requires a tanning facility owner to report an injury – to make sure make sure of that any injury is reported even if the customer does not seek medical attention. (Note: most laws requiring reporting of injury or illness do not require the person causing the injury or illness to make a report.)

Option 3 – (1) MD report injury; *AND*

(2) Tanning facility owner *must give* customer information on how to report injury to DOH

This option requires a health care provider to report a tanning device injury; ***and*** requires the owner of the facility to give customers information on how to report an injury to the Department of Health. Again, this option facilitates reporting of tanning device injuries when the customer does not seek medical attention.

Authority of a Physician to Disclose Protected Health Information -- If the Disclosure Is Required by Law

Under the HIPAA privacy rule, a physician is permitted to disclose protected health information if the disclosure is required [mandated] by law. 45 C.F.R. § 164.512(a).

In addition, a physician or other covered health care provider is permitted to disclose protected health information for public health purposes (such as surveillance of injuries and diseases) to a public health authority (such as the state Department of Health or a local public health unit). 45 C.F.R. § 164.512(b).

Engrossed HB 1154 - First Engrossment with Senate Amendments -- Proposed Amendments *[Rev. # 3]*

Option 1 – Only MD (or other provider) reports injury

Page 5, replace lines 14-18 with:

"**23-39-06. Injury reports**. If a health care provider treats a patient for a sunburn injury and determines, in the exercise of professional judgment, that the injury occurred as a result of using a tanning device at a tanning facility, the health care provider shall report the circumstances of the injury to the state department of health. A health care provider making or not making a report in good faith pursuant to this section is immune from liability for making or not making a report."

Renumber accordingly

Page 5, OLD VERSION of lines 14-18:

Lines 14-18: ~~If an individual requires medical attention due to use of a tanning facility, any physician, medical professional or the owner of that tanning facility shall report that injury to the department in writing and send a copy of that report to the injured individual. The owner of the tanning facility shall retain a copy of the report for at least three years.~~

Engrossed HB 1154 - First Engrossment with Senate Amendments -- Proposed Amendments *[Rev. # 3]*

Option 2 – Both (1) M.D. reports injury; *AND*

(2) Tanning facility owner reports injury

Page 5, replace lines 14-18 with:

"**23-39-06. Injury reports**. If a customer of a tanning facility reports a sunburn injury resulting from the use of a tanning device at that facility, the owner of the facility shall report the circumstances of the alleged injury to the state department of health, and give a copy of the report to the customer. If a health care provider treats a patient for a sunburn injury and determines, in the exercise of professional judgment, that the injury occurred as a result of using a tanning device at a tanning facility, the health care provider shall report the circumstances of the injury to the state department of health. A health care provider making or not making a report in good faith pursuant to this section is immune from liability for making or not making a report."

Renumber accordingly

Engrossed HB 1154 - First Engrossment with Senate Amendments -- Proposed Amendments *[Rev. # 3/ Alternate]*

Option 3 – (1) MD report injury; *AND*

(2) Tanning facility owner *must give* customer information on how to report injury to DOH

Page 5, replace lines 14-18 with:

"**23-39-06. Injury reports**. If a customer of a tanning facility reports a sunburn injury resulting from the use of a tanning device at that facility to the facility, the owner shall provide the customer with written information on how to report the alleged injury to the state department of health. If a health care provider treats a patient for a sunburn injury and determines, in the exercise of professional judgment, that the injury occurred as a result of using a tanning device at a tanning facility, the health care provider shall report the circumstances of the injury to the state department of health. A health care provider making or not making a report in good faith pursuant to this section is immune from liability for making or not making a report."

Renumber accordingly

Page 5, OLD VERSION of lines 14-18:

Lines 14-18: ~~If an individual requires medical attention due to use of a tanning facility, any physician, medical professional or the owner of that tanning facility shall report that injury to the department in writing and send a copy of that report to the injured individual. The owner of the tanning facility shall retain a copy of the report for at least three years.~~

PROPOSED AMENDMENTS TO ENGROSSED HOUSE BILL NO. 1154

Page 1, line 22, place a period after "annually" and delete "on June thirtieth."

Page 2, line 13, after the underscored period, insert: "The permit fee established by a city or county must be based on the cost of conducting routine and complaint inspections and enforcement actions and the cost of preparing and sending out license renewals."

Renumber accordingly