Hot Air or Safety?
by Kathy Barker, Chair, USPC Safety Committee

There has been so much written in equestrian articles, advertising, and endorsements from those in the Eventing world regarding the use of “Air Vest.” This makes it important to discuss them as safety “tools.” Air vests are exactly that, tools, and as such should be viewed as a rider’s choice, and given very serious thought. Likewise, there are other tools that should be discussed, all of which contribute to rider safety.

Let’s start with some basic guidelines for thinking about all of the “tools” available to us as participants in horse sports. First, safety of a horse and rider begins with the human connection and partnership between rider and horse. It is the human component that first must be engaged. This means you—as the human—must consider what could happen; make adjustments to keep your horse and yourself safe. Ask yourself, “What are the conditions to be faced, what equipment is needed, what is the condition of my equipment, and is it the proper equipment for what I am about to undertake?” Then, before getting on, ask yourself, “Am I really focused on what my horse and I are about to do?” Behavior is the most important component to safety of the horse and rider.

Now, with that considered, let’s talk about equipment

From the top down:

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Without a doubt, the most important item to have for equestrian sports is a good helmet, properly fitted, that is in perfect condition. It must be an equestrian helmet, approved by a national or international sanctioning safety body. ATSM, CE, NZ/ A, ISO, etc., are some of the acceptable testing organizations. Fit and condition are the most important for a helmet. Certainly there are multiple manufacturers to choose from in a variety of price ranges. But, like everything else, the least expensive or most expensive should not be the only consideration.

After all, a difference of $100 to $150 is a lot less expensive than one trip to the emergency room or a lifetime of being crippled. When buying a helmet—or any other protective equipment—the most important thing you can do is your own research. The next is to go to a good, well versed, outfitter, a vendor who can actually properly fit a helmet and provide a Socratic method of selling you the product. Only the FACTS, ma’am.

Foam vests are the second focus of this article. Foam vests carry three (3) (yes, I said 3) different levels of protection. Each level is tested for a degree of penetration prevention and is certified by a safety sanctioning body. Pony Club will create no hindrance to any member’s decision to wear mouth guards in any activity or discipline.

A Safety Message from Tom Adams, USPC President:

The National Youth Sports Foundation for the Prevention of Athletic Injuries, Inc. reports a very interesting statistic. Dental injuries are the most common type of head injury sustained during sports participation.

According to the American Dental Association, more than 200,000 of these mouth injuries incurred in this country can be prevented by wearing sports mouth guards.

Pony Club does not mandate the use or non-use of mouth guards and believes that their use is a personal decision to be made by members, their families and the professionals who advise them.

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Level 1 vests—usually something such as those commonly used by eventers—is the least protective. Level 1 is in most cases the most flexible and lightest in weight and least bulky. Level 2 provides a higher level of protection, is slightly more bulky—but after being worn for a while, breaks in nicely and is comfortable to wear and provides a better level of protection. Level 3 clearly provides the highest level of protection. It is heavier than both the level 1 and level 2 vests, however; it also provides the highest level of protection. It initially feels restrictive but after it is on for a couple of minutes, it too, conforms very nicely, is not terribly restrictive and is reasonably comfortable. As an aside, as a young person I played fast pitch softball and was a hind catcher. I remember well wearing the chest protector, facemask, and shin guards, in literally 100 degree heat and southern humidity, so I understand discomfort and the need to be able to move, and I can tell you the level 3 vest is not that bad to wear for competition considering the level of protection it offers. My catcher’s equipment saved me more than once; these vests for horse sports are equally important.

**Air Vests—Not Just Hot Air!**

Air Vests are not just hot air… air vests, like the safety equipment discussed above, are a TOOL. Like all safety equipment available, the air vest is one more tool in the box to help keep the equestrian athlete safe. Much like air bags in automobiles, air vests may help mitigate damage from an impact. Originally developed for the motorcycle industry, Air Vests have been well researched in other markets. There are claims of them being life saving and they may very well be. However, like anything else, they must only be considered a tool, just like the helmet and the foam vest. The important thing in considering an air vest, again, is the research that you do before considering its purchase. Know clearly what you want to accomplish and what you hope to achieve by purchasing one and what the different types of air vest offer in terms of their deployment types. The strategies for deployment of the air vests are different. There are 3 air vest types marketed in the United States to date. Only two have been advertised and fairly extensively used. They are Hit Air and Point Two. As I am somewhat familiar with these two manufacturers, those will be the ones presented. Both Hit Air and Point Two came from a significant history of being developed, tested, and used in the motorcycle racing industry. Both have been internationally tested and now introduced for use in horse sports.

**Deployment Strategy**

**Hit Air:** Deployment of the Hit Air occurs with the air bags deploying outward (away from the body). The Hit Air vest looks a lot like a high-end water vest you see the Coast Guard swimmers use. It has a neck roll and tail flap that opens and is activated upon deployment to protect the neck and base of the head and tailbone, as well as the ribs, and back. The Hit Air vests are fitted with a little closer fit, a more “forgiving” fit, and are light weight. They must be worn over a foam vest. Deployment is accomplished with a lanyard that attaches to the stirrup bars and then to the jacket. Vests may be deployed multiple times, but air canisters need to be replaced with each deployment. Once again, proper fit is essential and should be done by a professional knowledgeable in the use of the air vest.

**Point Two:** Deployment of the Point Two is inward (towards the body). This vest must be fitted very loosely. When the air bags in this vest are deployed, the bags blow up towards the body rather than away from it. Like the other air vest, this vest is designed to protect the neck and comes down further on the tailbone area, protecting the ribs and back. It is fitted more like the Level 1 foam vest. The neck area is raised more and the fit comes closer to the base of the neck at the back of the head. Likewise, it extends further down on the tailbone area. Attachment again is to the stirrup bars and can be deployed multiple times. Like the Hit Air vest, each time the vest is deployed a new CO2 canister is required. Once again, and especially with the Point Two vest, a professional fitter is essential.

**When this vest [Point Two] is deployed, if it is not properly fitted, it has been demonstrated to restrict the person’s ability to breathe. Proper fit is of extreme importance.**

In closing, the single most important safety equipment for you and your horse is you. How you think and your behavior are the greatest determining factors for safety. We can get all of the safety equipment the world has to offer, but at the end of the ride, your life and your horse’s safety is dependent upon how you think and how you behave. Good luck; may all rides be happy and SAFE!

On a final note… there are more disciplines in equestrian sports that are currently using air vests; barrel racing is one. Dressage, thank goodness, is now using helmets. Again, your safety depends on your behavior and how you view and think about things.