
Strategies of a Successful Campaign to Promote the Use of Equestrian Helmets

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Synopsis

Although the risk of serious head injury for horse riders is higher than for most other sports,

few equestrians regularly wear protective headgear. This study indicates that riders are well informed about the need for helmets and that the main reason for nonuse is inadequate helmet design. In particular, riders perceive that existing helmets are uncomfortable, expensive, and inappropriate for some riding styles.

Based on these findings, the authors developed strategies to increase usage and incorporated them into a successful program. These strategies included working with manufacturers to develop a low-cost, versatile helmet; efficiently distributing educational literature among the horse riding community; and encouraging individual clubs and equestrian organizations to mandate a helmet policy.

THOUGH ACCURATE data are hard to come by, evidence suggests that the risk of fatal injury is higher while riding horses than for most other sports including football, hockey, baseball, and even motor car sports (1). In the United States during 1989-90 (2), 121,274 persons were treated for horseback-related injuries at hospital emergency rooms. Almost 20 percent of these were head or neck injuries (3-5). All riders are at risk for serious head injury, irrespective of their experience or riding practices (2,6,7), and the vast majority of horse-related injuries occur during leisure riding rather than during work or supervised activities (7,8).

Equestrian helmets have been available for more than 50 years. However, despite the risk of serious head injury (2,6,7) and the demonstrated effectiveness of protective helmets in other sports, their rate of use among equestrians remains low. While several studies have identified the characteristics of helmet users and nonusers (1-7), the question of why riders do or do not wear protective headgear

has not been, to our knowledge, previously addressed.

We present the results from two surveys used to ascertain equestrian attitudes towards protective headgear and discuss the implications of our findings for the development of effective programs aimed at increasing equestrians' use of helmets. The first, a written survey, was conducted in three counties in Washington State; the second was a series of focus group interviews. We further describe the mechanics of, and lessons learned from, a pilot campaign promoting equestrian helmets carried out in the State of Washington.

Survey of Riders

Preliminary discussions with several groups of horseback riders indicated that the principal reason for not wearing helmets was that they were perceived to be uncomfortable. This perception has widespread implications for an equestrian helmet program. If riders did not wear helmets because of

Table 1. Frequency of equestrian helmet use by riders' demographic characteristics

	Number in group	Use rate (percent)		
		Every time	Usually or sometimes	Rarely or never
Riding style:				
English.....	222	35	38	28
Western.....	288	12	22	66
Trail.....	258	16	21	63
Other ¹	69
Sex:				
Male.....	94	19	19	62
Female.....	743	20	27	53
Age (years):				
Less than 10.....	155	35	22	43
11-19.....	461	18	28	54
Adult.....	221	13	21	67
Location:				
Rural.....	508	14	26	60
Urban.....	329	24	26	50

¹ Includes bareback riders and those who ride a combination of western, English, and trail.

specific design problems, an educational program alone could not be expected to increase use.

To test and expand these preliminary observations, a written survey was conducted in three Washington counties. The study was club based (individual 4-H clubs, King County Executive Horse Council, Back Country Horseman, and selected horse barns). All members of these riding clubs completed a questionnaire. This sampling method minimized the selective bias of respondents apparent in previous equestrian injury (6) studies based on voluntary responses.

The riding clubs and organizations selected were the largest in the three counties which do not have a policy requiring riders to wear helmets. (The U.S. Pony Club is the only major organization in Washington State with a helmet ride policy.) The survey sample consisted of 837 respondents, of whom 60 percent were from urban areas and 40 percent, from rural areas. Characteristic of the sport, 11 percent of the sample were male and 89 percent female. Eighteen percent were 5-10-year-olds; 38 percent, 11-14-year-olds; 18 percent, 15-20-year-olds; and 27 percent, adults (21 years old or older).

Categorized according to riding style, 34 percent rode English style—in which a velvet domed helmet is traditional—22 percent were trail riders and 44 percent, western riders. For practical purposes, these latter two categories can be combined since many riders participated in both; a brimmed hat or Stetson is considered appropriate headgear.

The results of the survey showed that only 20 percent of riders wore helmets every time they rode, and 40 percent never wore an equestrian helmet. Helmet use was strongly dependent on riding style (table 1), with smaller percentages of western and trail riders wearing protective headgear than their English riding style counterparts. The widely available English dome helmet is viewed as inappropriate riding attire for western and trail riding. The survey also indicated that there was no significant difference in helmet use by region or sex of the respondent; however, usage did decrease with increasing age.

The reported attitudes of riders toward helmet use are summarized in table 2. Most riders recognized the safety aspects associated with helmet use, and riders who frequently wore helmets felt safer when they rode. However, nearly all riders had strong negative attitudes about protective headgear. The dominant issue for most riders was not safety but the design of existing helmets. Approximately one-half the respondents indicated helmets were uncomfortable to wear, and the same percentage indicated that they were too hot. More than a third also felt helmets looked silly. These attitudes were consistent across all riding styles, as shown in table 2.

Peer group pressure was also a significant factor in limiting helmet use in the 14-17-year group. In this group more than twice the average percentage indicated that they "did not want to wear a helmet" and that they "looked silly in a helmet."

More than half the respondents (448 riders) rarely or never wore a helmet, even though more than one-third of these riders indicated they would feel safer if they did. Many riders perceived that they were not at risk because they (a) were experienced riders, (b) had a quiet horse, or (c) usually rode on flat ground at a moderate pace. Of those who did not wear a helmet, the main reasons given were that they (a) did not consider it (55 percent, 245 riders), (b) had not recognized a need (14 percent, 60 riders), (c) peer pressure (12 percent, 54 riders), and (d) discomfort of helmets (50 percent, 223 riders).

Focus Groups

To clarify several points of interest arising from the survey, six focus group interviews were conducted with riders from three clubs. There were 14 persons in each group. Three of the groups had children less than 14 years and three groups, youngsters ages 14-17 years. The groups were separated by age to reduce the impact of peer

pressure and any intimidation felt by younger participants. Furthermore, the written survey indicated that there were significant differences in the attitudes of the two groups toward helmet use. The interview techniques used during these sessions were orchestrated in an attempt to minimize biases, which can easily arise in focus group situations.

The interview sessions were approximately 1 hour in length. Participants were not informed of the questions before the interview or even told the general topic for discussion. Each focus group was totally independent of the others. The four general questions for discussion were (a) What do your friends think about equestrian helmets? (b) Do you feel safer when you wear a helmet? (c) How much do you think a helmet should cost? and (d) If you were to design a helmet, what features would you include?

Riders were clearly concerned with the image they presented to bystanders and fellow riders. They felt that they looked "silly" in a helmet (due, in part, to the bulky style of the helmet) and that protective headgear was a sign of an inexperienced rider. Many riders in the 14–17-year-old group felt that "equestrian helmets were just for kids." It is interesting to note that many of the respondents were content to wear a bicycle helmet when cycling, the determining factor being that "every one wears one."

Safety was a significant issue for most riders. All respondents recognized that helmets could prevent head injuries and felt safer when they wore a helmet. Younger riders felt that inexperience placed them at greater risk of an injury, and they tended to wear a helmet at all times. The older, rather than the younger, age group often equated risk with the particular horse they were riding. Generally, the latter group wore protective headgear only when riding a strange or young horse, or when they perceived they were riding in a dangerous situation.

Cost is a determining factor in the purchase of a helmet. The majority of participants felt that available ASTM-approved helmets were too expensive at \$70–\$130, particularly when compared with bicycle helmets priced at \$30–\$60. (ASTM—American Society for Testing Materials—publishes a standard which requires helmets to withstand certain pressures and impacts.) This cost factor was magnified given that an equestrian helmet is tightly fitted to the head and does not use adjustable sizing pads such as those found in bicycle helmets. Thus, a helmet is required for each family member and young riders outgrow them.

Participants in both age groups were unanimous

Table 2. Attitudes towards equestrian helmets among 837 horseback riders

Rider attitudes	Sample population		Riding style (percent)		
	Number	Average percent	Western	English	Trail
Feel safer if wearing a helmet	466	56	48	72	51
Reasons for not wearing a helmet:					
I don't need to wear ¹ ...	76	9	12	8	11
I don't want to wear	248	30	34	24	29
I don't think of wearing .	287	34	42	20	44
Peer pressure.....	82	10	12	7	13
Helmets are:					
Uncomfortable	396	47	47	50	50
Hot	395	47	47	54	44
Heavy.....	204	24	22	29	25
Look silly.....	298	36	37	35	30

¹ Respondents either thought they rode safely or had a quiet horse.

in the features that they would like to see included in an equestrian helmet. The most important was comfort. Current helmet designs were perceived as being hot, heavy, and uncomfortable. A more streamlined profile was also a concern; the current ASTM-approved helmet is bulky. Versatility in terms of a series of interchangeable covers (colored lycra, Stetson, and velvet) was also seen as desirable. Versatile helmets would ensure that riders from all disciplines would have access to appropriately styled headgear and that the cover could be laundered.

Description of the Program

It was apparent from the surveys that an equestrian helmet program would need to differ significantly from a previous successful bicycle helmet program conducted by the Harberview Injury Prevention and Research Center (HIPRC) (9). Research in the bicycle market indicated that the majority of riders "were not aware of the need to wear protective headgear" (10). Conversely, most equestrians were aware of the need for protective helmets, and low use was associated with strong negative attitudes toward the existing product. Thus an equestrian helmet program would need to provide new helmet styles and inform riders of the improvements, as well as persuade riders that the actual risk level was higher than their perceived risk level.

The cost of developing and maintaining a helmet promotion program was also a concern. As equestrians tend to be scattered throughout the commu-

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nity, the more traditional methods of mass media and school-based programs, coupled with the assistance of health professionals, would have been inefficient. To reach a significant proportion of riders with limited resources, the program would best seem to be targeted (a) at riding clubs (4-H, U.S. Pony Club, trail riding clubs, riding stables); (b) major equestrian events (county fairs and horse shows); and (c) equestrian-related commercial outlets.

The main goal of the HIPRC Program in the three counties was to increase helmet use among children and young adults. The specific objectives were to educate parents and other members of the horse riding fraternity about the need for equestrian helmets, to develop and provide suitable educational materials for equestrian clubs, and to provide manufacturers with information which would lead to improved helmet design. The program was based on social learning principles, rather than the more traditional approach of health education (11,12). In particular, strategies were developed to increase rider awareness, to improve public and organization awareness, to encourage organizations to mandate helmet use, and to provide assistance during the helmet purchase decision.

Individual awareness. The objective during this phase of the program was to educate young equestrians and their parents on the need for protective headgear by increasing their perceived personal risk level. It was emphasized that protective headgear is an integral part of the sport, and that the concept of a safe horse or superior riding expertise is a misnomer.

To increase the level of perceived personal risk, the mass media in the three counties featured "victim stories" of local riders who had suffered a severe head injury. These included information on protective headgear and the HIPRC Program.

A speakers bureau was formed to present information and demonstrate ASTM-approved safety helmets at meetings of individual riding clubs and local horse shows. Bureau members also wrote articles for association and club newsletters and assisted in distributing a pamphlet—"Do I Need to Wear an Equestrian Helmet?"

Giving helmet discount price coupons to parents of young riders was a personal approach which helped bring many new clubs into the program. Individual riders were also extremely receptive to learning safer riding practices and welcomed the opportunity to discuss possible improvements in helmet design.

Other centers such as horse barns, riding schools, and disabled riding clubs were targeted through a mail campaign. This campaign included an information package containing a club guide, "Equestrian Safety—A Project for Riding Clubs," and flyers for display, "Can You Reduce the Riding Risk?" and "Equestrian Injuries—the Facts." Each rider also received "Do I Need to Wear an Equestrian Helmet" and a helmet discount price coupon.

Organization awareness. Our objective was to educate equestrian organizations on the need for protective headgear and create a positive environment for widespread adoption of equestrian helmets. The program coordinator addressed meetings of leaders of Washington State 4-H Clubs, Washington State American Horse Show Association, U.S. Pony Club, and the Combined Training Association. The 4-H, through its parent body, the U.S. Department of Agriculture, officially adopted the program and elected to print and distribute the club guide and other educational material to their members in Washington State.

A traditionally contentious issue with equestrian organizations has been the mandating of protective headgear. Helmets are presently required by the U.S. Pony Club, Combined Training Association, and the American Horse Show Association for junior competitors and jumping events. This requirement is reported to have contributed to a 20 percent decrease in injuries at such events during the past 10 years (2).

Philosophical arguments exist for both sides of this debate. However, given that 62 percent of injuries occur around the home or farm (2) where enforcement is impractical, one must question whether a mandatory policy would significantly reduce the number of injuries. On the other hand, if all riders participating in organized events were

required to wear protective headgear, helmet ownership would increase, perhaps leading to improved home use. Furthermore, riders who wear protective headgear at organized events would no longer fear being ostracized as a minority. More popular riders would also serve as role models for their peers and young riders. (While the HIPRC Program could not insist on a helmet rule, more than 20 percent of riding clubs in King County voluntarily introduced such a policy.)

The purchase decision. The objective during this phase was to make the rider's purchase decision easier. This decision involved providing adequate point of sale information, individual discount coupons, bulk purchasing discounts, and perhaps most importantly, persuading companies to improve helmet design.

There were a number of important issues that needed to be addressed at the point of sale. Several recent changes in the requirements for protective headgear at organized equestrian events had confused both retailers and riders. In particular, many were unaware of recent developments in helmet design and the new ASTM test standard. They also did not know the correct procedure for fitting a helmet. To clarify these points, HIPRC produced and distributed to tack shops a flyer, "Equestrian Helmets—What Do I Need to Know?" and "Do I Need to Wear an Equestrian Helmet?"

Measures were also taken to address concerns about the high cost of helmets. A purchase incentive (9) in the form of a \$10 discount coupon was developed in conjunction with a major helmet manufacturer, Lexington Safety Products. A separate bulk discount purchase program was run for 2 months with 4-H clubs in the Yakima, King, and Snohomish Counties in Washington State. As part of the program, members of 4-H clubs could order new style light weight, ventilated helmets from Vision International at \$32—a 54 percent discount on the \$70 suggested retail price.

To address the issue of poor product performance, HIPRC used the results of the attitude survey to encourage interested national manufacturers to redesign their helmets. The resulting new style of helmet will be considerably less expensive, better ventilated, lighter weight, and fit a range of head sizes—with fitting pads similar to bicycle helmets. They will also be more versatile, providing an optional point-of-chin or under-chin quick release fastening mechanism and a variety of interchangeable covers including lycra, velvet, or Stetson. (Manufacturers indicated that this new

generation of helmets would be available at retail outlets in 1993.) It will be interesting to monitor the response among equestrians, particularly since it has been designed according to riders' perceptions of the "ideal helmet."

Cost effectiveness of the program. The equestrian helmet program was developed on an extremely modest budget. A coordinator devoted 10 hours per week for 12 months, at a total cost of \$6,000, to designing educational literature and the discount purchase program, organizing media support, and working with riding clubs and manufacturers to improve helmet design.

Donated materials and services played an important role in maintaining the program budget. At present the equestrian program is working towards becoming self-funding, with a consortium of manufacturers, riding clubs, insurance agents, and other interested groups donating monies and services.

Program Results

The success achieved in the first year of this program was made possible by the inherent interest of riders towards improving riding safety. Clubs were, in general, eager to be involved in the program, and they encouraged their members to participate. While discussion on a helmet-ride policy for organized events was sometimes heated, there was a feeling that, with improvements in rider education and rising insurance costs, its outcome was inevitable. Furthermore, the public's widespread acceptance of the bicycle helmet may have indirectly aided the progress of the equestrian program.

The club discount purchase program achieved a high level of interest. In the urban region of King County, 24 clubs, with a total of 420 club members, purchased 385 discount priced helmets. The purchase response of 92 percent was outstanding, particularly since some club members already owned a helmet and others subsequently purchased a helmet outside of the program. (The helmets were purchased by individual club members. The club did not require its members to purchase or wear a helmet.)

In the rural area of Yakima County, 10 clubs participated with a 69 percent purchase response, while in Snohomish County, 17 clubs contributed to a 51 percent purchase response. The lower response in rural areas can be attributed to traditionally lower use and the higher representation of trail and western riders who prefer brimmed head-

gear. The total number of helmets distributed through the bulk purchase discount program was 778. This success has encouraged other manufacturers to plan similar promotions.

Response to the discount purchase coupon program was also encouraging with 15 percent of coupons returned during the 2-month period. This return is considered a high percentage for the product promotion industry and is higher than that for similar bicycle helmet discount coupon programs (9).

Evaluating behavior change is always difficult, and this program is no exception. The program has monitored the number of helmets sold and recorded very favorable increases in the target areas. As more organized events introduce a helmet-ride policy, sales figures should continue to increase.

This increase does not necessarily imply, however, that riders are wearing protective headgear when riding in informal situations, particularly around the home. Given that a home observation survey is impractical, the program must gauge long-term behavioral change through the use of an ongoing club-based survey addressing the issues of helmet use and safe riding practices. Clearly the ultimate measure of any behavioral change must be a reduction in the incidence of serious equestrian injuries.

Discussion

Several conclusions can be drawn from the equestrian helmet program. One of the most important is that while safety education was an important component, changing the cost and style of the safety helmet was imperative to the program's success. Manufacturers had failed to recognize the inherent problems in existing protective headgear and, thus, had not adapted their product to better suit rider needs. By using an attitudinal survey, HIPRC was able to convince manufacturers that by re-styling their helmet and reducing the price, they could increase sales and profits.

An important component of any future program must be to overcome the existing negative perceptions of riders. To significantly increase helmet use, equestrians must realize that there are products available which are comfortable and cool to wear.

Another important implication for future programs is that although most equestrians are aware of the need for protective headgear, many perceive that they are not at risk. Thus, an important criteria of any program must be to alter a rider's

risk perception through education and human interest stories.

As in other safety education programs (9,13), the success of the equestrian program also can be attributed to its tight focus and selective use of the mass media. The program used existing equestrian information networks. Articles were printed in their newsletters and magazines, displays were taken to equestrian events, and speakers contributed at club and organization annual meetings. A useful factor was that the program coordinator was an experienced rider familiar with equestrian jargon. This allowed development of rapport, which helped counteract some of the strong negative perceptions of riders and organizations toward helmet use.

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