



Pole Vault Safety – Our #1 Concern at VaultMonster.com

Pole Vault Injuries and the Three Ways to Stop them from Happening:

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The pole vault has come a long way since the days of bamboo poles and landing on dirt or sawdust. We have made great strides with the improvement and move to thicker and larger Foam Landing Systems. It is much safer to land from higher heights today, minimizing the risks of a landing injury.

However, the technology advancements of the fiberglass and carbon pole have made the potential for Injury to actually greatly increase over time. The modern pole vault has added the complexity of proper technique and pole selection needed in the modern Vault. Now the use of the wrong pole, poor technique, or poor coaching/guidance could lead to serious injuries. And unfortunately it often does.

As a young vaulter at Michigan State University in 1984, at a meet at the University of Illinois I had a first hand eye witness of the effects of improper technique and coaching resulting in serious injury. A vaulter from the University of Michigan was attempting his final jump at 16 feet. During his first two attempts – the vaulter was not getting his plant up – landing at the very right edge of the landing system behind the standards. The others watching including myself were very concerned about his well being. His final jump – as all the other athletes were expecting – his plant did not improve and ended with a worse result. This time he went to the right, missed the pit, came down on his shoulder and his head hit the cement. The young man went into convulsions and the paramedics were summoned immediately. They got him to the hospital and he ended up suffering from a serious concussion and a dislocated shoulder. I don't think he ever vaulted again.

That injury to the vaulter from Michigan did not have to happen. His coach could have corrected the problem in practice or on his previous jumps. Or and more importantly - If an official or coach had the courage to say "STOP", there would have been no concussion, no dislocated shoulder and no ending of a vaulting career.

Here are some statistics on Vault Injuries and how they happen::

Vaulting Injuries since 1971

1. 45 catastrophic injuries reported (25 life threatening and 20 fatal) since 1971

- type of injury
 - 43 head injuries (all fatalities resulted from head injuries)
 - 2 spinal cord injuries
- landing location
 - 18 off the back (10 deaths)
 - 10 off the side (5 deaths)
 - 13 in the box (4 deaths)
 - 2 in the pit (0 deaths)
 - 2 unknown (1 death)

2. Non-catastrophic injuries

(data from survey of 230 pole vaulters at the Pole Vault Summit in 2000)

- ankle sprains were the most common injury reported in the survey
- feet first landings in the pit were the most common cause of this injury
- landings off of the pit were the cause of the most severe injuries reported in the survey

There are Three ways to Stop these type of Injuries from Happening:

1. The Use of Proper Equipment and Safe Area

The use of the correct size Landing System, Pole Selection and having a Safe Vault Area are all critical to insure the safety of our Vaulters.

There are very specific rules and regulations for Landing Systems today for High Schools and Colleges. Make sure your school or training facility is within those regulations. Old or Torn pads or covers can be an area where potential accidents and injuries can happen. Be on the look out for old Landing Systems where the foam is eroding – or are “bottoming out”. Landing Systems useful life can be 20 plus years if taken care of and stored in a climate controlled environment or 2-5 years if stored outside. If you are unsure of your Landing Systems safety, get it checked out.

Pole Selection is often a problem specifically with Jr. High and High School Vaulters. The use of a pole that is too soft or too long is more common than any. We need to make sure we are using poles that are rated at or above our body

weights. Then we need to determine if the vaulter needs to use a stiffer pole. The body weight measurement on a pole is based on an average speed and strength of a vaulter with average technique. The faster the speed the stronger the athlete and the better technique – will result in needed a stiffer pole. A simple hard and fast rule that I use: When the bend of the pole is going past 90 degrees – its time to move to a stiffer pole.

Using too long of a pole and holding too high is another area that is often misguided. Put a soft pole and a vaulter holding too high, then we have a recipe for disaster. Work with a Certified Pole Vault Safety instructor to help you decide on what pole is best for you.

The Vaulting Area around the Landing System must be free and clear of any object that could cause injury if a Vault goes awry. Be on the look out for objects around the Landing Systems area that could be of potential danger. I have personally seen bleachers, extra standards, cement blocks, tires, lawn mowers, rocks(to hold the standards down), and wooden pallets around the Vaulting Area. All of those items were potential hazards and needed to be removed from the area. A general rule is – if any object is within 25 Feet from the vaulting box itself – it needs to be removed. If you cant remove the object (Bleachers, Building Walls, etc) then they need to be covered by 2” of foam padding – and no sharp corners. Again, if you are not sure – get it checked out.

2. Proper Coaching on Form and Technique

The USA Today came out with an article a few years back. They had a list of the top ten toughest things to do in sports. The most difficult thing to do in sports was to hit a curve ball from a major league pitcher. The second most difficult thing to do in sports was Pole Vault.

Proper Coaching is the number one factor in insuring the safety and success of a vaulter. A trained coach can point out potential problems before they happen – by helping with proper pole selection and to teach or change technique when needed. Make sure your vaulters are working with a coach who has experience in training the pole vault and is Safety Certified.

3. Know when to say STOP!

There are many areas of instruction in the vault. The pole carry, the run, the plant, the take off, the swing, the rock back, the extension, the pull/turn and the fly away. The vaulter needs to put all of these together in a vault that last no more than 6 seconds. Every athlete in their careers has had a bad day – from junior high to World Class. When things go awry in the vault enough to be of a safety concern, then its up to the vaulter, the coach and the official to work together to make a decision to STOP.

At practice with a coach, it is easy to reevaluate technique, do some drills to correct the problem or stop and come back another day.

In a meet, where points are at stake and winning is part of job description, the decision to stop sometimes becomes cloudy. The vaulter, the coach and the judge or official have to work together to make a decision based on what is best for the Vaulter. Not the team or the coach.

By using the proper equipment, good coaching and technique as well as knowing when to say STOP, we can insure the safety and success of our sport.

For questions on the safety of your schools Landing Systems, Vaulting Area, Pole Selection or Technique, email us at coach@vaultmonster.com. Please allow us 3-5 days to respond back.

Links:

Pole Vault Safety Certification Board

www.pvscb.com

