

2013 HOUSE GOVERNMENT AND VETERANS AFFAIRS

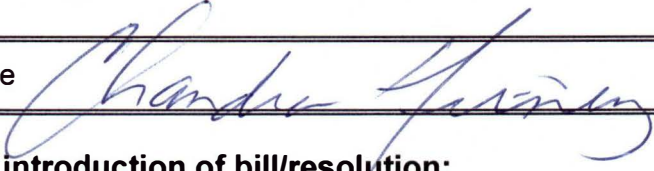
HB 1257

2013 HOUSE STANDING COMMITTEE MINUTES

House Government and Veterans Affairs Committee
Fort Union Room, State Capitol

HB 1257
February 7, 2013
Job 18558

Conference Committee

Committee Clerk Signature 

Explanation or reason for introduction of bill/resolution:

Relating to fireworks permitted to be sold.

Minutes:

You may make reference to "attached testimony."

Audio is very faint throughout recording.

Chairman Jim Kasper opened the hearing on HB 1257.

Support:

Rep. Blair Thoreson, District 44, appeared in support of HB 1257. (Audio very faint.) This bill would allow our retailers to sell bottle rockets again. It does not change any bans by cities, counties, or townships. Provided **attachment 1**, information on eye injuries.

Rep. Ben Koppelman: (Audio very faint.)

Rep. Thoreson: The original legislation passed in 2009. There was a provision that if retailers had bottle rockets on hand at the time the legislation took effect, they could still sell them during that season.

Rep. Ben Koppelman: Are you aware of more (Audio very faint.)

Rep. Thoreson: I do not have any statistics on that. I have asked around and have not been provided. It's hard to say because while a retailer cannot legally offer to sell these, they are still being used throughout the state. If there are still eye injuries taking place, it's not because the product _____ (Audio very faint). They still do have the right to use them.

Rep. Scott Louser: When the bill was passed, what was the rationale for banning the sale?

Rep. Thoreson: I would have to defer. I was not on the bill at that time or on the committee which made the recommendation. It came down to a safety issue, but I am not sure why the product was banned altogether.

Rep. Karen Rohr: I have received phone calls from ophthalmologists from all over the state about this. You keep referring that there are not statistics ____ (Audio very faint.)

Rep. Thoreson: That is a very good question. I don't know that I've had that information. This was the information which I was to find with a quick search, and it is from the American Academy of Ophthalmology.

Rep. Steven Zaiser: From your prospective, do you see bottle rockets more destructive than Roman candles or other forms of fireworks?

Rep. Thoreson: I don't know if there is more risk. Any time you have a product that travels above the ground, there is probably some level of risk. There are other rockets of a larger size, some that are smaller, and those can still be sold.

Rep. Gail Mooney: Are the other forms of fireworks unavailable for sale in the state? Is this the only one?

Rep. Thoreson: There are other products that are not sold in North Dakota, and some of them are germane to the grams of powder and that sort of thing. Section 23-15.01 of the Century Code does spell out what can be sold and what cannot be sold.

Rep. Gail Mooney: Is this the only one that is singled out?

Rep. Thoreson: There are those that are singled out by their size or weight, but of the rockets, this is the one which has been specifically singled out, not for usage by for sale by retailers.

Opposition:

Courtney Koebele, North Dakota Society of Eye Physicians and Surgeons and the North Dakota Medical Association: Refer to written testimony, **attachment 2**. Also provided **attachments 3 & 4**.

15:35 **Rep. Ben Koppelman:** Since the sale has been banned, what is the percentage or number _____ (Audio very faint.)

Courtney Koebele: Two ophthalmologists will be testifying. They may be able to give you information about that. I can certainly pull my numbers.

Representative Louser: It's the use, not the sale, _____ (Audio very faint.)

Courtney Koebele: I do not know. We would not oppose a ban on the use.

Nancy Kopp, representing the North Dakota Optometric Association: I appear in **opposition to HB 1257**. Our position remains the same as in 2009 in that we are advocates for public safety. Since the ban on the sale was approved in 2009, we are very pleased to report that our organization has not received any injury reports.

Dr. Taya Patzman, Bismarck optometrist and President of the North Dakota Optometric Association: Refer to written testimony, **Attachment 5.**

21:19 Rep. Steven Zaiser: If you were to have free prerogative and be able to design a legislation pertaining to bottle rockets, would you include a preclusion of the use of those rockets as well as the sale?

Dr. Patzman: I absolutely would. Most people who use bottle rockets are children. As we know, not all children have a lot of common sense. An eye injury could affect a child for the rest of his or her life.

Dr. Charlie Volk, ophthalmologist in Bismarck: Spoke of his experience being on call on the Fourth of July over the course of many years. The injury could come from the explosion of the bottle rocket or the thud of the bottle rocket against the eye. Based on my observations, it is kids and not adults who are misusing bottle rockets. Since the ban on the sale of bottle rockets, the incidence of injury has gone down to practically zero. I cannot recall one in my own experience since the ban. Injuries from what seems like innocent fun could in fact end up being life changing.

Rep. Ben Koppelman: (Audio very faint.) _____ wearing any eye protection _____

Dr. Volk: I don't recall anyone every wearing protective eyewear except my kids. We took care of much of western North Dakota. We would have four to six serious injuries in our area in a year, and I imagine there were that many elsewhere in the state as well.

Vice Chair Randy Boehning: What is the most common eye injury which results in the loss of an eye?

Dr. Volk: Industrial accidents; gave examples.

Neutral:

Hearing closed.

Rep. Vernon Laning: I have three boys, and they shot bottle rockets in all directions. I confess that it is extremely dangerous. I have seen injuries and fires. I am not in favor of government control on many things, but this one just seems to have so many repercussions, especially for young kids. I feel we should leave the law in place.

Rep. Ben Koppelman: (Audio very faint.) Do we typically restrict the sale of products because of their misuse? Also, as a parent, I will take precautionary measures, such as eyewear. I don't know if having a ban is the answer. (Audio very faint.)

Rep. Gail Mooney: I tend to agree with Rep. Vernon Laning. I would not be in favor of this, especially after hearing the testimony from the ophthalmologist who stated that there is a decline in injuries.

Rep. Karen Karls: Shared personal story.

Rep. Vernon Laning made a motion for a do not pass.

Rep. Karen Karls second

Rep. Karen Rohr: The state has a trauma registry. Would it be possible to get the data from them for 2009 to date to see if there were any firework injuries directly related to bottle rockets?

Chairman Kasper: I don't know the answer to that. We heard Dr. Volk say that talking with his colleagues around the state, the number of these accidents has gone down.

Rep. Marie Strinden: I hate when the government tells people what to do. A lot of this does come down to parents. However, Rep. Karls shared that her child who was injured was not every playing with the bottle rockets, was just in the neighborhood and was hit. Even if we were to encourage eyewear or education for parents, I think that they would still be really dangerous. That said, I'm not sure how I am going to vote.

Rep. Scott Louser: We are going to see debate on the floor. I am still searching for why there was a ban on the sale but not a ban on the use. (Audio very faint.)

Rep. Bill Amerman: If I remember, the sponsor of the bill to ban the sale of fireworks wanted to ban the use of bottle rockets also, but that would not have passed. So I believe what they did was with the idea that to ban the sale would cut down on the usage.

Chairman Kasper: Rep. Thoreson, you were involved with that in 2009, were you not? Maybe you could give the answer to that question.

Rep. Thoreson: At that time, I was not on the committee which gave it a do pass recommendation. There was an attempt to overturn that recommendation on the floor. The bill did pass in house by a single vote. In 2009, I was a sponsor on a similar bill.

Chairman Jim Kasper: I am a cosponsor of the bill. Under our Constitution, we have a right to pursue freedom and happiness. We have the right to make mistakes. When we limit our rights, even if it's the wrong rights, we are still limiting the right of the people. It's a tough vote.

Rep. Steven Zaiser: Shared personal story. Most of the damage done by bottle rockets is not the result of responsible use.

Roll call vote on motion for a do not pass. Motion passed.

**Yes = 9
No = 5
Absent = 0**

Carrier: Representative Zaiser

Date: 2-7-13
 Roll Call Vote #: _____

**2013 HOUSE STANDING COMMITTEE
 ROLL CALL VOTES
 BILL/RESOLUTION NO. 1257**

House Government and Veterans Affairs Committee

Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken: Do Pass Do Not Pass Amended Adopt Amendment
 Rerefer to Appropriations Reconsider

Motion Made By Lanning Seconded By Karls

Representatives	Yes	No	Representatives	Yes	No
Chairman Jim Kasper		✓	Rep. Bill Amerman	✓	
Vice Chairman Randy Boehning		✓	Rep. Gail Mooney	✓	
Rep. Jason Dockter		✓	Rep. Marie Strinden	✓	
Rep. Karen Karls	✓		Rep. Steven Zaiser	✓	
Rep. Ben Koppelman		✓			
Rep. Vernon Lanning	✓				
Rep. Scott Louser		✓			
Rep. Gary Paur	✓				
Rep. Karen Rohr	✓				
Rep. Vicky Steiner	✓				

Total (Yes) 9 No 5

Absent 0

Floor Assignment Zaiser

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

REPORT OF STANDING COMMITTEE

HB 1257: Government and Veterans Affairs Committee (Rep. Kasper, Chairman)
recommends **DO NOT PASS** (9 YEAS, 5 NAYS, 0 ABSENT AND NOT VOTING).
HB 1257 was placed on the Eleventh order on the calendar.

2013 SENATE JUDICIARY


HB 1257

2013 SENATE STANDING COMMITTEE MINUTES

Senate Judiciary Committee
Fort Lincoln Room, State Capitol

HB1257
3/20/2013
Job #20228

Conference Committee

Committee Clerk Signature 

Minutes:

Attached testimony

Relating to fireworks permitted to be sold

Senator David Hogue - Chairman

Representative Blair Thoreson - Introduces the bill and gives a handout **(1)**. Senator Berry asks him if he has an impact study from the retailers. Senator Grabinger asks why they have singled out bottle rockets to which Rep. Thoreson responds it is because of misuse of the product. Senator Berry states that 80% of the time it is an injury to a by-stander. Rep. Thoreson believes there is a disconnect because citizens can possess bottle rockets they just cannot be sold.

Kyle Thiel - Dakota Fireworks, Dickinson - See written testimony **(2)**. He shows a presentation.

Jerry Briar - Generous Jerry Fireworks, Bismarck - Mr. Briar says anything can be used in a destructive negligent manner. He relates that 5% of his business was for bottle rockets. Senator Sitte asks him how this has affected his business. Mr. Briar relates they take apart any pre-packaged fireworks to make sure there are no bottle rockets. Senator Berry asks him if he has seen change in the construction of the bottle rockets to which Mr. Briar says they do have a thicker stick and do not stray off like they used to.

Ron Knutson - Memory Fireworks - Says his sales have also been reduced because of not being able to sell bottle rockets. He said they used to sell a 1000 to 1500 cases a year. Senator Hogue asks him if they were to put an age restriction on those who could buy them would that be workable for him. He said it would make it tough but they are out of the city limits so often times the kids are with the parents.

Opposition

Joel Boespflug - ND Fire Chiefs Association - See written testimony **(3)**.

Courtney Koebele - ND Society of Eye Physicians and Surgeons and the ND Medical Association - See written testimony. Also passes out information for others not in the room. **(4)**

Nancy Kopp - ND Optometric Association - Introduces Taya Patzman.

Taya Patzman - President of the ND Optometric Association - See written testimony **(5)**.

Billie Madler - President of the NDNPA - See written testimony. **(6)**

Bernie Sinner - Casselton, ND - See written testimony **(7)**.

Dr. Doug Litchfield - Bismarck - Explains the eye injuries from bottle rockets. He says they noted the difference of fewer injuries after the bottle rocket ban. He says the new ones with the stronger shaft are okay but the bottle rocket with the flimsy stick are bad. He would like to see a no vote on bottle rockets. Senator Hogue asked him for statistics on bottle rocket injuries to which Dr. Litchfield responded that it is over a 50 % decrease. He adds that the injuries they have seen have been less severe.

Close the hearing

2013 SENATE STANDING COMMITTEE MINUTES

Senate Judiciary Committee
Fort Lincoln Room, State Capitol

HB1257
3/25/2013
Job #20444

Conference Committee

Committee Clerk Signature 

Minutes:

Senator David Hogue - Chairman

Committee work

Senator Lyson moves a do pass
Senator Armstrong seconded

Discussion

Senator Lyson says to make a law like this is ridiculous and the responsibility needs to be put on the parents. Senator Sitte agrees but says she will vote against it. Senator Berry is concerned about the misuse of bottle rockets and the by-standers that may be injured. He says he cannot support this. Senator Hogue says an age limit is not going to protect the innocent by-stander. Senator Lyson says the four Indian reservations we have are selling them right now. Senator Armstrong says he can think of many things to ban that have more injuries with them than this bill. He goes on to say we are only banning the sale of them not the use so he will vote for the bill.

Vote - 5 yes, 2 no
Motion passes
Senator Lyson will carry

Date: 3/25/13
 Roll Call Vote #: 1

**2013 SENATE STANDING COMMITTEE
 ROLL CALL VOTES
 BILL/RESOLUTION NO. 1257**

Senate JUDICIARY Committee

Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken: Do Pass Do Not Pass Amended Adopt Amendment
 Rerefer to Appropriations Reconsider

Motion Made By S. Lyson Seconded By S. Armstrong

Senators	Yes	No	Senator	Yes	No
Chairman David Hogue	X		Senator Carolyn Nelson		X
Vice Chairman Margaret Sitte	X		Senator John Grabinger	X	
Senator Stanley Lyson	X				
Senator Spencer Berry		X			
Senator Kelly Armstrong	X				

Total (Yes) 5 No 2

Absent 0

Floor Assignment S. Lyson

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

REPORT OF STANDING COMMITTEE

HB 1257: Judiciary Committee (Sen. Hogue, Chairman) recommends DO PASS
(5 YEAS, 2 NAYS, 0 ABSENT AND NOT VOTING). HB 1257 was placed on the
Fourteenth order on the calendar.

2013 TESTIMONY

HB 1257

Eye Injuries: Recent Data and Trends in the United States

Introduction

Eye injury is a significant health problem in the United States, second only to cataract as a cause of visual impairment. Each year more than 2.5 million eye injuries occur and 50,000 people permanently lose part or all of their vision. **Ninety percent (90%) of all eye injuries can be prevented by using protective eyewear.**

The American Academy of Ophthalmology (Academy) and the American Society of Ocular Trauma (ASOT) track eye injuries annually through an effort called Eye Injury Snapshot (EIS), part of the EyeSmart™ Campaign to raise awareness of eye disease, eye injury and eye infection. Ophthalmologists, pediatricians and emergency room doctors from all regions of the United States report on the eye injuries they treat during a one-week period of time, the “snapshot” period. The EIS data presented here were averaged from the 2004–2008 snapshot periods. This information is also consistent with longer-term trend data compiled by the United States Eye Injury Registry. In this backgrounder EIS facts are compared with American perceptions about eye injuries identified in a recent public survey by Greenberg, Quinlan, Rosner Research for the Academy and ASOT.

Who is at greatest risk for an eye injury?

The Facts:

- Adults: Nearly half (47.6 percent) of all reported eye injuries occur in people between the ages of 18 and 45
- Children: 25.4 percent of injuries occur in children and youth 0 to 18 years old
- Older Adults: 26.9 percent of injuries occur in people age 46 and older
- Males are at greater risk than females for all age groups: 73 percent of injuries occur in males
- Americans of Caucasian, African and Hispanic ethnicity sustain 95.2 percent of injuries, compared with 2.5 percent for Asian Americans and 3.3 percent for other ethnic groups

Public Perceptions vs. the Facts:

- Most people consider themselves unlikely to suffer an eye injury, even though 29 percent of survey respondents had already had a serious eye injury or knew someone who had
- Women, especially married mothers and younger women, understand the risks for their family members more clearly than the public in general; men, especially younger or “blue collar” men, are more likely to see themselves at risk
- Most people assume that eye *diseases* are more significant threats to eye health than injuries, yet the public also underestimates their risks for the major eye diseases according to other surveys commissioned by the Academy
- Few survey respondents noted elders as an at-risk group

Where are eye injuries likely to occur?

The Facts:

- Home: Nearly half (44.1 percent) of all reported injuries happen in the home
- Sports: 14.7 percent of reported injuries happen during sports or recreational activities

- Work: 15.6 percent of reported injuries occur in an industrial, factory or office setting
- Roads: 11.4 percent of reported injuries happen on a street or highway, usually in relation to motor vehicle accidents
- The remaining 14.2 percent of reported injuries took place in schools, farms or other, unspecified locations

Public Perceptions vs. the Facts:

- People tend to think eye injuries happen “elsewhere”---to people performing high risk construction work or sports---rather than during every day, home-based activities
- Americans fail to identify accidental slips and falls in the home as significant causes of eye injury, but the data show this is often how young children and elders are injured
- Schools and youth sports are not recognized as locations and activities that are significant for eye injury

What are the causes of eye injuries?

The Facts:

- Projectile objects such as flying debris or nails: 17.9 percent of all reported injuries
- Blunt objects like construction hand tools or hardware: 13.3 percent of reported injuries
- Fingers, fists or other body parts: 10.6 percent of reported injuries
- Sharp objects such as a wood splinter, fishhook or glass shard: 9.2 percent of reported injuries

Public Perceptions vs. the Facts:

- Only half (50 percent) of survey respondents report wearing protective eyewear when doing home or yard maintenance tasks. Though fireworks are responsible for *less than one percent* of all eye injuries, most respondents identify fireworks as the third leading cause of injury

Cause of Injury

Projectile	17.9 %
Blunt object	13.3 %
Finger, fist, body (elbow, etc)	10.6 %
Sharp object	9.2 %
Sports equipment	4.5 %
Automobile airbag	4.4 %
Paintball, bb gun, pellet gun	3.5 %
Furniture/ appliance	2.1 %
Household chemical	2.0 %
Firearm	1.9 %
Fireworks	0.68 %
Other	15.8 %
Unknown	5.0 %



Attachment 2

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HB 1257
2-7-13
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Testimony in Opposition to HB 1257
North Dakota Society of Eye Physicians and Surgeons
North Dakota Medical Association
February 7, 2013

Mr. Chairman and Committee Members, I'm Courtney Koebele and I represent the North Dakota Society of Eye Physicians and Surgeons and the North Dakota Medical Association, both of which oppose HB 1257. Our efforts in 2009, with your help, resulted in the passage of the law which prohibited the sale of small bottle rockets in an effort to reduce the burden of bottle rocket-related injuries among both children and adults. In 2011 a bill similar to this one was reviewed by the legislature and defeated in the house.

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.

Bottle rockets can cause significant ocular injury in children, often with permanent loss of vision. In a very recent study published in the *Archives of Ophthalmology*, it was concluded that a disproportionate number of cases of severe eye damage and visual impairment are caused by bottle rockets:

This study demonstrates that bottle rockets can cause significant ocular injury in children and adolescents and, in turn, cause their parents and themselves to incur expenses through emergency department visits, surgical interventions, and days missed from school and work. It has been shown that half of all fireworks-related ocular injuries, particularly those leading to permanent blindness or enucleation, are caused by bottle rockets. [Khan, Reichstein, Recchia, *Ocular Consequences of Bottle Rocket Injuries in Children and Adolescents*, *Archives of Ophthalmology*, January 2011]

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. Our ophthalmologists and optometrists in the

state talked with you about some of the injuries and personal stories in previous sessions. One particular bottle rocket incident we discussed with you was highlighted in the media – Casselton high school student Beau Sinner received a lacerated cornea from a bottle rocket and the story of the implications of the injury on his life and recovery was covered by the media.

Overall, according to the U.S. Consumer Product Safety Commission, the typical fireworks victim is young and most fireworks injuries occur during the one month period surrounding the July 4th holiday.

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.

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 NOT PASS” on HB 1257.

**N
D NPA**

North Dakota
Nurse Practitioner Association

Attachment 3

HB 1257

2-7-13

February 7, 2013

Chairman Kasper and committee members:

The North Dakota Nurse Practitioner Organization is offering written testimony against HB 1257. We do not support allowing the sale or distribution of skyrockets or bottle rockets. These rockets fly erratically and are well known to be common offenders in firework related injury to both the individual lighting the firework and innocent bystanders. Every year in the United States many children have eye and bodily injuries from bottle rockets.

We ask you to vote no on HB 1257.

Cheryl Rising, FNP Legislative Representative

701-527-2583

ONLINE FIRST

Ocular Consequences of Bottle Rocket Injuries in Children and Adolescents

Mehnaz Khan, MS; David Reichstein, MD; Franco M. Recchia, MD

Objective: To describe the spectrum of ocular injuries and associated visual morbidity in the pediatric and adolescent population caused by bottle rockets.

Methods: Retrospective review of consecutive medical records of patients 18 years or younger seen during a recent 4-year period. Outcome measures were ocular injuries at time of visit, interventions required, visual acuity at most recent follow-up, and most recent anatomic findings.

Results: Eleven eyes from 10 patients (8 boys and 2 girls aged 5-17 years) were identified. Significant ocular injuries included corneal epithelial defect (7 eyes), hyphema (6 eyes), traumatic iritis (2 eyes), iridodialysis (4 eyes), cataract (4 eyes), retinal dialysis (1 eye), and vitreous hemorrhage (2 eyes). Eight eyes required primary intervention (lensectomy in 4 eyes, corneal debridement in 2 eyes, globe

exploration in 1 eye, and retinal laser photocoagulation in 1 eye). Three patients required additional procedures. These secondary interventions included pars plana vitrectomy (1 eye), muscle surgery for sensory strabismus (1 eye), corneal debridement (1 eye), and intraocular lens placement (1 eye). Most recent visual acuity (10 eyes with follow-up) was 20/30 or better in 4 eyes and 20/200 or worse in 6 eyes (for 1 eye, the patient was unavailable for follow-up). Permanent visual impairment was typically due to traumatic maculopathy.

Conclusion: Bottle rockets can cause significant ocular injury in children, often with permanent loss of vision.

Arch Ophthalmol. 2011;129(5):639-642.

Published online January 10, 2011.

doi:10.1001/archophthalmol.2010.336

FIREWORKS-RELATED INJURIES are frequently seen among patients admitted to the emergency department because fireworks are a popular means of expression during Independence Day and other celebrations in the United States. In 2006, a total of 11 deaths and approximately 9200 emergency department admissions resulted from fireworks-related injuries, with most affecting boys and 36% of injuries occurring in individuals younger than 15 years.¹ An estimated 1400 cases annually involve injury to the eyes.² A disproportionate number of cases of severe ocular morbidity and visual impairment are caused by bottle rockets.^{3,4}

A bottle rocket is approximately half the size of a normal firework and consists of 3 main parts: the core ("engine"), which is a tube filled with black powder or a similar explosive; the nose cone, which guides the flight of the firework and may contain explosive components or other decorative items; and a guide stick, which sta-

bilizes the rocket in flight. When ignited, the explosion propels the bottle rocket into the air, often setting off further colorful explosions, including star bursts, trails, or sparklers. Many manufacturers of bottle rockets also design them with whistles that shriek as the rockets climb into the air or explosives that make a concussive bang when they explode. The guide stick is typically stuck in the ground or braced in a bottle (hence the name) prior to launch. Injuries may result from direct high-velocity contact with the intact rocket, from parts of the rocket that may break off during flight, or from neighboring debris propelled by the force of the rocket's combustion.

Bottle rocket injuries, therefore, may bring significant costs to the individual, through loss of vision and decreased quality of life, and to society, through health care use and lost productivity. One step toward a rational discussion about the regulation of fireworks, particularly bottle rockets, is an analysis of the ocular complications that can result from their use.

Author Affiliation: Vanderbilt University School of Medicine (Ms Khan) and Division of Vitreoretinal Diseases and Surgery, Vanderbilt Eye Institute (Drs Reichstein and Recchia), Vanderbilt University Medical Center, Nashville, Tennessee.

Table 1. Demographic and Historical Details of Children and Adolescents Treated for Ocular Injuries Associated With Bottle Rockets

Patient No./ Sex/Age, y	Date of Injury	Reported Method of Injury	Level of Involvement
1/M/7	July 2, 2006	Played with bottle rocket in hand	Active
2/M/17	July 5, 2007	When mowing lawn, struck in eye by bottle rocket launched by nearby children	Passive
3/F/5	July 5, 2008	Bottle rocket exploded nearby	Passive
4/M/13	October 12, 2006	Launched bottle rocket	Active
5/M/11	October 11, 2008	Struck in eye by bottle rocket	Active
6/M/6	July 7, 2008	Struck in eye by bottle rocket	Active
7/M/10	June 25, 2008	Bottle rocket exploded in front of eye	Active
8/M/15	June 23, 2008	Struck in eye by bottle rocket	Active
9/M/11	June 7, 2008	Struck in eye by bottle rocket	Active
10/F/17	June 11, 2009	Bent over bottle rocket to light it	Active

In addition, we hope that such studies will educate parents and children about the long-term repercussions of ocular injuries, guide pediatricians and ophthalmologists who care for and counsel these patients, and inform the public of the risks of bottle rockets. Several studies of ocular trauma have included bottle rocket injuries,^{4,6} but none, to our knowledge, has detailed the extent and long-term outcomes of such injuries in children and adolescents. The objectives of this retrospective study were to describe the spectrum of ocular injuries and the long-term sequelae resulting from bottle rocket injuries in children and adolescents.

METHODS

Approval from the institutional review board of Vanderbilt University Medical Center was obtained for this retrospective study. Consecutive medical records of all patients 18 years or younger seen in ophthalmic consultation through the Vanderbilt Children's Hospital emergency department between January 1, 2006, and December 31, 2009, were reviewed. Patients with a history of fireworks injury were selected for further study. Data collected included patient demographics (age and sex), date of the accident, method of injury, level of patient's involvement (having launched the bottle rocket or having been a bystander), visual acuity (VA) at first visit, ophthalmic findings at first visit, initial and secondary therapeutic interventions, VA at most recent follow-up, and anatomic findings at most recent follow-up.

RESULTS

Of 2385 consultation medical records reviewed, 10 patients with a history of bottle rocket injury were identified (**Table 1**). Eight patients were boys and 2 were girls. The median age was 11 years (range, 5-17 years). Interestingly, 8 of the 10 patients identified were injured within a month of July 4. Eight patients were launching bottle rockets at the time of injury, whereas 2 were bystanders. Nine of 10 patients were injured in 1 eye and 1 patient in both eyes. Use of protective eyewear was not recorded in any of the patients.

On first visit, 7 of the 11 eyes had VA of 20/200 or worse (**Table 2**). Injuries to the eyelids, anterior segment, and adnexa included periocular burns (3 eyes), eyelid laceration (1 eye), corneal epithelial defect (7 eyes), hyphema (6 eyes), traumatic iritis (1 eye), iridodiolysis

(4 eyes), and cataract (4 eyes). Recorded injuries to the posterior segment included vitreous hemorrhage (2 eyes), intraretinal hemorrhage (2 eyes), commotio retinae (4 eyes), and retinal dialysis (1 eye). Eight of 11 eyes required primary intervention, which included lensectomy (4 eyes), corneal debridement (2 eyes), anterior vitrectomy (1 eye), globe exploration (1 eye), and retinal laser photocoagulation (1 eye).

Secondary interventions included pars plana vitrectomy (1 eye), muscle surgery for sensory strabismus (1 eye), corneal debridement (1 eye), and intraocular lens placement (1 eye). One patient was unavailable for follow-up. In 3 patients (patients 5, 8, and 9), no active or vision-threatening ocular abnormality was seen, and these patients were discharged to care in their local area. Of the remaining 6 patients (representing 6 eyes), follow-up was available for at least 3 months (range, 3-37 months). In all 6 eyes, VA was 20/200 or worse, with limited visual potential. Permanent VA loss was attributed to corneal scarring, traumatic maculopathy, or a traumatic macular hole.

COMMENT

This study demonstrates that bottle rockets can cause significant ocular injury in children and adolescents and, in turn, cause their parents and themselves to incur expenses through emergency department visits, surgical interventions, and days missed from school and work. It has been shown that half of all fireworks-related ocular injuries, particularly those leading to permanent blindness or enucleation, are caused by bottle rockets.¹ We specifically looked at bottle rocket-related ocular injuries because of the severity of these injuries compared with other fireworks-related ocular injuries,⁴ their high incidence in children,⁵ and the paucity of detailed clinical data for this subset of patients.¹

Our study confirmed that the preponderance of trauma patients are male, as shown by a previous epidemiologic study.⁴ The presence of adults was not uniformly documented in our records, but 1 study has shown that adult supervision was present in only 54% of pediatric fireworks-related injuries.² Indeed, adult supervision during fireworks launching may seem advisable, but it is not sufficient to prevent fireworks-related injuries in children.

Whereas most patients were launching bottle rockets at the time of injury, 2 were bystanders. In 1 of these

Table 2. Anatomic Findings and Therapeutic Interventions in Children and Adolescents With Ocular Injuries Associated With Bottle Rockets

Patient No.	Eye(s) Involved	VA in Injured Eye at First Visit	Injuries to Eyelids, Anterior Segment, and Adnexa	Injuries to Posterior Segment	Primary Surgical Intervention	Additional Procedures	Length of Follow-up	Most Recent VA	Anatomic Abnormalities at Most Recent Follow-up
1	OS	6/400	CED, hyphema, iridodialysis, partial thickness corneal laceration	Comotio retinae; preretinal, intraretinal, and subretinal hemorrhage; retinal dialysis	Retinal laser photocoagulation, debridement of corneal tissue	Debridement of cornea	35 mo	20/200	None
2	OD	HM	CED, hyphema, iridodialysis	None	None	None	0	NA	None
3	OD	CF at 0.3048 m	CED, microhyphema, iridodialysis, anterior cataract	Berlin edema	None	Medial and lateral rectus recession	3 mo	CF	Traumatic maculopathy/RPE loss
4	OS	HM	Microhyphema, iridodialysis, cataract	Traumatic macular hole	Pars plana lensectomy, synechiolysis	Secondary IOL placement, pars plana vitrectomy, macular hole repair, retinal detachment repair	37 mo	20/200	None
5	OS	20/20	CED, mild thermal keratopathy	None	None	None	3 d	20/30	Healed CED
6	OD	LP	Traumatic iritis, microhyphema	None	Lensectomy, anterior vitrectomy	None	9 mo	CF	Corneal scar, aphakia
7	OD	CF at 0.3048 m	Corneal laceration, hyphema, iridodialysis, cataract	Berlin edema, perifoveal intraretinal and subretinal hemorrhage, commotio retinae	Pars plana lensectomy	None	13 mo	20/400	Traumatic maculopathy/RPE loss
8	OD	20/50	Lid edema, subconjunctival hemorrhage, traumatic iritis	Berlin edema, vitreous hemorrhage, subhyaloid hemorrhage	None	None	15 d	20/25	Healed
9	OD, OS	20/25 OD	Fragments in fornices, CED	None	Debridement of corneal and conjunctival fragments	None	17 d	20/20	Healed
		20/20 OS	Fragments in fornices, CED	None	Debridement of corneal and conjunctival fragments	None	17 d	20/20	Healed
10	OS	20/400	Eyelid margin laceration, hyphema, traumatic cataract with anterior capsular rupture	Vitreous hemorrhage	Globe exploration, AC washout, vitrectomy, lensectomy	None	4 mo	20/400	Optic pallor, traumatic maculopathy

Abbreviations: AC, anterior chamber; CED, corneal epithelial defect; CF, count fingers; HM, hand motion; IOL, intraocular lens; LP, light perception; NA, not applicable; RPE, retinal pigment epithelium; VA, visual acuity.

cases, VA was reduced to finger counting. Also of note, none of the patients in this series were reported to have been wearing protective eyewear at the time of injury. Therefore, if children, adolescents, and parents choose to launch bottle rockets, it is important for parents not

only to supervise children and adolescents in the vicinity of bottle rockets but also to ensure that protective eyewear is being used.

Follow-up of at least 3 months was available for 6 of 11 eyes. In all 6 eyes, VA was 20/200 or worse. In the 4

eyes with significant visual loss, the residual anatomic defects still present at the most recent follow-up included traumatic maculopathy (3 eyes) and corneal scar with aphakia (1 eye).

The main limitations of this study include the retrospective retrieval of clinical information and the possibility of ascertainment bias. Because only the cases of patients who visited our emergency department were reviewed, it is possible that those reported here are more severe. Thus, one cannot draw any conclusions regarding the incidence of bottle rocket–related ocular injuries or the true spectrum of their severity.

In this series, 8 of the injuries occurred within 1 month of Fourth-of-July festivities. Therefore, during such times, parents, children, and adolescents need to be particularly aware of the potential danger of injuries from bottle rockets. Not surprisingly, the US Consumer Product Safety Commission prohibits the sale of certain dangerous types of fireworks, including large firecrackers that contain more than 50 mg of explosive powder and aerial fireworks that contain more than 130 mg of flash powder.⁷ Despite these federal regulations and state prohibitions, approximately one-third of fireworks-related deaths between 2000 and 2005 involved fireworks illegally sold to customers.⁸ Massachusetts, Delaware, New Jersey, New York, and Rhode Island are the only 5 states that ban the sale of all consumer fireworks. Whereas the US Consumer Product Safety Commission has issued mandatory safety regulations for firework devices and enforces them under the Federal Hazardous Substance Act, these regulations are clearly not enough to prevent the devastating ocular injuries incurred each year as a result of fireworks, particularly bottle rockets. Therefore, studies such as ours are important for the education of parents, children, adolescents, physicians, and the public regarding the repercussions of fireworks-related ocular injuries to active participants and to bystanders. Finally, studies such as ours can assist in modifying legislation to ban sales of bottle

rockets in an effort to eliminate unnecessary ocular trauma and visual loss.

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Attachments
HB 1257
2-7-13

HOUSE BILL 1257
GOVERNMENT & VETERANS AFFAIRS COMMITTEE
REPRESENTATIVE JIM KASPER – CHAIRMAN
FEBRUARY 7, 2013

My name is Taya Patzman and I'm an optometrist practicing in Bismarck, as well as am the current President of the ND Optometric Association.

I am here today to urge you to DO NOT PASS HB 1257. Banning the sale of bottle rockets is a public safety issue and helps protect our children and innocent bystanders.

As an optometrist, protecting my patients' eye health and safety is my top priority. Since bottle rockets account for the majority of eye-related injuries involving fireworks, it is imperative that we do not repeal the current ban on the sale of bottle rockets. The problem with the bottle rocket is that it is unpredictable in where it will go once lit. This becomes a public safety issue when the reality is that most of the injuries are to innocent bystanders. The eye injuries sustained by bottle rockets are life altering. When a bottle rocket explodes in an eye it results in trauma that causes loss of vision and blindness. When trauma is caused to one eye it can affect the other eye as well causing inflammation and pain. The healthcare costs for this type of injury can be quite significant with treatment over an extended period of time.

My colleague, Dr. Paul Dunderland, reports significant vision loss with 3 patients ages 12-15 due to bottle rocket injuries. These young boys had injuries ranging from light perception, cornea transplant resulting in total blindness, and counting fingers visual acuity with severe photobia requiring an eye patch. Loss of vision in one eye causes deficits in depth perception and peripheral vision loss. These visual skills are necessary for daily activities, sports, driving, and many careers. When an

injury is sustained to a child, it can adversely alter their path in life. To experience these devastating visual effects, simply wear an eye patch for an hour and try to perform everyday tasks. You will find how challenging it is to pour a cup of coffee, pick up a pen, or even more daunting, driving a car or playing a sport.

According to the CDC, “Patients who sustained eye injuries resulting from bottle rockets reported that the factors associated with their injuries included product misuse, (e.g., the intentional aiming of the device at others (bottle rocket wars); 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)).

In the interest of the health and safety of our children and citizens of North Dakota, please DO NOT PASS HB 1257.

I would be happy to answer any questions you may have.

Eye Injuries: Recent Data and Trends in the United States

Introduction

Eye injury is a significant health problem in the United States, second only to cataract as a cause of visual impairment. Each year more than 2.5 million eye injuries occur and 50,000 people permanently lose part or all of their vision. **Ninety percent (90%) of all eye injuries can be prevented by using protective eyewear.**

The American Academy of Ophthalmology (Academy) and the American Society of Ocular Trauma (ASOT) track eye injuries annually through an effort called Eye Injury Snapshot (EIS), part of the EyeSmart™ Campaign to raise awareness of eye disease, eye injury and eye infection. Ophthalmologists, pediatricians and emergency room doctors from all regions of the United States report on the eye injuries they treat during a one-week period of time, the “snapshot” period. The EIS data presented here were averaged from the 2004–2008 snapshot periods. This information is also consistent with longer-term trend data compiled by the United States Eye Injury Registry. In this backgrounder EIS facts are compared with American perceptions about eye injuries identified in a recent public survey by Greenberg, Quinlan, Rosner Research for the Academy and ASOT.

Who is at greatest risk for an eye injury?

The Facts:

- Adults: Nearly half (47.6 percent) of all reported eye injuries occur in people between the ages of 18 and 45
- Children: 25.4 percent of injuries occur in children and youth 0 to 18 years old
- Older Adults: 26.9 percent of injuries occur in people age 46 and older
- Males are at greater risk than females for all age groups: 73 percent of injuries occur in males
- Americans of Caucasian, African and Hispanic ethnicity sustain 95.2 percent of injuries, compared with 2.5 percent for Asian Americans and 3.3 percent for other ethnic groups

Public Perceptions vs. the Facts:

- Most people consider themselves unlikely to suffer an eye injury, even though 29 percent of survey respondents had already had a serious eye injury or knew someone who had
- Women, especially married mothers and younger women, understand the risks for their family members more clearly than the public in general; men, especially younger or “blue collar” men, are more likely to see themselves at risk
- Most people assume that eye *diseases* are more significant threats to eye health than injuries, yet the public also underestimates their risks for the major eye diseases according to other surveys commissioned by the Academy
- Few survey respondents noted elders as an at-risk group

Where are eye injuries likely to occur?

The Facts:

- Home: Nearly half (44.1 percent) of all reported injuries happen in the home
- Sports: 14.7 percent of reported injuries happen during sports or recreational activities

- Work: 15.6 percent of reported injuries occur in an industrial, factory or office setting
- Roads: 11.4 percent of reported injuries happen on a street or highway, usually in relation to motor vehicle accidents
- The remaining 14.2 percent of reported injuries took place in schools, farms or other, unspecified locations

Public Perceptions vs. the Facts:

- People tend to think eye injuries happen “elsewhere”---to people performing high risk construction work or sports---rather than during every day, home-based activities
- Americans fail to identify accidental slips and falls in the home as significant causes of eye injury, but the data show this is often how young children and elders are injured
- Schools and youth sports are not recognized as locations and activities that are significant for eye injury

What are the causes of eye injuries?

The Facts:

- Projectile objects such as flying debris or nails: 17.9 percent of all reported injuries
- Blunt objects like construction hand tools or hardware: 13.3 percent of reported injuries
- Fingers, fists or other body parts: 10.6 percent of reported injuries
- Sharp objects such as a wood splinter, fishhook or glass shard: 9.2 percent of reported injuries

Public Perceptions vs. the Facts:

- Only half (50 percent) of survey respondents report wearing protective eyewear when doing home or yard maintenance tasks. Though fireworks are responsible for *less than one percent* of all eye injuries, most respondents identify fireworks as the third leading cause of injury

Cause of Injury

Projectile	17.9 %
Blunt object	13.3 %
Finger, fist, body (elbow, etc)	10.6 %
Sharp object	9.2 %
Sports equipment	4.5 %
Automobile airbag	4.4 %
Paintball, bb gun, pellet gun	3.5 %
Furniture/ appliance	2.1 %
Household chemical	2.0 %
Firearm	1.9 %
Fireworks	0.68 %
Other	15.8 %
Unknown	5.0 %

Testimony for Public Hearing
Senate Judiciary Committee
March 20, 2013

Kyle Thiel
Dakota Fireworks LLC
387 15th St W, #141
Dickinson, ND 58601

(701) 483-FIRE – Kyle@DakotaFireworks.com

HB 1257 - Relating to fireworks permitted to be sold.

My name is Kyle Thiel and I'm a fireworks retailer in Dickinson. I've lived in Dickinson for the past 10 years and have worked in the fireworks industry in Colorado for the past 15 years. Last year, I opened a retail location in Dickinson with the help of one of my friends and mentors. I learned about HB 1257 through the media after it passed the House and I am urging you to vote "pass" on this bill. Hopefully I can make your decision easier by providing perspective to injury statistics and comparing bottle rockets to another potentially dangerous product which is legal and widely used.

First, let me talk about injuries from bottle rockets. The Consumer Product Safety Commission (CPSC) publishes an annual report on fireworks injuries. I've taken data from those reports and created the graph known as Exhibit A. The graph illustrates the number of injuries by bottle rockets from 2002 – 2011. I've focused on the eyes specifically since in 2009, an ophthalmologist felt bottle rockets were dangerous to the eyes and therefore bottle rocket sales should be banned and much of the discussion is still centered on eyes.

As you can see, injuries to body regions other than the eyes are greater than injuries to the eyes. The number of eye injuries from bottle rockets has been 100-300 each year nationwide with the exception of 0 in 2011. This averages out to 170 eye injuries annually nationwide compared to 360 injuries to other body regions annually nationwide. This graph also shows the number of eye injuries sustained by public fireworks displays, which is also 0-300 each year or 140 eye injuries on average annually from public displays.

Exhibit B shows the data from Exhibit A in tabular form. In 5 of the last 10 years studied, eye injuries from public fireworks displays were equal to or greater than eye injuries from bottle rockets, highlighted in yellow and bolded on this table.

Since the data shows 0-300 eye injuries across the entire nation each year, the question becomes "If a regulation makes sense in one state, does it automatically make sense for North Dakota?" The answer is clearly "no." It probably doesn't make sense to allow people to hunt in Central Park in the center of Manhattan. That doesn't mean North Dakota should outlaw hunting.

Again, the numbers from the CPSC are nationwide numbers, meaning the number of injuries annually in North Dakota is much lower. Using the CPSC national injury data from 2002-2011, I calculated an estimate of the number of bottle rocket eye injuries for North Dakota, as seen in Exhibit C. You can see how I arrived at the numbers 1.85 injuries from bottle rockets annually in our state and 0.59 eye injuries. Based on this information alone, the fact that 1 or 2 people a year are injured by bottle rockets in our state, I hope you will feel okay allowing me to sell bottle rockets to my customers again.

Another issue brought up by opponents of this bill is the trajectory of bottle rockets. Bottle rockets will travel up. If they don't go up, the errant trajectory and injuries sustained can almost always be attributed to misuse. Some examples of misuse include not using a proper launcher which can tip over; not using a launcher at all; lighting off a rocket with a bent, broken or missing stick; attempting to inspect or relight an item that didn't go off; lighting off rockets near people; standing next to them after being lit; purposely shooting them horizontally. Now, if you think of the number of preventable injuries by using our product as designed and as specified, you will see that bottle rockets themselves are not inherently dangerous and don't cause a large number of unpreventable eye injuries as bottle rocket opponents would like you to think.

Which leads me to my last point: Injuries due to misuse or a propensity to misuse a product are not reasons to ban the sale of a product. Typically, we punish the individual and his or her actions, not the product. I'm not asking you to like bottle rockets or fireworks. I'm asking you to take an honest look at the data and ask yourself whether or not it's worth punishing small business owners and consumers by banning a product that causes 1 to 2 injuries per year, most of them being a result of misuse or risky behavior.

As I wrap up, I want you to think of alcohol as an example. I'm going to drive back to Dickinson, get some work done and if I have time tonight, I may sit down on the couch, watch TV and drink a beer. Meanwhile, somewhere in this country, someone is going to drink many beers. Possibly take some shots of whiskey. They are going to stumble to their car, fumble with their keys and drive. They are going to crash into someone and kill them. The person will be charged with driving under the influence and likely face other charges. But here's what won't happen: We won't talk about banning alcohol. We won't consider banning whiskey because it has a high propensity of making people drunk, a higher propensity than beer. And nor should we.

Banning products punishes responsible people. This January, I became a victim of a drunk driving accident for the 3rd time in my life. But when I get home tonight, I'm still going to drink a beer. I might drink two. I don't hate alcohol. I don't like idiots who misuse alcohol by getting into a vehicle and injuring or killing people. My customers are not idiots. Please vote "pass" on HB 1257 so that we can treat them as responsible citizens.

Source: Consumer Product Safety Commission fireworks annual reports, 2002 - 2011

2002 - 2010:

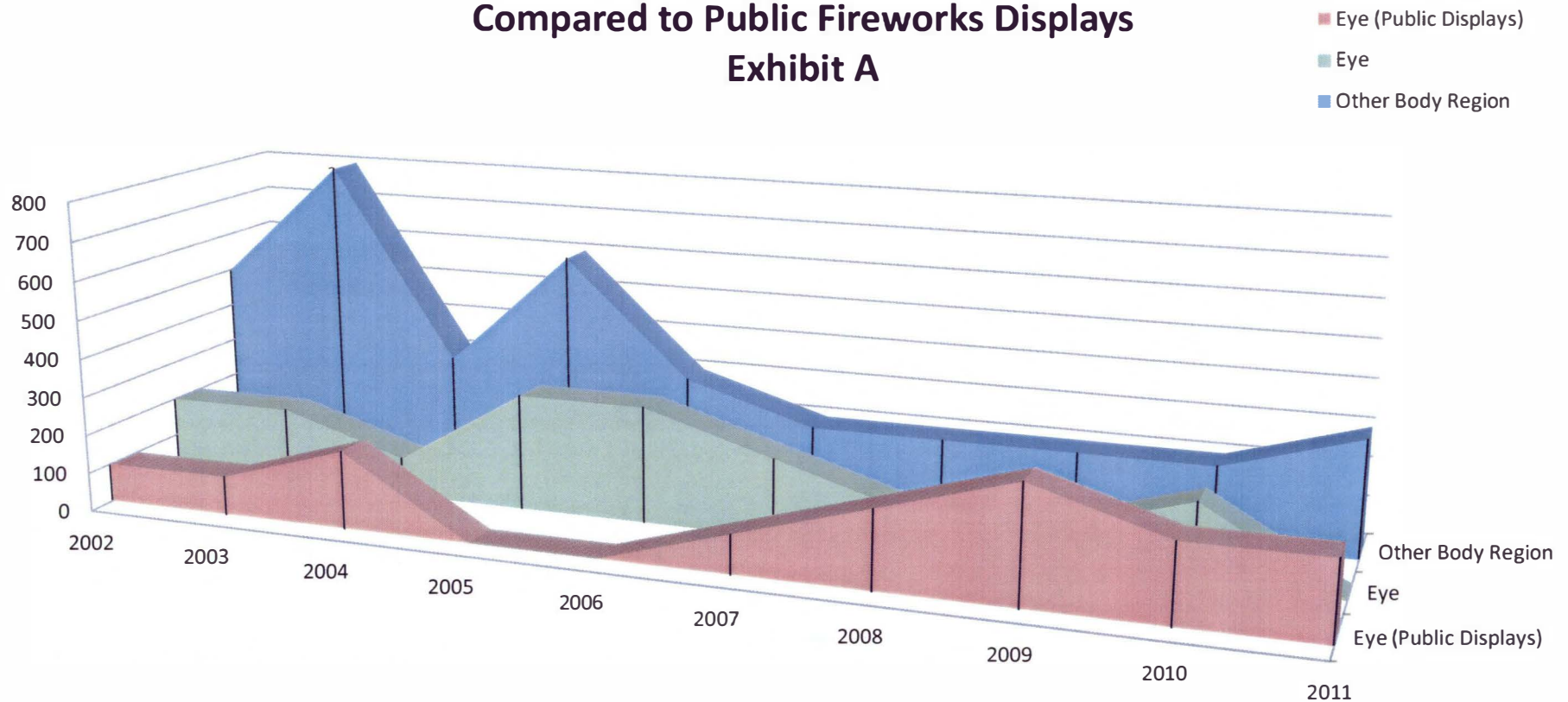
<http://www.cpsc.gov/Research--Statistics/Injury-Statistics/Topics/Fireworks-Related-Injuries> or <http://1.usa.gov/137UIXG>

2011:

<http://www.cpsc.gov/PageFiles/108534/2011fwreport.pdf> or <http://1.usa.gov/YR0lyw>

Bottle Rocket Injuries by Body Region and Year Compared to Public Fireworks Displays

Exhibit A



Source: Consumer Product Safety Commission fireworks annual reports, 2002 - 2011

2002 - 2010:

<http://www.cpsc.gov/Research--Statistics/Injury-Statistics/Topics/Fireworks-Related-Injuries> or <http://1.usa.gov/137UIXG>

2011:

<http://www.cpsc.gov/PageFiles/108534/2011fwreport.pdf> or <http://1.usa.gov/YR0lyw>

**Bottle Rocket Eye Injuries per Year Compared to
Eye Injuries by Public Fireworks Displays (Nationwide)**

Exhibit B

Year	Eye	Eye (Public Displays)	Other Body Region
2002	200	100	500
2003	200	100	800
2004	100	200	300
2005	300	0	600
2006	300	0	300
2007	200	100	200
2008	100	200	200
2009	100	300	200
2010	200	200	200
2011	0	200	300

2002 – 2011 Nationwide Averages

Eye injuries per year from bottle rockets: 170

Eye injuries per year from public fireworks displays: 140

Injuries to body regions other than eyes per year from bottle rockets: 360

Source: Consumer Product Safety Commission fireworks annual reports, 2002 - 2011

2002 - 2010:

<http://www.cpsc.gov/Research--Statistics/Injury-Statistics/Topics/Fireworks-Related-Injuries> or <http://1.usa.gov/137UIXG>

2011:

<http://www.cpsc.gov/PageFiles/108534/2011fwreport.pdf> or <http://1.usa.gov/YR0Iyw>

North Dakota Fireworks Injuries Estimate
Based on 2002-2011 Averages from CPSC Nationwide Statistics
Exhibit C

Annual Bottle Rocket Injuries in North Dakota

1.85

Annual Bottle Rocket Eye Injuries in North Dakota

0.59

Fireworks injuries per 100,000 people:	3.08
Fireworks injuries in ND (assuming population of 700,000):	$3.08 \times 7 = \mathbf{21.56}$
Percent of fireworks injuries caused by bottle rockets:	8.6%
Bottle Rocket Injuries in ND:	$21.56 \times 8.6\% = \mathbf{1.85}$
Percent of bottle rocket injuries to the eyes:	32%
Bottle rocket eye injuries in ND:	$1.85 \times 32\% = \mathbf{0.59}$

Source: Consumer Product Safety Commission fireworks annual reports, 2002 - 2011

2002 - 2010:

<http://www.cpsc.gov/Research--Statistics/Injury-Statistics/Topics/Fireworks-Related-Injuries> or <http://1.usa.gov/137UIXG>

2011:

<http://www.cpsc.gov/PageFiles/108534/2011fwreport.pdf> or <http://1.usa.gov/YR0Iyw>



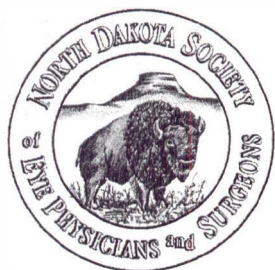
**NORTH DAKOTA
FIRE CHIEF'S ASSOCIATION**

**Testimony on House Bill 1257
Senate Judiciary Committee
March 20, 2013**

Good morning Mr. Chairman and members of the committee. My name is Joel Boespflug, and I am representing the North Dakota Fire Chief's Association in opposition to HB 1257.

Bottle rockets do pose a distinct hazard in regard to the ignition of fires. The travel distance of the rocket is significant and the direction of travel can be unpredictable where the person discharging the firework is likely not able to monitor the area for fire. Bottle rockets can land on rooftops or in open fields and still retain enough heat to cause a fire.

Mr. Chairman and members of the committee, the ND Fire Chief's Association respectfully recommends a Do Not Pass on this bill.



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Testimony in Opposition to HB 1257
North Dakota Society of Eye Physicians and Surgeons
North Dakota Medical Association
March 20, 2013

Chairman Hogue and Committee Members, I'm Courtney Koebele and I represent the North Dakota Society of Eye Physicians and Surgeons and the North Dakota Medical Association, both of which oppose HB 1257. Our efforts in 2009, with your help, resulted in the passage of the law which prohibited the sale of small bottle rockets in an effort to reduce the burden of bottle rocket-related injuries among both children and adults. In 2011 a bill similar to this one was reviewed by the legislature and defeated in the house.

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.

Bottle rockets can cause significant ocular injury in children, often with permanent loss of vision. In a very recent study published in the *Archives of Ophthalmology*, it was concluded that a disproportionate number of cases of severe eye damage and visual impairment are caused by bottle rockets:

This study demonstrates that bottle rockets can cause significant ocular injury in children and adolescents and, in turn, cause their parents and themselves to incur expenses through emergency department visits, surgical interventions, and days missed from school and work. It has been shown that half of all fireworks-related ocular injuries, particularly those leading to permanent blindness or enucleation, are caused by bottle rockets. [Khan, Reichstein, Recchia, *Ocular Consequences of Bottle Rocket Injuries in Children and Adolescents*, *Archives of Ophthalmology*, January 2011]

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. Our ophthalmologists and optometrists in the

state talked with you about some of the injuries and personal stories in previous sessions. One particular bottle rocket incident we discussed with you was highlighted in the media – Casselton high school student Beau Sinner received a lacerated cornea from a bottle rocket and the story of the implications of the injury on his life and recovery was covered by the media.

Overall, according to the U.S. Consumer Product Safety Commission, the typical fireworks victim is young and most fireworks injuries occur during the one month period surrounding the July 4th holiday.

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.

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 NOT PASS” on HB 1257.

OPHTHALMOLOGY

- DAVID J. JACOBS, MD
- EVELYNE B. KINDY, MD
- ROBERT F. SANKE, MD
- DARRELL P. WILLIAMS, MD
- CHAD J. WOLSKY, MD

OPTOMETRY

- JILL R. MARTINSON, OD
- SHAWN P. NELSON, OD
- BRAD SCHIMKE, OD

Dear North Dakota Senator:

Please help us to eliminate the most preventable cause of traumatic blindness in North Dakota. In 2009 we successfully joined most of the rest of the nation in banning the sale of small bottle rockets. The bill did not restrict the sale or use of any other fireworks – just to outlaw small bottle rockets (aka pop bottle rockets) which are a dangerous hazard that needed to be eliminated. There is now legislation to over turn that ban, bill HB1257.

Prior to 2009 we saw traumatic bottle rocket eye injuries every year of my ophthalmic practice here since 1984. 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 that they were sold we saw blinding injuries in North Dakota – most of them suffered by children. Even when used as directed this item is inherently dangerous and flies erratically then explodes. They are unpredictable and can fly any direction. Even if the individual lighting them has safety glasses they are unsafe because most injuries are to bystanders who may be up to several hundred feet away. **IT IS THEREFORE NOT A CIVIL LIBERTY ISSUE OF PERSONAL FREEDOM SINCE MOST OF THESE DEVASTATING INJURIES ARE TO BYSTANDERS.**

We are patriotic and believe in personal freedoms and are not opposing the sale of any other fireworks. Pop bottle rockets are, however, a defective item which are dangerous even when used as directed. 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 incalculable personal cost of suffering and lost vision. In the five years prior to the ban Dr. Max Johnson, an ophthalmologist from Fargo, personally cared for twelve eye injuries from bottle rockets. He states, "The concussive explosion followed by the fragments of the bottle rocket embedding in their eye and orbit resulted in poor visual outcome. Most of these patients were bystanders."

Eye care providers in North Dakota have never been more unified on a single issue. The following is a quote from one colleague characteristic of the sentiment of our state's ophthalmologists and optometrists. Dr. Lee Dannenberg 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 vote no on bill HB1257 and 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.

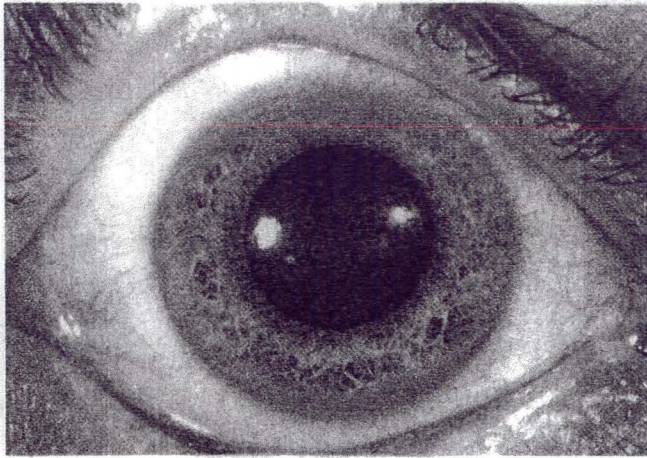
Sincerely,



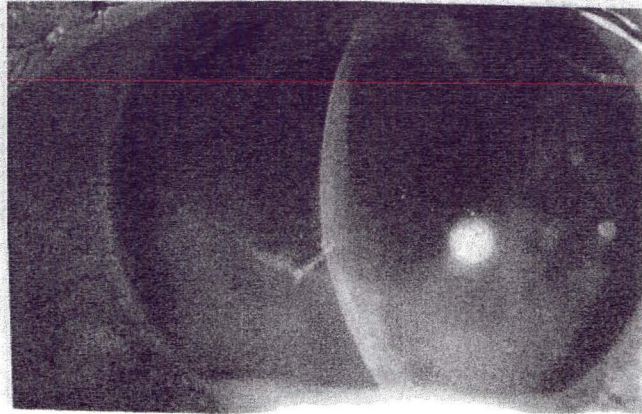
Darrell P. Williams, MD

Plaza 16
2815 16th Street SW, Suite 102
P.O. Box 5020
Minot, N.D. 58702-5020

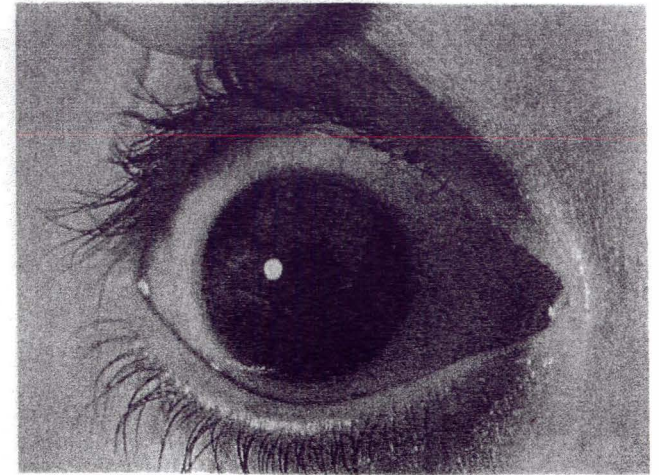
Telephone: 701-852-3937
1-888-852-3937
Fax: 701-857-5792
www.trinityhealth.org



Normal External Eye



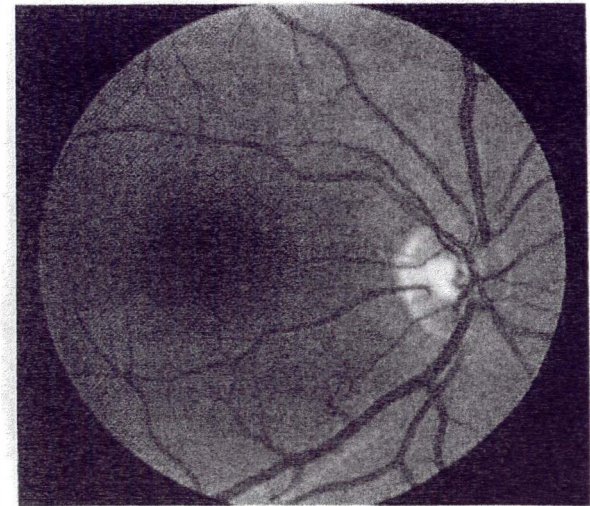
Infected Ruptured Eye



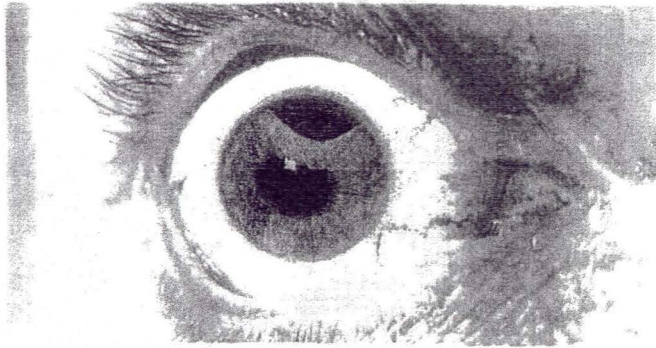
Blood in Traumatized Eye



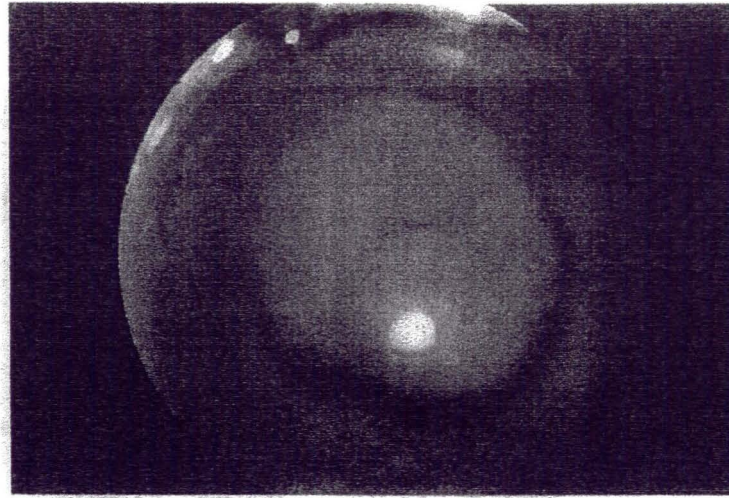
"8 Ball": Blood Filling the Entire Front Chamber of the Eye



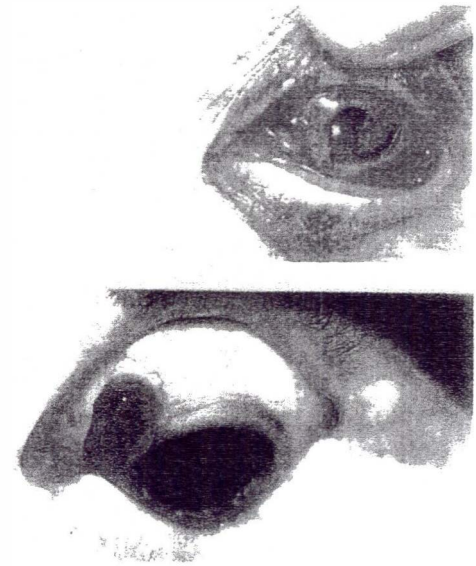
Normal Internal Eye



Traumatic Iris Defect



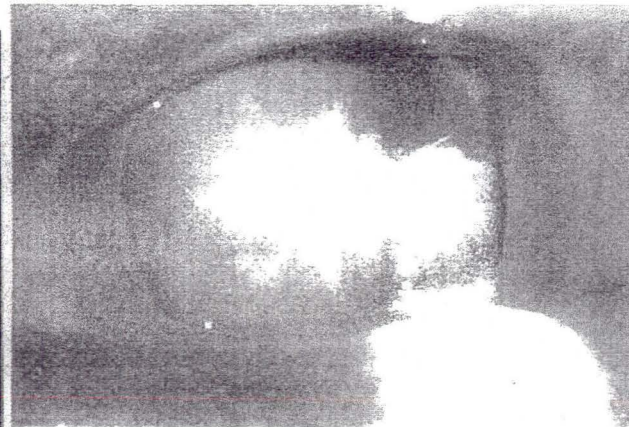
Traumatic Retinal Scarring



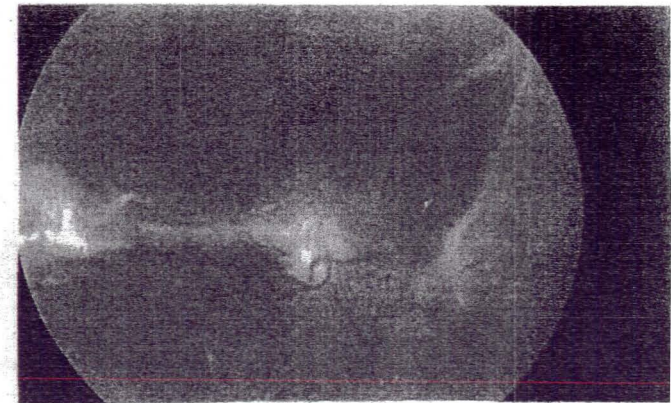
Traumatic Ruptured Eyes



Traumatic Retinal Scarring



Traumatic Cataract



Traumatic Retinal Scarring and Detachment

Regarding House Bill 1257

March 10, 2013

Senate Judiciary Committee,

I am writing to offer testimony against the proposed House Bill 1257. This bill proposes to allow bottle rockets to be sold in the state of North Dakota. I am an ophthalmologist practicing at Sanford Health in Fargo, North Dakota. I have been practicing for less than two years, but already have seen far too many examples of the devastating ocular injuries that are far too commonly caused by bottle rocket use. In my experience, these injuries commonly occur in adults and children who are not following proper safety precautions and all too often lead to permanent vision loss. I urge you to vote against the proposed bill in order to protect the citizens of North Dakota from these potentially harmful devices.

Sincerely,

Michelle Atchison, MD

1717 South University Drive

Fargo, North Dakota 58103

HOUSE BILL 1257
HOUSE JUDICIARY COMMITTEE
MARCH 20, 2013

My name is Taya Patzman and I'm an optometrist and the current President of the ND Optometric Association.

I am here today to urge you to DO NOT PASS HB 1257. Banning the sale of bottle rockets is a public safety issue and helps protect our children and innocent bystanders.

As an optometrist, protecting my patients' eye health and safety is my top priority. Since bottle rockets account for the majority of eye-related injuries involving fireworks, it is imperative that we do not repeal the current ban on the sale of bottle rockets. The problem with the bottle rocket is that it is unpredictable in where it will go once lit. This becomes a public safety issue when the reality is that most of the injuries are to children and innocent bystanders. The eye injuries sustained by bottle rockets are life altering. When a bottle rocket explodes in an eye it results in trauma that causes loss of vision and blindness. When trauma is caused to one eye it can affect the other eye as well causing inflammation and pain. The healthcare costs for this type of injury can be quite significant with treatment over an extended period of time.

My colleague, Dr. Paul Dunderland, reports significant vision loss with 3 patients ages 12-15 due to bottle rocket injuries. These young boys had injuries ranging from light perception, cornea transplant resulting in total blindness, and counting fingers visual acuity with severe photophobia requiring an eye patch. Loss of vision in one eye causes deficits in depth perception and peripheral vision loss. These visual skills are necessary for daily activities, sports, driving, and many careers, such as a pilot, many military careers, anything which requires the use of a microscope, and even a commercial truck driver. When an injury is sustained to a child, it can adversely alter their path in life. To experience these devastating visual effects, simply wear an eye patch for an hour and try

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to perform everyday tasks. You will find how challenging it is to pour a cup of coffee, pick up a pen, or even more daunting, driving a car or playing a sport.

According to the CDC, “Patients who sustained eye injuries resulting from bottle rockets reported that the 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).

Injuries sustained by bottle rockets are senseless and preventable. You will hear the argument that simple in-expensive safety eyewear is all that is needed. May I remind you that most of the injuries are to children and bystanders? How many times do you see the spectators wearing safety eyewear who are not involved with the lighting of the fireworks? ND has already banned fireworks such as M80's due to disfiguring injuries such as loss of fingers. This seems sensible so why wouldn't we ban bottle rockets? I would trade any finger on my hands for an eye. I feel vision is the most important of our senses and I couldn't imagine being without an eye.

Banning the sale of Bottle Rockets is not taking away your right to shoot fireworks. It is simply banning the sale of the most dangerous, in-expensive and accessible firework that causes the most life-altering injuries. Please be responsible and do the right thing.

Thank you for your consideration of a DO NOT PASS on HB 1257. I would hate for my next bottle rocket injury to treat be your child, friend, or neighbor.

I would be happy to answer any questions you may have.

NDNPA

**North Dakota
Nurse Practitioner Association**

March 20th, 2013

Chairman Hogue and committee members:

The North Dakota Nurse Practitioner Organization is offering written testimony against HB 1257. We do not support allowing the sale or distribution of skyrockets or bottle rockets. These rockets fly erratically and are well known to be common offenders in firework related injury to both the individual lighting the firework and innocent bystanders. Every year in the United States many children have eye and bodily injuries from bottle rockets.

We ask you to vote no on HB 1257.

Cheryl Rising, FNP legislative Representative NDNPA

cdrising@earthlink.net

701-527-2583

Billie Madler, FNP, DNP President of the NDNPA

bmadler@umary.edu

701-400-4693

March 20, 2013

Thank you for taking the time and allowing me the opportunity to come before you today. My name is Bernie Sinner. I am a North Dakota native and have lived in Casselton with my wife Bonnie for the past 24 years where we are raising our two sons, now 19 and 21 years old. Bonnie and I have made a lifestyle of enjoying the wide open spaces of North Dakota...riding horses across many acres of public and private land, hunting birds and big game throughout our great State and celebrating a good number of holidays and festivals with picnics and outdoor grilling. We have enjoyed many 4th of July picnics at home in our rural setting usually capped off with a low budget, but memorable fireworks display. We appreciate the great deal of freedom we have in our country and appreciate a government that supports that freedom, rather than stifle it.

I want to share a specific summer day that brings up an issue of social responsibility that is being confused with restricting individual rights. On August 22nd, 2008, Bonnie and I were relaxing on our deck after enjoying a meal on the grill. It was a beautiful Friday night – our boys had just started football practice and we were quite excited about the upcoming season. The senior class (including our son Beau) was on a roll, having just won the State Legion Baseball title a few weeks earlier. Beau was honored with the Legion tournament MVP title and was looking forward to switching gears from baseball pitcher to wide receiver on the football team where he had been starting since his sophomore year. My phone rang at about 8:00pm that Friday...it was Beau. He was at a friend's house where he was hanging out with a bunch of buddies after practice. He told me in a very calm voice that he had been hit in the eye with a firework and was pretty sure he needed to go to the doctor to have it checked out. Someone at the gathering lit a bottle rocket which erratically ricocheted off something and found Beau's right eye. The impact of the little rocket, not the explosion, left little visible mark, but Beau could not see out of the eye.

Bonnie and I took him to a Fargo Hospital emergency room where we were met by the ER staff and Dr who began to examine Beau's right eye. (Beau and I talked about his concern that he may miss the first football game that was only a week away) Those concerns quickly turned to a dull ache in our stomachs. The Dr said the damage was severe and we needed to get Beau to a specialist as soon as possible. The closest would be The U of M medical center in Minneapolis. We jumped in our car and proceeded to Mpls.

When we arrived at the Hospital around 1:30am the surgical team was waiting for us and proceeded to prep Beau for emergency surgery. His cornea had been lacerated and he had no vision in his right eye. There was only speculation about whether or not he would see again out of his eye. By morning we learned that he had about twenty stitches in his cornea, the iris was damaged and the lens and lens sac were destroyed and would need to be removed with another surgery after the eye stabilized in a couple weeks. This meant that his pupil would never dilate properly again, leaving him susceptible to retina damage in normal sunlight. He will either need a cornea transplant or will always be looking through

the scar tissue on his cornea and without a natural lens, his vision would only be able to be improved to 20/60 or so with a corrective specialized contact lens.

In the beginning, our trips to the U of M were frequent to remove stitches and track the healing process. Now it is only once a year or so that we visit the specialists to learn about new ways to improve the vision in that eye. We have spent thousands of out of pocket dollars to adjust, improve and protect Beau's vision. Our insurance company has spent tens of thousands of dollars for the surgeries and procedures. All because of the easy access to a little plug of gun powder on a stick. Nearly all of us have experienced the little thrill of shooting a bottle rocket. They seem so harmless and most of the time they are, but the reality is, they are extremely unpredictable and very volatile. They move with such speed and unpredictability that even the quick reactions of an athlete are no match. Seldom does the person lighting a bottle rocket get hurt, it is the un-expecting by-stander that pays the price.

Fast forward four years....Beau has managed very well with his eye injury. He did not play football again, but he was able to play basketball and baseball his senior year with some restrictions (and a much reduced batting average) He had to wear goggles or protective glasses for all sports and his depth perception and peripheral vision would take a good deal of time to improve. He has learned to adjust as he is now left eye dominate. He learned to shoot his shotgun left handed and has managed to drop a few pheasants in the past 4 years.

This issue is about social responsibility, not personal rights. Please, listen to people that are dealing with the results of the down side of this simple pleasure. It's not worth it. Please say no to bottle rocket sales in North Dakota. It may be your son's or grandson's senior year some day.

Thank you again for your time and the important work you do for our State and it's people.



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Supplemental Testimony in Opposition to HB 1257 North Dakota Society of Eye Physicians and Surgeons North Dakota Medical Association

According to the American Academy of Ophthalmology, fireworks cause .68% of eye injuries.

However, keep the following in mind with regard to that statistic:

- **Fireworks are outlawed** totally in these states: New York, Delaware, Massachusetts, and New Jersey;
- Sparklers are the only fireworks allowed in these states: Illinois, Iowa, Ohio and Vermont;
- **Bottle rockets are only legal in 11 states:** Alabama, Alaska, Arkansas, Indiana, Kentucky, Louisiana, Missouri, Nevada, South Dakota, Tennessee, and Wyoming.
- Fireworks are only legal four to seven days of the year in most states.

Therefore, considering the population of the states that bottle rockets are allowed in, factored by the time limit for when they are permitted, the percentage of eye injuries is substantial.

- According to the Consumer Product Safety Commission, in 2010, **50 percent of all ocular related fireworks injuries, particularly leading to permanent blindness or enucleation, were caused by bottle rockets.** <http://www.cpsc.gov/PageFiles/110031/2010fwreport.pdf>
- Between June 18 and July 18, 2010, there were about 6,300 fireworks-related injuries in the U.S., according to the U.S. Consumer Product Safety Commission (CPSC). An estimated 1,200 injuries were associated with bottle rockets.
- The 2006 U.S. Consumer Product Safety Commission report provides that more than 1,500 eye injuries fireworks-related eye injuries occur each year. Children and youth under age 20 sustain 47 percent of these eye injuries, and males of all ages are three times more likely to be hurt than females. Firecrackers were associated with the greatest number of injuries, the report found. Sparklers accounted for one-third of the injuries to children under five years old. Rockets and bottle rockets were related to more than three-quarters of the most serious injuries. Bystanders are at real risk of injury within 100 feet of fireworks and ideally should be at least 500 feet away.
- **Since the ban in 2009, bottle rocket injuries have been almost non-existent in North Dakota. Fargo and Bismarck report no injuries since the ban.** Attached is an unofficial report of bottle rocket injuries prior to the ban.

Voluntary Fireworks Injury Reports North Dakota Society of Eye Physicians and Surgeons

The North Dakota Society of Eye Physicians and Surgeons annually encourages physicians, clinics and hospitals to complete a report regarding fireworks injuries treated in North Dakota. The reports are voluntary and serve only to provide information on reports received and do not account for additional bottle rocket injuries that occurred. **The prohibition on the sale of bottle rockets began with the 2010 fireworks season.**

2010

18 injury reports received

One was a bottle rocket injury to an eight-year old boy that resulted in corneal abrasion and burns.

2009

14 injury reports received

Five were injuries resulting from bottle rockets (2) or skyrockets (3). Bottle rocket injuries included burns, partial sight loss, abrasions and lacerations.

2008

11 injury reports received

Two resulted in injuries to children caused by bottle rockets; one causing a lacerated cornea and iris to a high school student (bystander) and one causing second degree burns on the hands and two fingers of a thirteen-year old girl.

2007

19 injury reports received

Five were injuries to children caused by bottle rockets (4) and skyrockets (1).