

2009 SENATE POLITICAL SUBDIVISIONS

SB 2366

2009 SENATE STANDING COMMITTEE MINUTES

Bill/Resolution No. SB 2366

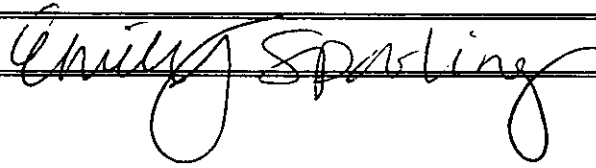
Senate Political Subdivisions Committee

Check here for Conference Committee

Hearing Date: 02/05/2009

Recorder Job Number: 8810, 8818, 8820

Committee Clerk Signature



Minutes:

Chairman Andrist Opened the hearing on SB 2366.

Senator Dave Oehlke District #15. Introduced SB 2366. This bill has to do with bottle rockets and prohibiting them from sale. They are dangerous and this bill prevents their sale. I was not hesitant to sponsor this bill when asked to sponsor this bill by health care professionals.

Senator Olafson Can you explain the logic behind prohibiting smaller rockets but not necessarily the larger ones?

Senator Oehkle The hazardous rockets are the smaller ones that in many cases the vendors give away. Vendors I talked with are not bothered by this bill because they so often give them away, they are not a big ticket item. The bigger ones are less likely to make it into the hands of younger kids, vendors are not as likely to sell them for cheaper or give them away, and because they are bigger they have more directional control. The smaller rockets have little directional control.

Chairman Andrist Are there a lot of larger bottle rockets sold?

Senator Oehkle I don't know the numbers but I don't even consider those to be bottle rockets, I call them fireworks and a real rocket.

Bruce Levi Represents the ND Society of Eye Physicians and Surgeons. Spoke in support of 2366. See attachment #1.

Senator Olafson I see that some of your testimony includes medical transfers to other hospitals, is there a large cost involved?

Levi I know there were at least two high visibility cases relating to that, and yes there is a high cost of transfer and clinical implications.

Nancy Kopp ND Optometric Association. Spoke in support of 2366. I echo Mr. Levi's comments and I want to introduce Dr. Paul Dunderland.

Dr. Paul Dunderland Optometrist in Bottineau. Spoke in support of 2366. See attachment #2.

Senator Olafson Do you agree with the prohibitions against small rockets vs. large rockets? Do you have a way of knowing what size rockets caused the injury?

Dunderland The patients all told me they were from the small bottle rockets.

Senator Lee Can you give us the numbers from the Arkansas study again?

Dunderland 2006 study of firework related injuries. #1 source of injuries was bottle rockets at 80%. Bystanders 43%, Legally blind 46% in the injured eye.

Louis Hartman Executive Director of ND Firefighters Association. Spoke in support of 2366. I stand in support on behalf of the fire service in ND. In addition to the testimony already given there is another danger that is imposed by these bottle rockets and that is to the fire fighters who have to go fight fires started by these rockets.

Gerald Breyer Owner of Generous Jerry in Fargo. Spoke in opposition to 2366. The problem with this bill is that we are trying to legislate responsibility. When we sell fireworks we sell goggles, we hand out a Safety Sam packets, and we have all the fireworks AFSL tested before we purchase them. This bill seems like a takeaway bill as bottle rockets are a pretty good source of revenue for the fireworks industry. Injuries related to the amount of fireworks sold are

pretty small. Spoke about economic impact of fireworks that bring in out of state buyers.

Doesn't want to legislate responsibility. Spoke about the safety features and age limits that Generous Jerry employs.

Senator Anderson Is there any control over direction of the fireworks after they are shot?

Breyer For the most part there is, once in awhile one will go astray. It also depends on how they set up.

Senator Olafson Can you tell us what percentage of your gross receipts are generated by bottle rockets?

Breyer To the best of my recollection it is about 5%.

Senator Bakke Is there a particular age that they need to be in order to purchase these?

Breyer The state law is 12 but we try to hold it at 16. We do make packages of fireworks that are very safe for younger kids so they can participate.

Jane Breyer I think I represent the people who purchase fireworks. Spoke in opposition. A lot of people come to ND to buy fireworks because we sell all class C fireworks (common fireworks). Everything we do is AFLS tested, we do not order dirt cheap fireworks, we pay more for quality. Spoke about the age limit upheld by Generous Jerry's and the safety tips sheets. Why should we punish the whole population for the stupidity of a few? I don't think this would be fair to others, I don't think anyone would want these bans. As for the Arkansas study, I have sold fireworks down there and I truly believe they are not all there down there. I would support a ban in Arkansas, it is a different mentality in the South. We carry good insurance and put safety first. Discussed at length all the safety things at Generous Jerry's and their business. People who follow the directions generally do not have problems.

Senator Anderson Are you liable if you sell to someone under 12 who buys a rocket?

Breyer We carry premise insurance and product liability insurance. Safety first.

Chairman Andrist Closed the hearing on SB 2366

Job #8818

Senator Anderson I move **Do Pass**.

Senator Bakke Second.

Chairman Andrist I say, the fireworks dealers are losing five percent of their sales while some kids lost 80 percent of their eyesight.

The Clerk called the role on the motion to **Do Pass. Yes: 5, No:1, Absent: 0.**

Senator Bakke will carry the bill.

Job #8820

Senator Lee I move we reconsider our actions on 2366

Senator Olafson Second

Voice vote, all members in favor.

Chairman Andrist I think we should change it to say sell, offer to sell or offer to distribute.

Senator Lee I move to amend.

Senator Olafson Second.

Voice vote, all members in favor.

Senator Bakke I move **Do Pass as Amended**

Senator Anderson Second

The Clerk called the role on the motion to **Do Pass as Amended. Yes: 5, No: 1, Absent: 0.**

Senator Bakke will carry the bill.

Date: 2/5/09
Roll Call Vote #: 1

2009 SENATE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 2366

Senate Political Subdivisions Committee

Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken Do pass Do not pass Amend

Motion Made By J. Andersen Seconded By J. Bakke

Senators	Yes	No	Senators	Yes	No
Chairman John M. Andrist	/		Senator Arden C. Anderson	/	
Vice Chairman Curtis Olafson	/		Senator JoNell A. Bakke	/	
Senator Judy Lee	/		Senator Jim Dotzenrod	/	X

Total (Yes) 5 No 1

Absent 0

Floor Assignment Senator Bakke

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

VOICE VOTE

Date: 2/5/09
Roll Call Vote #: 2

2009 SENATE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 2366

Senate Political Subdivisions Committee

Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken Do pass Do not pass Amendment Other

Motion Made By Senator Lee Seconded By Senator Olafson

Senators	Yes	No	Senators	Yes	No
Chairman John M. Andrist	/		Senator Arden C. Anderson	/	
Vice Chairman Curtis Olafson	/		Senator JoNeil A. Bakke	/	
Senator Judy Lee	/		Senator Jim Dotzenrod	/	

Total (Yes) 6 No 0

Absent 0

Floor Assignment _____

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

more to reconsider action
on SB 2366

VOICE VOTE

Date: 2/15/09
Roll Call Vote #: B

2009 SENATE STANDING COMMITTEE ROLL CALL VOTES BILL/RESOLUTION NO. 2366

Senate Political Subdivisions Committee

Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken Do pass Do not pass Amend

Motion Made By J. Lee Seconded By J. Olafson

Senators	Yes	No	Senators	Yes	No
Chairman John M. Andrist	/		Senator Arden C. Anderson	/	
Vice Chairman Curtis Olafson	/		Senator JoNell A. Bakke	/	
Senator Judy Lee	/		Senator Jim Dotzenrod	/	

Total (Yes) 6 No 0

Absent 0

Floor Assignment _____

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

Change offer to sell
to "offer to sell, sell,
or offer to distribute"

Date: 2/5/09
Roll Call Vote #: 4

2009 SENATE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 2366

Senate Political Subdivisions Committee

Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken Do pass Do not pass Amendment

Motion Made By J. Bakke Seconded By J. Anderson

Senators	Yes	No	Senators	Yes	No
Chairman John M. Andrist	/		Senator Arden C. Anderson	/	
Vice Chairman Curtis Olafson	/		Senator JoNell A. Bakke	/	
Senator Judy Lee	/		Senator Jim Dotzenrod		/

Total (Yes) 5 No 1

Absent _____

Floor Assignment Senator Bakke

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

REPORT OF STANDING COMMITTEE

SB 2366: Political Subdivisions Committee (Sen. Andrist, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (6 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). SB 2366 was placed on the Sixth order on the calendar.

Page 1, line 24, replace the second "sell" with "offer to distribute"

Renumber accordingly

2009 HOUSE INDUSTRY, BUSINESS AND LABOR

SB 2366

2009 HOUSE STANDING COMMITTEE MINUTES

Bill/Resolution No. 2366

House Industry, Business and Labor Committee

Check here for Conference Committee

Hearing Date: March 16, 2009

Recorder Job Number: 10960

Committee Clerk Signature

Ellen Letang

Chairman Keiser: Opened the hearing on SB 2366 relating to the sale of fireworks.

Representative Pinkerton~District 5. This is a bill to ban the sale of bottle rockets. It specifically defines what a bottle rocket is. This is not intended to ban the sale of fireworks nor do we think it will have a significant effect on the profits of firework sales. The language on page 2, section A, defines the size of the bottle rocket. The reason for the technical definition of the size of the fireworks and the problem with these is there is no guidance on them. The bigger bottle rockets, you know where they are going to go but the smaller bottle rockets, when they are set off, they can go in any direction. It is that particular fireworks that causes the eye injuries. Even putting on safety glasses doesn't solve the problem. Another issue is the bottle rocket fights. It's not right that we allow the sales of something that causes injuries so easily. I'm not here to restrict commerce in hurting the sales of fireworks.

Representative N Johnson: The larger have some kind of guidance system in them versus the smaller ones?

Rep Pinkerton: The larger ones have enough mass to go where you want them to go and have the better ability to aim.

Representative Vigesaa: You mentioned that the larger ones actually will go in the direction that you aim them. If people who would like to have bottle rocket fights, they could actually aim them at someone, why don't you ban all bottle rockets and not just the small ones?

Rep Pinkerton: You can ban a lot of different fireworks but the life changing injuries, eye injuries, are cause from the small bottle rockets. They are the one that are less than 5/8 in diameter and the length of the casing is less than 3 1/2 inches.

Vice Chairman Kasper: To get kind of an idea what 5/8 is like, is it the size of my marker?

Rep Pinkerton: Your marker is too big.

Vice Chairman Kasper: How did you come up with the 5/8 guideline? All these other bottle rockets bigger than the 5/8 of an inch that you are worried about?

Rep Pinkerton: Actually, the AMA did the research. They have done an extensive research to what's safe or not safe.

Bruce Levi~North Dakota Society of Eye Physicians & Surgeons & North Dakota Medical Association. See testimony attachment.

Vice Chairman Kasper: Is this the only type of fireworks your organization objects to or are you going to be back in the future with more fireworks objections that you are aware of?

I am not aware of any other objections. These are fireworks that have resulted in specific injuries that are inherently dangerous.

Vice Chairman Kasper: The yellow is 5/8 of an inch, so it's about 1/2 of this little thing you are talking about for banning.

Levi: The casing is 3 1/2 inches long and a diameter of 5/8.

Representative Boe: Nancy's pen (which she is holding up), to my estimation is pretty close.

Darrell Williams~Trinity Regional Eyecare-Williams Center. See testimony & picture attachments.

Vice Chairman Kasper: Do you have any problem with any other type of fireworks being sold in North Dakota besides bottle rockets?

Williams: I, as an eye surgeon, have seen a huge lop sided statistic heavily weighted toward the bottle rockets. I personally wouldn't take issue with any other fireworks.

Vice Chairman Kasper: If you recall in the last session, the sponsor of the bill had wanted to give another week for the fireworks operators to sell their fireworks. This bill, actually hog housed; it turned into a bill he did not want. One of the keys he did want was seven more days for the fireworks sellers to be able to sell their product. Would you object if we would amend this bill to allow seven more days to sell fireworks and ban bottle rockets?

Williams: Anything that would derail the bill might be a concern to me. We tried hard for a decade now and just hope this bill can pass on its own merit.

Vice Chairman Kasper: Let me clarify my question, without changing any rule other than allowing one more week for the fireworks vendors to sell their product, keep the bottle rocket ban.

Williams: If that would put this bill at risk, going back to other committees and not passing, I would have a concern. As for the merits of amendment itself, I would have no objection.

Representative Amerman: How many eye injuries in the state are caused by whatever? Do you have any estimate?

Williams: In my practice we see several a year. Of the major blinding injuries, this would be the number one preventable cause of blindness. If we would cure diabetes, that would be even more but bottle rockets is the most preventable cause.

Representative Amerman: I was reading a quote from Dr. Danenberg, he roughly estimates that ½ of all eye injuries are cause by bottle rockets. It would seem to me that sports and all

other functions of life, it seems that ½ of all eye injuries, that's quite a few eye injuries, is that a correct statement?

Williams: I would say that the blinding traumatic injuries it would be high on the list. Dr Danenberg may have been referring indirectly to half of the eye injuries, I'm not sure. That does sound like a statement that I can't totally explain. We have looked at the data from all over the nation **(see attachment)**.

Representative Boe: My question is on line 24 on page one, it makes it illegal to offer sell or to distribute but not to use. Is there a reason for that?

Williams: I think there is a limit on what we can accomplish. Looking back on our experience, last time it failed because we made it too encompassing and we put an emergency clause that would have made a hardship on the fireworks industry. Bottom line, we ended up losing the bill when we made it too restrictive. We tried to make this a passable bill.

Representative Gruchalla: Minnesota and Montana law reads somewhat to this? Just the distribute and sell?

Williams: I would have to look at those laws and I don't have them with me at the time.

Representative Nottestad: Assuming that the bill passes, it's illegal to sell the bottle rockets in North Dakota. What about the states and internet, where it is legal to sell, what going to stop people from getting them from those states?

Williams: I'm not sure I have the answer.

Chairman Keiser: One of the answers is that we can write laws for North Dakota but we can for anybody else. That's just a given.

Nancy Kopp~North Dakota optometric Association. I'm providing testimony from Dr Paul Dunderland, doctor of optometry. See testimony attachment.

Chairman Keiser: Anyone here to testify in opposition of SB 2366, neutral? Closes the hearing, what are the wishes of the committee?

Representative Thorpe: Moves a Do Pass on SB 2366.

Representative Nottestad: Second.

Chairman Keiser: It's unusual when an industry come before a committee and ask us take away one of their primary revenue sources. That says a lot.

Voting roll call was taken on SB 2366 for a Do Pass with 12 ayes, 0 nays, 1 absent and

Representative Vigesaa is the carrier.

Date: Mar 16, 2009

Roll Call Vote # 1

2009 HOUSE STANDING COMMITTEE ROLL CALL VOTES

BILL/RESOLUTION NO. 2366

House House, Business & Labor Committee

Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken Do Pass Do Not Pass As Amended

Motion Made By Thorpe Seconded By Nottestad

Representatives	Yes	No	Representatives	Yes	No
Chairman Keiser	1		Representative Amerman	1	
Vice Chairman Kasper	1		Representative Boe	1	
Representative Clark	1		Representative Gruchalla	1	
Representative N Johnson	1		Representative Schneider	1	
Representative Nottestad	1		Representative Thorpe	1	
Representative Ruby					
Representative Sukut	1				
Representative Vigesaa	1				

Total (Yes) 12 No 0

Absent 1

Floor Assignment ~~Thomas~~ Vigesaa

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

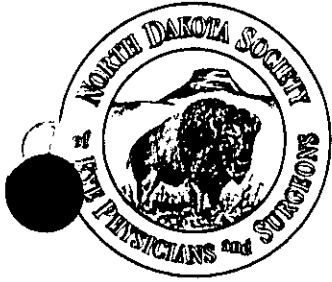
REPORT OF STANDING COMMITTEE

SB 2366, as engrossed: Industry, Business and Labor Committee (Rep. Keiser, Chairman) recommends **DO PASS** (12 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). Engrossed SB 2366 was placed on the Fourteenth order on the calendar.

2009 TESTIMONY

SB 2366

#1



1622 East Interstate Avenue
Post Office Box 1198
Bismarck, North Dakota
58502-1198

Phone: 701-223-9475
Fax: 701-223-9476

**Testimony in Support of SB 2366
North Dakota Society of Eye Physicians and Surgeons
North Dakota Medical Association
February 5, 2009**

Mr. Chairman and Committee Members, I'm Bruce Levi and I represent the North Dakota Society of Eye Physicians and Surgeons, and the North Dakota Medical Association, both of which strongly support SB 2366, which would reduce the burden of fireworks-related injuries among both children and adults by prohibiting the sale of small bottle rockets.

The North Dakota Society of Eye Physicians and Surgeons is the state professional membership for our state's Eye MDs, affiliated with the American Academy of Ophthalmology. The North Dakota Medical Association is the professional membership organization for all North Dakota physicians, residents, and medical students.

Seemingly innocuous bottle rockets exact a toll of pain and suffering on many North Dakotans each year. Unwitting children often make up a large segment of those victimized, and the physical and emotional scars often last a lifetime. Overall, the typical fireworks victim is young. Children 15 years old or younger account for 50 percent of fireworks eye injuries in the United States. A study published in the July 2006 *Pediatrics* journal concluded that consumer fireworks such as bottle rockets cause serious preventable injuries among pediatric fireworks users and bystanders. The most common injuries occur to the eyeball, face and hands.

According to the U.S. Consumer Product Safety Commission, more than 9,000 fireworks-related injuries happen each year. Of these, nearly half are head-related injuries with nearly 30 percent of these injuries to the eyes. One-fourth of fireworks eye injuries result in permanent vision loss or blindness.

Bottle rockets are inherently dangerous to both adults and children for two very simple reasons. First, the rate of travel of a standard bottle rocket can reach very high rates of speed, and they are very susceptible to ricochet--often traveling in any direction but the one intended. Second, the bottle rocket presents a significant fire hazard. When a bottle rocket detonates, the casing can burn from a few seconds to a few minutes.

According to the American Pyrotechnics Association, the following states prohibit bottle rockets (most on the list prohibit all skyrockets):

Arizona	Iowa	New Hampshire	South Carolina
California	Kansas	New Jersey	Texas
Colorado	Kentucky	New Mexico	Utah
Connecticut	Maine	New York	Vermont
Delaware	Maryland	North Carolina	Virginia
Florida	Massachusetts	Ohio	Washington
Georgia	Michigan	Oklahoma	Washington DC
Hawaii	Minnesota	Oregon	West Virginia
Idaho	Montana	Pennsylvania	Wisconsin
Illinois	Nebraska	Rhode Island	

North Dakota physicians are working to encourage the safe use of fireworks. Prior to the July 4th holiday, the Society of Eye Physicians and Surgeons typically provides public service announcements and often participates in radio talk shows to encourage safe use of fireworks. The Society has also developed a Fireworks Injury Reporting Form for voluntary use by hospitals, clinics and health professionals across the state. Attached are several reports relating specifically to bottle rocket injuries in North Dakota, involving burns and lacerations involving eyes, hands and fingers, and the head.

One particular bottle rocket incident has been highlighted recently in the media – Casselton high school student Beau Sinner received a lacerated cornea last summer from a bottle rocket and the story of the implications of the injury on his life and recovery was recently aired on WDAY. The WDAY (transcript) and Fargo Forum stories are attached.

Bottle rockets are inherently dangerous. They have been removed from the list of saleable fireworks in the vast majority of states. On behalf of the North Dakota Eye Physicians and Surgeons and the North Dakota Medical Association, we urge the Committee to recommend a “Do Pass” on SB 2366.

Bruce Levi

From: Bernie Sinner [bsinner@fsbnd.com]
Sent: Saturday, January 31, 2009 9:27 AM
To: Bruce Levi
Cc: Bernie Sinner
Subject: Emailing: WDAY Sports Blog

~~WDAY Sports Blog~~
WDAY Sports Blog

A blog on the Fargo-Moorhead area sports. High school, College, and National sports.

Lucky to be on the court

Video: Lucky to be on the court

(WDAY SPORTS) - Three sport athletes are rare to find these days, it's even harder to find one that excels at all of them. That's why Central Cass' Beau Sinner stands out. A great wide receiver on the football field, a terrific baseball pitcher and a big part of the Squirrels basketball team, but he came close to never playing any of those sports again.

"It's a miracle for him to be playing basketball right now."

Miracle's a word you don't hear too often in sports, but it sure does apply to Beau Sinner. Five months ago, he was named MVP of the State Legion Baseball Tournament. Two weeks later, he wasn't sure if he'd play any sport, ever again.

It was a bottle rocket accident. A friend lit it; it ricocheted and caught Beau in the right eye.

"Right when it happened I didn't think I would be able to play sports again, glad to be here right now."

Doctors told him they wouldn't know the full extent of the damage to his eye until the swelling subsided. Turns out he got lucky, after a few weeks, sinner regained some of his eyesight. An eye patch was needed however due to the scarring of his cornea and he get still gets stitches removed from his eye, but in November he was cleared to start playing sports again with one catch, he'd have to wear goggles for contact sports.

"It was a lot different coming out with the goggles, perception is a lot different but I'm getting used to it."

"Ball handling is a more of an issue, shooting is an issue, he's fast, whether he scores a point for us, he's a very good defensive player, gives us so many things, he can still be a very valuable member to this team."

"I didn't really doubt him because he's Beau Sinner, he's going to come back. He's a good athlete and a good friend."

Sinner wears a contact lens for periods of time; he'll have a cornea transplant later this year in an attempt to fully restore his vision. This whole experience has made sinner appreciate what he has.

"I was pretty sure I wasn't going to be able to play anything. It definitely makes you count your blessings."

Bruce Levi

From: Bursack, Carol [cbursack@forumcomm.com]
Sent: Monday, September 15, 2008 8:40 AM
To: Bruce Levi
Subject: Sinner

Publication: Forum; Date:2008 Aug 28; Section:Sports; Page Number: D3



HIGH SCHOOL FOOTBALL

Squirrels' star to miss season

By Heath Hotzler hhotzler@forumcomm.com

Central Cass High School standout senior athlete Beau **Sinner** will miss at least his final prep football season after a freak fireworks accident last week severely damaged one of his eyes.

Sinner's right **eye** was injured when he was hit with a **bottle** rocket last Friday night while with friends in Casselton, N.D.

"We were just hanging out and someone let off a firework, and it found its way into my **eye**," **Sinner** said Wednesday. "... It's kind of an unfortunate thing. But I'm not going to dwell on it and feel sorry for myself. I have to get over it."

After the accident, **Sinner** was immediately taken to Fargo's Innovis Hospital. He was transferred early Saturday morning to the University of Minnesota Medical Center in Minneapolis.

Sinner said he had surgery Saturday to repair a lacerated cornea and iris. The **eye's** lens was also jarred out of place, **Sinner** said.

Sinner's father, Bernie, said he was very concerned when first told of his son's **eye** injury.

"When you hear fireworks, you assume that it's an explosion that has caused some damage," Bernie said. "When we saw him, it didn't look terrible. It didn't explode in his face, it didn't distort the skin. He just said that he couldn't see out of it."

Bernie **Sinner** said doctors can't determine how much damage has been caused to Beau's vision until after another surgery is performed on Sept. 11. Beau is scheduled to have another checkup today in Minneapolis. Beau will likely have at least some impaired vision, Bernie **Sinner** said.

Beau, who will wear an **eye** patch for a few weeks, will need to wear glasses to protect both his eyes. Beau said he is hopeful he will be able to play basketball and baseball for Central Cass later this year.

"I'm disappointed about not being able to play (football)," Beau said. "But I can get over that. Hopefully, I can look forward to some basketball and football."

Central Cass was defeated by Kindred 13-6 on Tuesday night in both teams' season opener.

Squirrels head coach Patrick Metzger said news of **Sinner's** injury was a shock to the team.

Sinner would have been a starting wide receiver and safety.

"The senior group is extremely close," Metzger said. "I think it was pretty draining on some of those guys. It was kind of like a balloon was landing. But we are not done by any means. There are a lot of games to be played."

Fireworks are illegal in the city limits of Casselton without a permit, according the Casselton City Auditor Brandy Pyle. **Sinner** and his friends did not have a permit. "Certainly, we are hopeful," Bernie **Sinner** said.

"We have not been told that we shouldn't have hope. We are trying to keep a reality perspective on the severity of the injury."

Readers can reach Forum reporter Heath Hotzler at (701) 241-5562. Hotzler's blogs can be found at



FIREWORKS INJURY REPORTING
NORTH DAKOTA SOCIETY OF EYE PHYSICIANS AND SURGEONS

Please complete this form for each fireworks-related injury treated during the study period June 20-July 31. This reporting is voluntary. We appreciate your assistance in determining the nature and extent of fireworks injuries treated in North Dakota.

Please do not include any identifying information, e.g., patient's name or date of birth.

Please fax this form to (701) 223-9476: Attn: Fireworks Injury
 Or mail to: North Dakota Society of Eye Physicians and Surgeons
 PO Box 1198, Bismarck, ND 58503
 Or e-mail to: blevi@ndmed.com

Section 1: Site of Report

Facility or Practice Name McKenzie Co Hospital
 Person reporting (name and phone number)
Brenda Fulwider RN
812-3000

Section 2: Patient Information

Gender
 Male
 Female
 Age 13
 Date of medical evaluation: 7-6-08
 Date of injury: 7-5-08
 City where injury treated: Watford City, ND
 City where injury occurred (or county if injury occurred outside city): Mandaree, ND

Section 3: Nature of Injury

Type of injury (check all that apply)
 Abrasion, contusion, laceration
 Burn, 1st Degree
 Burn, 2nd Degree
 Burn, 3rd Degree
 Dismemberment
 Fracture / Sprain
 Hearing Loss, Partial
 Hearing Loss, Total
 Sight Loss, Partial
 Sight Loss, Total
 Other _____

Body part injured
 Hand (Finger's) x2
 Arm
 Eye(s)
 Face/Ears/Head
 Leg(s)
 Trunk
 Other _____

Section 4: Injury Information

Nature of fireworks causing injury
 Bottle rocket
 Fountain
 Skyrocket (larger than bottle rocket)
 Roman candle
 Ground spinner/flower
 Sparkler
 Firecracker
 Illegal fireworks (e.g., cherry bomb, M-80)
 Homemade or altered fireworks
 Smoke bomb
 Wheel
 Other _____

Reason for injury (if known)
 Malfunction / timing of firework
 Errant path of rocket
 Debris from aerial fireworks
 Mishandling (relighting, throwing, etc.)
 Other _____
 Unknown

Risk factors at time of injury
 Alcohol consumption by injured person
 Alcohol consumption by fireworks user (other than patient)
 Injured person was bystander
 Injured person or fireworks user was less than 12 years of age with no adult present
 Unknown

Eyewear worn
 Not worn
 Contacts
 Street spectacles
 Safety spectacles
 Sports spectacles
 Unknown

Section 5: Comments / Additional Information



FIREWORKS INJURY REPORTING
NORTH DAKOTA SOCIETY OF EYE PHYSICIANS AND SURGEONS

Please complete this form for each fireworks-related injury treated during the study period June 20 – July 31. This reporting is voluntary. We appreciate your assistance in determining the nature and extent of fireworks injuries treated in North Dakota.

Please do not include any identifying information, e.g., patient's name or date of birth.

Please fax this form to (701) 223-9476: Attn: Fireworks Injury
Or mail to: North Dakota Society of Eye Physicians and Surgeons
PO Box 1198, Bismarck, ND 58503
Or e-mail to: blevi@ndmed.com

Section 1: Site of Report

Facility or Practice Name Innovis Hospital
Person reporting (name and phone number) _____

Section 2: Patient Information

Gender
 Male
 Female
Age 12
Date of medical evaluation: 7/3/07
Date of injury: 7/3/07
City where injury treated: Fargo
City where injury occurred (or county if injury occurred outside city): Hankinson

Section 3: Nature of Injury

Type of injury (check all that apply)
 Abrasion, contusion, laceration
 Burn, 1st Degree
 Burn, 2nd Degree
 Burn, 3rd Degree
 Dismemberment
 Fracture / Sprain
 Hearing Loss, Partial
 Hearing Loss, Total
 Sight Loss, Partial
 Sight Loss, Total
 Other transfer to Hennepin for further evaluation
Body part injured
 Hand / Finger
 Arm
 Eye(s)
 Face/Ears/Head
 Leg(s)
 Trunk
 Other

Section 4: Injury Information

Nature of fireworks causing injury
 Bottle rocket
 Fountain
 Skyrocket (larger than bottle rocket)
 Roman candle
 Ground spinner/flower
 Sparkler
 Firecracker
 Illegal fireworks (e.g., cherry bomb, M-80)
 Homemade or altered fireworks
 Smoke bomb
 Wheel
 Other _____
Reason for injury (if known)
 Malfunction / timing of firework
 Errant path of rocket
 Debris from aerial fireworks
 Mishandling (relighting, throwing, etc.)
 Other _____
 Unknown
Risk factors at time of injury
 Alcohol consumption by injured person
 Alcohol consumption by fireworks user (other than patient)
 Injured person was bystander
 Injured person or fireworks user was less than 12 years of age with no adult present
 Unknown
Eyewear worn
 Not worn
 Contacts
 Street spectacles
 Safety spectacles
 Sports spectacles
 Unknown

Section 5: Comments / Additional Information



FIREWORKS INJURY REPORTING NORTH DAKOTA SOCIETY OF EYE PHYSICIANS AND SURGEONS

Please complete this form for each fireworks-related injury treated during the study period June 20 - July 31. This reporting is voluntary. We appreciate your assistance in determining the nature and extent of fireworks injuries treated in North Dakota.

Please do not include any identifying information, e.g., patient's name or date of birth.

Please fax this form to (701) 223-9476: Attn: Fireworks Injury
Or mail to: North Dakota Society of Eye Physicians and Surgeons
PO Box 1198, Bismarck, ND 58503
Or e-mail to: blevi@ndmed.com

Section 1: Site of Report

Facility or Practice Name Presentation Med Center

Person reporting (name and phone number)
Nick Lindseth 701-477-3161

Section 2: Patient Information

Gender

- Male
- Female

Age 2

Date of medical evaluation: 7-3-07

Date of injury: 7-3-07

City where injury treated: Rolla

City where injury occurred (or county if injury occurred outside city): Rolla

Section 3: Nature of Injury

Type of injury (check all that apply)

- Abrasion, contusion, laceration
- Burn, 1st Degree
- Burn, 2nd Degree
- Burn, 3rd Degree
- Dismemberment
- Fracture / Sprain
- Hearing Loss, Partial
- Hearing Loss, Total
- Sight Loss, Partial
- Sight Loss, Total
- Other

Body part injured

- Hand / Finger
- Arm
- Eye(s)
- Face/Ears/Head
- Leg(s)
- Trunk
- Other neck

Section 4: Injury Information

Nature of fireworks causing injury

- Bottle rocket
- Fountain
- Skyrocket (larger than bottle rocket)
- Roman candle
- Ground spinner/flower
- Sparkler
- Firecracker
- Illegal fireworks (e.g., cherry bomb, M-80)
- Homemade or altered fireworks
- Smoke bomb
- Wheel
- Other

Reason for injury (if known)

- Malfunction / timing of firework
- Errant path of rocket
- Debris from aerial fireworks
- Mishandling (relighting, throwing, etc.)
- Other
- Unknown

Risk factors at time of injury

- Alcohol consumption by injured person
- Alcohol consumption by fireworks user (other than patient)
- Injured person was bystander
- Injured person or fireworks user was less than 12 years of age with no adult present
- Unknown

Eyewear worn

- Not worn
- Contacts
- Street spectacles
- Safety spectacles
- Sports spectacles
- Unknown

Section 5: Comments / Additional Information



FIREWORKS INJURY REPORTING

NORTH DAKOTA SOCIETY OF EYE PHYSICIANS AND SURGEONS

Please complete this form for each fireworks-related injury treated during the study period June 20 – July 31. This reporting is voluntary. We appreciate your assistance in determining the nature and extent of fireworks injuries treated in North Dakota.

Please do not include any identifying information, e.g., patient's name or date of birth.

Please fax this form to (701) 223-9476: Attn: Fireworks Injury
Or mail to: North Dakota Society of Eye Physicians and Surgeons
PO Box 1198, Bismarck, ND 58503
Or e-mail to: blevi@ndmed.com

Section 1: Site of Report

Facility or Practice Name MeritCare
Person reporting (name and phone number) Steven Thom MD
701-234-2305

Section 2: Patient Information

Gender
 Male
 Female
Age 9
Date of medical evaluation: 7-5-07
Date of injury: 7-4-07
City where injury treated: Fargo
City where injury occurred (or county if injury occurred outside city): Fargo

Section 3: Nature of Injury

Type of injury (check all that apply)
 Abrasion, contusion, laceration
 Burn, 1st Degree
 Burn, 2nd Degree
 Burn, 3rd Degree
 Dismemberment
 Fracture / Sprain
 Hearing Loss, Partial
 Hearing Loss, Total
 Sight Loss, Partial
 Sight Loss, Total
 Other _____
Body part injured
 Hand / Finger
 Arm
 Eye(s) (Conjunctiva)
 Face/Ears/Head
 Leg(s)
 Trunk
 Other

Section 4: Injury Information

Nature of fireworks causing injury
 Bottle rocket
 Fountain
 Skyrocket (larger than bottle rocket)
 Roman candle
 Ground spinner/flower
 Sparkler
 Firecracker
 Illegal fireworks (e.g., cherry bomb, M-80)
 Homemade or altered fireworks
 Smoke bomb
 Wheel
 Other _____

Reason for injury (if known)
 Malfunction / timing of firework
 Errant path of rocket
 Debris from aerial fireworks
 Mishandling (relighting, throwing, etc.)
 Other _____
 Unknown

Risk factors at time of injury
 Alcohol consumption by injured person
 Alcohol consumption by fireworks user (other than patient)
 Injured person was bystander
 Injured person or fireworks user was less than 12 years of age with no adult present
 Unknown

Eyewear worn
 Not worn
 Contacts
 Street spectacles
 Safety spectacles
 Sports spectacles
 Unknown

Section 5: Comments / Additional Information



FIREWORKS INJURY REPORTING
 NORTH DAKOTA SOCIETY OF EYE PHYSICIANS AND SURGEONS

Please complete this form for each fireworks-related injury treated during the study period June 20 – July 31. This reporting is voluntary. We appreciate your assistance in determining the nature and extent of fireworks injuries treated in North Dakota.

Please do not include any identifying information, e.g., patient's name or date of birth.

Please fax this form to (701) 223-9476: Attn: Fireworks Injury
 Or mail to: North Dakota Society of Eye Physicians and Surgeons
 PO Box 1198, Bismarck, ND 58503
 Or e-mail to: blevi@ndmed.com

Section 1: Site of Report

Facility or Practice Name Meritcare
 Person reporting (name and phone number) _____

Section 2: Patient Information

Gender
 Male
 Female
 Age 8
 Date of medical evaluation: 7-5-07
 Date of injury: 7-4-07
 City where injury treated: Fargo
 City where injury occurred (or county if injury occurred outside city): Mahnomen

Section 3: Nature of Injury

Type of injury (check all that apply)
 Abrasion, contusion, laceration
 Burn, 1st Degree
 Burn, 2nd Degree
 Burn, 3rd Degree
 Dismemberment
 Fracture / Sprain
 Hearing Loss, Partial
 Hearing Loss, Total
 Sight Loss, Partial
 Sight Loss, Total
 Other _____
 Body part injured
 Hand / Finger
 Arm
 Eye(s)
 Face/Ears/Head
 Leg(s)
 Trunk
 Other _____

BLOWN
Burn
+
Contusion
L. cornea

Section 4: Injury Information

Nature of fireworks causing injury
 Bottle rocket
 Fountain
 Skyrocket (larger than bottle rocket)
 Roman candle
 Ground spinner/flower
 Sparkler
 Firecracker
 Illegal fireworks (e.g., cherry bomb, M-80)
 Homemade or altered fireworks
 Smoke bomb
 Wheel
 Other _____
 Reason for injury (if known)
 Malfunction / timing of firework
 Errant path of rocket
 Debris from aerial fireworks
 Mishandling (relighting, throwing, etc.)
 Other _____
 Unknown
 Risk factors at time of injury
 Alcohol consumption by injured person
 Alcohol consumption by fireworks user (other than patient)
 Injured person was bystander
 Injured person or fireworks user was less than 12 years of age with no adult present
 Unknown
 Eyewear worn
 Not worn
 Contacts
 Street spectacles
 Safety spectacles
 Sports spectacles
 Unknown

Section 5: Comments / Additional Information



FIREWORKS INJURY REPORTING
NORTH DAKOTA SOCIETY OF EYE PHYSICIANS AND SURGEONS

Please complete this form for each fireworks-related injury treated during the study period June 20 -- July 31. This reporting is voluntary. We appreciate your assistance in determining the nature and extent of fireworks injuries treated in North Dakota.

Please do not include any identifying information, e.g., patient's name or date of birth.

Please fax this form to (701) 223-9476: Attn: Fireworks Injury
Or mail to: North Dakota Society of Eye Physicians and Surgeons
PO Box 1198, Bismarck, ND 58503
Or e-mail to: blevi@ndmed.com

Section 1: Site of Report

Facility or Practice Name Bergstrom Eye + Laser

Person reporting (name and phone number)
Heather Cowden, OD
701-235-5200

Section 2: Injury Information

Nature of fireworks causing injury

- Bottle rocket
- Fountain
- Skyrocket (larger than bottle rocket)
- Roman candle
- Ground spinner/flower
- Sparkler
- Firecracker
- Illegal fireworks (e.g., cherry bomb, M-80)
- Homemade or altered fireworks
- Smoke bomb
- Wheel
- Other _____

Section 3: Patient Information

Gender

- Male
- Female 8

Age _____
Date of medical evaluation: 7/4/07

Date of injury: 7/4/07

City where injury treated: _____ Fargo

City where injury occurred (or county if injury occurred outside city): Cassidon

Reason for injury (if known)

- Malfunction / timing of firework
- Errant path of rocket
- Debris from aerial fireworks
- Mishandling (relighting, throwing, etc.)
- Other _____
- Unknown

Section 4: Nature of Injury

Type of injury (check all that apply)

- Abrasion, contusion, laceration
- Burn, 1st Degree
- Burn, 2nd Degree
- Burn, 3rd Degree
- Dismemberment
- Fracture / Sprain
- Hearing Loss, Partial
- Hearing Loss, Total
- Sight Loss, Partial
- Sight Loss, Total
- Other _____

Body part injured

- Hand / Finger
- Arm
- Eye(s)
- Face/Ears/Head
- Leg(s)
- Trunk
- Other _____

Risk factors at time of injury

- Alcohol consumption by injured person
- Alcohol consumption by fireworks user (other than patient)
- Injured person was bystander
- Injured person or fireworks user was less than 12 years of age with no adult present
- Unknown

Eyewear worn

- Not worn
- Contacts
- Street spectacles
- Safety spectacles
- Sports spectacles
- Unknown

Section 5: Comments / Additional Information

**Testimony on SB 2366
February 5, 2009
Paul Dunderland, O.D.**

My name is Paul Dunderland and I am a doctor of optometry who has practiced 25 years in my home town of Bottineau. In this community of approximately 2500 people, I have seen the blinding effects of bottle rocket eye injuries sustained by three boys, ages 12, 13, and 15. The first boy, Anthony S. received a bottle rocket injury to his left eye resulting in vision of light perception. That means the only remaining vision in his eye was the ability to tell whether a light was turned on or turned off. Not only did he damage his left eye but he also struggled to maintain good health in his right eye because he developed a condition called sympathetic ophthalmia. This condition causes a healthy eye to become seriously inflamed "in sympathy" for the damaged eye and must be aggressively treated with steroids to prevent losing that eye as well. Anthony was a promising young hockey player whose aspirations were drastically altered because of his injury. He no longer had accurate depth perception, complete peripheral vision and his ability to maintain balance while on skates was significantly altered.

In 2001, 13 year old Raymond D. had a bottle rocket explode in his right eye. He received extensive damage to both the internal and external ocular structures ultimately requiring a corneal transplant to replace the front window of the eye. In spite of all the medical treatments and surgery, he ended up with no vision at all, total blindness, in the injured eye. Raymond's ability to enjoy his passion for motor sports (snowmobiling, motorcycling, and four-wheeling) was compromised forever.

The third patient from Bottineau who sustained one of these horrible eye injuries was Matthew Volk who was 15 years old on the date of his accident, July 10, 2006. Matthew had been a patient of mine since receiving his first pair of glasses in kindergarten. He was a classmate of my son's and his mother had been a high school educator for both of my children. My heartfelt compassion for Matthew and his parents was the most I have ever experienced when treating eye trauma. His current vision is count fingers meaning that he can tell how many fingers are being displayed at a distance of 2 or 3 feet. His iris, the colored part of the eye which controls the amount of light entry, was torn away from its base or insertion. This results in a very large misshapen pupil that allows too much light into the eye causing severe photophobia. Matthew, along with Anthony and Raymond, often wears a patch over the injured eye to avoid the excessive light.

With over 25 years in clinical practice, I've seen a wide variety of ocular trauma involving metal in the eye, tree branches, tarp straps, paint balls, curling irons, ammonia, nails, knives and others. By far, the most visually devastating injuries have been those caused by bottle rockets. To have one of these injuries in a small community is bad enough let alone three. In conversation with other eye doctors, I

have found that these injuries are not just unique to my practice. Dr. Thorman, of Rolla, estimates he sees an average of two patients annually because of firework related eye injuries. He provides ocular prostheses and has done so for two patients who had their eyes removed as a result of bottle rocket injuries. John Kludt of Hettinger has also had two patents with severe eye injuries as a result of bottle rockets.

All states surrounding us except South Dakota prohibit bottle rockets. In fact, most prohibit all sky rockets unless used in professional firework displays. I'm not here to oppose all fireworks but just to speak against the use of small bottle rockets that cause the most preventable trauma related eye injury and blindness in our state.

Lastly, if you want to experience what life is like for the three boys, now young men, that I've described, simply patch an eye just for an hour to see what it's like to perform common every day tasks. Even reaching for a cup of coffee or picking up a pen can be challenging, let alone driving a vehicle or playing sports.

Thank you for your time. I strongly urge a DO PASS of this bill.

Paul Dunderland, O.D.



1622 East Interstate Avenue
Post Office Box 1198
Bismarck, North Dakota
58502-1198

Phone: 701-223-9475
Fax: 701-223-9476

Testimony in Support of Engrossed SB 2366
North Dakota Society of Eye Physicians and Surgeons
North Dakota Medical Association
March 16, 2009

Mr. Chairman and Committee Members, I'm Bruce Levi and I represent the North Dakota Society of Eye Physicians and Surgeons, and the North Dakota Medical Association, both of which strongly support Engrossed SB 2366, which would reduce the burden of fireworks-related injuries among both children and adults by prohibiting the sale of small bottle rockets.

The North Dakota Society of Eye Physicians and Surgeons is the state professional membership for our state's Eye MDs, affiliated with the American Academy of Ophthalmology. The North Dakota Medical Association is the professional membership organization for all North Dakota physicians, residents, and medical students.

Seemingly innocuous bottle rockets exact a toll of pain and suffering on many North Dakotans each year. Unwitting children often make up a large segment of those victimized, and the physical and emotional scars often last a lifetime. Overall, the typical fireworks victim is young. Children 15 years old or younger account for 50 percent of fireworks eye injuries in the United States. A study published in the July 2006 *Pediatrics* journal concluded that consumer fireworks such as bottle rockets cause serious preventable injuries among pediatric fireworks users and bystanders. The most common injuries occur to the eyeball, face and hands.

According to the U.S. Consumer Product Safety Commission, more than 9,000 fireworks-related injuries happen each year. Of these, nearly half are head-related injuries with nearly 30 percent of these injuries to the eyes. One-fourth of fireworks eye injuries result in permanent vision loss or blindness.

Bottle rockets are inherently dangerous to both adults and children for two very simple reasons. First, the rate of travel of a standard bottle rocket can reach very high rates of speed, and they are very susceptible to ricochet--often traveling in any direction but the one intended. Second, the bottle rocket presents a significant fire hazard. When a bottle rocket detonates, the casing can burn from a few seconds to a few minutes.

According to the American Pyrotechnics Association, the following states prohibit bottle rockets (most on the list prohibit all skyrockets):

Arizona	Iowa	New Hampshire	South Carolina
California	Kansas	New Jersey	Texas
Colorado	Kentucky	New Mexico	Utah
Connecticut	Maine	New York	Vermont
Delaware	Maryland	North Carolina	Virginia
Florida	Massachusetts	Ohio	Washington
Georgia	Michigan	Oklahoma	Washington DC
Hawaii	Minnesota	Oregon	West Virginia
Idaho	Montana	Pennsylvania	Wisconsin
Illinois	Nebraska	Rhode Island	

North Dakota physicians are working to encourage the safe use of fireworks. Prior to the July 4th holiday, the Society of Eye Physicians and Surgeons typically provides public service announcements and often participates in radio talk shows to encourage safe use of fireworks. The Society has also developed a Fireworks Injury Reporting Form for voluntary use by hospitals, clinics and health professionals across the state. Attached are several reports relating specifically to bottle rocket injuries in North Dakota, involving burns and lacerations involving eyes, hands and fingers, and the head.

One particular bottle rocket incident has been highlighted recently in the media – Casselton high school student Beau Sinner received a lacerated cornea last summer from a bottle rocket and the story of the implications of the injury on his life and recovery was recently aired on WDAY. The WDAY (transcript) and Fargo Forum stories are attached.

Bottle rockets are inherently dangerous. They have been removed from the list of saleable fireworks in the vast majority of states. On behalf of the North Dakota Eye Physicians and Surgeons and the North Dakota Medical Association, we urge the Committee to recommend a “Do Pass” on Engrossed SB 2366.



OPHTHALMOLOGY

EVELYNE B. KINDY, MD

ROBERT F. SANKE, MD

DARRELL P. WILLIAMS, MD

CHAD J. WOLSKY, MD

OPTOMETRY

JILL R. MARTINSON-
REDEKOPP, OD

SHAWN P. NELSON, OD

LOW VISION

STAN K. MOSSER, CVRT

North Dakota Senators and House of Representatives

Please help us eliminate the most preventable cause of traumatic blindness in North Dakota. I have personally cared for patients with traumatic bottle rocket injuries to the eye virtually every July in the history of my twenty two year ophthalmology practice in Minot, North Dakota. This one item causes more eye injuries than all other fireworks combined. Other states have reported similar data with bottle rockets causing up to 80% of fireworks eye injuries. Every year we have blinding injuries in North Dakota-most of them suffered by children. Bottle rockets, even when used as directed, fly erratically. They can fly any direction and sometimes turn back and hit the people who light them. Even if those individuals have safety glasses they are unsafe because most injuries are to bystanders who may be up to several hundred feet away.

The goal of this bill is not to restrict the sale or use of any other fireworks-just to outlaw bottle rockets which are a dangerous hazard that we need to eliminate. We do not wish to reduce commerce in North Dakota. Any financial gain to the state from bottle rockets is more than lost through medical expense not to mention the tremendous personal cost of suffering and lost vision.

Eye care providers in North Dakota have never been more unified on a single issue. The following is one quote from one colleague characteristic of the sentiment of our state's ophthalmologists and optometrists. Dr. Lee Danneberg states, "I am the oldest practicing ophthalmologist in the state which has no merit except for the misfortune of seeing many serious eye injuries. The overwhelming favorite for the most dangerous piece of fireworks goes to the bottle rocket. When they are ignited there is no way to predict where they might go so they frequently injure an innocent bystander. I would roughly estimate that half of all eye injuries over the years have been caused by bottle rockets so I would be glad to help you eliminate them from the state of North Dakota if possible."

For the sake of our children and yours please add your vote to ban bottle rockets to those of the American Academy of Ophthalmology, the American Academy of Pediatrics, the Public Health Association, Prevent Blindness America, the North Dakota Society of Eye Physicians and Surgeons, the North Dakota Academy of Optometry and the North Dakota Medical Association.

Thank you.

Sincerely,

Darrell P. Williams, MD
Medical Director
Trinity Regional Eyecare-Williams Center

Health Sciences Building
120 Burdick Expressway East
Minot, North Dakota 58701

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MMWR

Weekly

June 23, 1995 / 44(24);449-452

Serious Eye Injuries Associated with Fireworks -- United States, 1990-1994

Eye injuries caused by fireworks are often severe and can cause permanently reduced visual acuity or blindness. Findings from the National Electronic Injury Surveillance System database maintained by the U.S. Consumer Product Safety Commission (CPSC) indicate that approximately 12,000 persons are treated each year in U.S. emergency departments because of fireworks-related injuries; of these, an estimated 20% are eye injuries. To improve characterization of fireworks-related eye injuries, data were analyzed from the United States Eye Injury Registry (USEIR) for July 1990-December 1994 and from the Eye Injury Registry of Alabama (EIRA) for August 1982-July 1989. This report summarizes the findings of these analyses. United States Eye Injury Registry

USEIR, a nonprofit organization sponsored by the Helen Keller Eye Research Foundation, is a federation of state eye registries that uses a standardized form to obtain voluntarily reported data on eye injuries and to obtain 6-month follow-up information. Reports are made by ophthalmologists to the USEIR database in Birmingham, Alabama. The primary purpose of USEIR is to provide prospective, population-based, epidemiologic data to improve the prevention and control of eye injuries. The registry contains information only for patients who have sustained a serious eye injury, defined as "an injury resulting in permanent and significant, structural or functional ocular change." USEIR comprises 39 state registry affiliates (representing 89% of the U.S. population); 32 states registered injuries during 1990-1994, and 27 states reported fireworks-related injuries during this period.

From July 1990 through December 1994, a total of 4575 serious eye injuries from all causes were reported to USEIR; of the 274 (6%) fireworks-related injuries, 255 (93%) were unintentional injuries. Persons injured by fireworks were aged 4-63 years (median: 15 years); 211 (77%) were males. The largest proportion (123 {45%}) of injured persons were bystanders; 96 (35%) were fireworks operators, and for 55 (20%), status was unknown. Most (219 {80%}) injuries occurred during the Independence Day holiday period *; 44 (16%) occurred during the New Year's holiday period *, and 11 (4%) at other times. Most (67%) injuries occurred at home; injuries also occurred in recreational settings (14%), on a street or highway (5%), and in parking lots or occupational settings (1%). Location was unknown for 13%.

Most injuries were caused by bottle rockets (58%) Figure_1. Bottle rockets accounted for 68% of the injuries to bystanders. Eye Injury Registry of Alabama

A retrospective review was begun in 1989 of severely injured persons registered from August 1982 through July 1989 through the EIRA, the first state registry of USEIR. Reports to the

EIRA are made by Alabama ophthalmologists. Data were obtained from EIRA standard report forms and from direct interviews with each injured person and/or family members.

Of the 70 fireworks-related injuries reported, 40 (57%) occurred during the Independence Day holiday period, and 27 (39%) occurred during the New Year's holiday period. These injuries resulted in legal blindness in 31 (44%) injured persons; in addition, enucleation was required for seven (10%). Bottle rockets accounted for 38 (83%) injuries, including eight of 10 injuries resulting in permanent damage to the optic nerve and all those resulting in enucleation.

Patients who sustained eye injuries resulting from bottle rockets reported that factors associated with their injuries included product misuse, (e.g., the intentional aiming of the device at others {"bottle rocket wars"}) and throwing the device after it had been lit but before ignition), device malfunction (especially immediate explosion after ignition), erratic flight characteristics even when used according to manufacturers' instructions, and device ricochet off hard surfaces (e.g., a car or the street). Reported by: S Brown, MPH, CD Witherspoon, MD, R Morris, MD, SM Hamilton, MD, FI Camesasca, MD, JA Kimble, MD, United States Eye Injury Registry, Birmingham, Alabama. Directorate for Epidemiology and Health Sciences, Div of Hazard Analysis, US Consumer Product Safety Commission. Div of Unintentional Injury Prevention, National Center for Injury Prevention and Control, CDC.

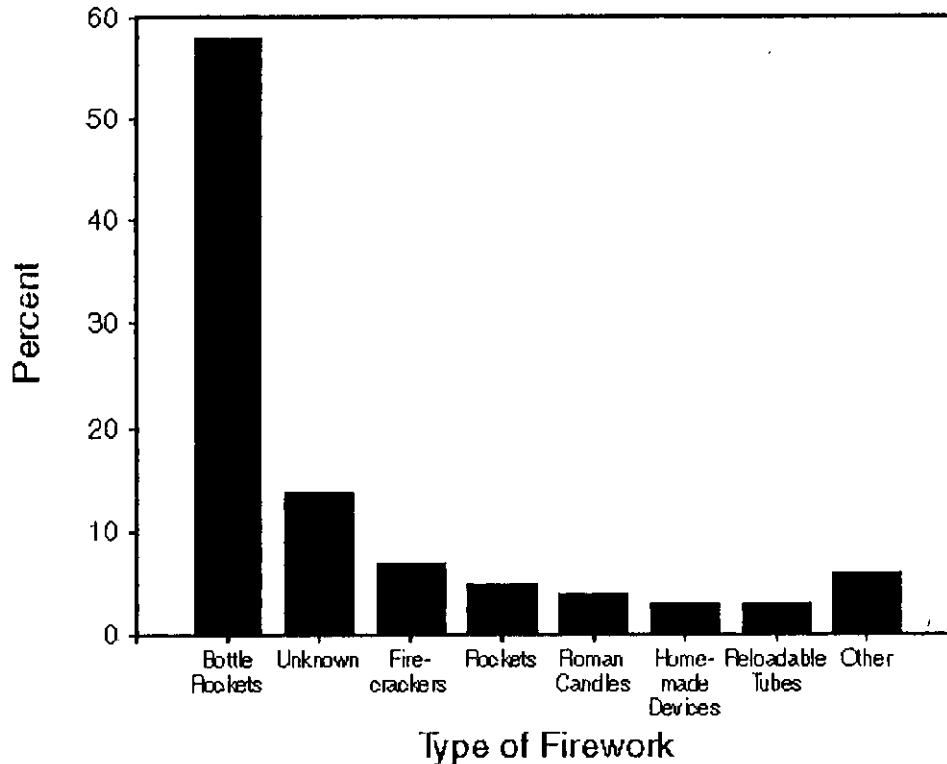
Editorial Note

Editorial Note: Irreversible consequences -- including reduced visual acuity and blindness -- can result from the use of consumer fireworks, especially bottle rockets. Analysis of the USEIR database indicated that a high proportion of fireworks-related injuries occurred among young males -- a finding consistent with previous reports (1,2). These findings are similar to the results of a study in Washington in which injuries were associated with improper use (both intentional and unintentional), product malfunctions (e.g., short fuses, erratic flight, or tip-over), and high temperature (2).

Consumer fireworks -- including bottle rockets (classified as 1.4G {formally known as Class C} fireworks) -- have been banned in 10 states (Arizona, Connecticut, Delaware, Georgia, Massachusetts, Minnesota, New Jersey, New York, Rhode Island, and Vermont). Six states (Illinois, Iowa, Maine, Maryland, Ohio, and Pennsylvania) permit the use only of sparklers and other novelties (e.g., poppers, wheels, and snaps). The District of Columbia and 32 states allow at least some 1.4G fireworks to be sold. Nevada and Hawaii have no laws regulating fireworks except for local ordinances. The CPSC has banned firecrackers with greater than 50 mg pyrotechnic composition (including cherry bombs, M-80s, and silver salutes) designed to detonate on or near the ground and reloadable shell devices with diameters exceeding 1.75 inches; bottle-rockets can contain up to 130 mg pyrotechnic composition.

Because of the risks for injury associated with bottle rockets and other fireworks, several organizations have made specific recommendations regarding their use. USEIR recommends that persons attend public fireworks displays; however, if persons choose to use fireworks, USEIR recommends that they not use bottle rockets, and when other fireworks are used, eye protection should be worn by operators, bystanders, and spectators. CPSC and USEIR also advise that young children should never use fireworks, older children should be supervised when using fireworks, fireworks should be used only outdoors, a source of water should always be nearby for fire and to douse malfunctioning fireworks, instructions should be read and followed carefully, and malfunctioning fireworks should not be relit.

FIGURE 1. Percentage of fireworks-related serious eye injuries, by type of firework — United States Eye Injury Registry, 1990-1994



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