

# Why Riders Get Caught in Their Stirrups and Potentially Drug ...And Other Stirrup Considerations©.

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There are five primary reasons riders get caught in their stirrups.

- 1) Stirrups that are too big.
- 2) Stirrups that are too small.

Each of these first two reasons should be addressed when purchasing your stirrups at a tack store. A correct stirrup size should be assessed by a tack shop specialist, the evaluation of a professional horseperson, or through common knowledge of stirrup sizes and fitting known throughout the industry.

- 3) Improper footwear. It is the standard of the industry that proper riding footwear must have a heel to prevent the foot from passing through the stirrup.
- 4) The main reason for a rider to become hung up in the irons is due to the 'closing door effect' of a lost stirrup trying to return to lay flat against the side of the horse. When the rider falls and the stirrup is free, it tends to return to its home position flat against the horse's side. As the stirrup returns to the horse, the opening for the foot gets smaller and smaller and can catch a falling rider's boot in that increasingly smaller opening. Imagine reaching into a refrigerator and the door is continually trying to close on your hand.
- 5) Bad luck. No stirrup can 100% guarantee that you will not be caught during a fall.

Stirrups that address safety concerns are products that may reduce the chance of getting caught or stirrups that have a mechanism that may release once the foot is actually caught. Overall, it is preferable to 'not be caught in the first place'. With this in mind, any stirrup that tends to stay open when at the horse's side will decrease the chances of getting caught in a lost iron as the 'tendency' of the lost iron to return to its natural position flat against the horse's side is reduced. It is better to avoid being caught in a lost stirrup than to be dragged down the arena by your foot waiting for a mechanism to release.



Any stirrup whose opening for the stirrup leather is *pre-positioned* to face the front of the horse when the stirrup is hanging normally will give added protection against being caught by



the foot. Stirrups that tend to face forward address the core issue of a rider being caught as their design overcomes the built in tendency of standard riding stirrups.



Examples of Forward Facing Stirrups™.

Stirrups with a side ‘release mechanism’ and a standard leather opening do not address this ‘core issue’ as those stirrups still retain the tendency to trap the rider’s foot. Once the rider’s foot is caught, these stirrups provide a chance for release with the opening of their mechanism. This is a secondary safety feature that occurs only after the rider is caught and potentially drug. Consider these designs as ‘catch and release’.



A most interesting discussion involves the popular ‘Peacock Stirrup’. This design has been considered the standard of the industry for a safety stirrup, but still does not overcome the primary tendency of a lost stirrup to turn back to the horse. The ‘Peacock Stirrup’ still retains this dangerous tendency. Further, its open ‘hook’ design presents additional safety concerns. Only after the falling rider is actually caught in the ‘Peacock Stirrup’ does the concept of safety come into play. Once caught, the weight of the dragged rider is applied to the side mounted rubber band and hopefully, that weight releases the rubber band and the rider. Should the release not occur, the potential for the rider to be drug is still retained by this ‘safety design’. This hardly seems safe. There are reports of the ‘Peacock Stirrup’ not releasing. Further, falling riders have been caught by the protrusion of the open edge of the stirrup during a fall and when dismounting. The resultant exposed ‘open hook’ can catch a rider’s pants, belt, clothing or helmet strap. Some riders have even suffered severe injury caused by the open hook ripping through their clothing and lacerating the abdomen or groin.



Other safety considerations include a discussion of stirrup weight, stirrup design, tread design and leather characteristics.

Stirrups with some residual weight tend to hang ‘true’ and are more easily retrievable. Stirrups made with lighter materials, such as aluminum, plastic and composites are more difficult to retrieve and are inclined to move in an unpredictable manner when lost. In the heat of training or an intense competition, not being able to retrieve one’s stirrups can be the difference between winning and losing, safety or injury.

In his book *“Riding and Jumping”*, Bill Steinkraus, America’s first Gold Medal Olympic Rider in Show Jumping states:

**“A reasonable wide and reasonably heavy iron will be far more easily recovered in emergencies – and this is exactly when a second or two saved may prove quite crucial in the show ring.”**

In a personal conversation with me, Mr. Steinkraus said “I cannot understand why anyone would want to ride in a light stirrup.”

There are new and creative stirrups being designed with more frequency today than ever before. Unfortunately, most stirrups are designed by engineers and not riders / horsemen. Stirrups traditionally have been designed with an arched, bell shaped upper inside curve. This traditional, wide arch allows for more interior area for the foot to retrieve the stirrup when lost and to escape the stirrup during a fall. It is obvious that stirrups whose top arch is narrower than normal are more likely to catch a rider’s toe or foot during a fall than properly designed stirrups. In the past, stirrups had the same inside width as they had the interior height. I call this a ‘one to one’ relationship. Today, modern stirrups are designed to have a taller vertical opening that they have an interior width.



This taller increased interior area allows for greater safety for both retrieval as well as escape.

Stirrups that have overly aggressive, sharply pointed treads may not release as easily as other rubber, composite or less aggressive metal treads.

Stirrup leathers should also be considered as part of your stirrup safety considerations. Leathers that are overly light and flexible can allow the stirrup to rotate both forward and backward when lost. Leathers with some stiffness and residual tension / memory will tend to retain their shape when lost. Overly flexible leathers compound the inherent issues of lost stirrups and should be avoided.



The foot can be caught in a stirrup in several ways. When a rider falls and the stirrup turns back towards the horse’s side, “the closing door effect’ takes place and the foot is generally caught crossing the foot at an angle with pressure on the outside toe and inside ball of the foot. In another condition, should the foot fall directly away from the stirrup as if a car was backing out of a garage, the toe or upper arch of the foot can become caught at the upper, inside radius of the stirrup. A very rare and dangerous condition can occur when the rider falls to one side of the horse and the ‘opposite side’ stirrup stays with the rider’s foot as they fall. In this example of being caught, a rider’s peril is greatly enhanced due to this unexpected position of the rider and stirrup.

There are two types of falls: **horizontal falls** and **vertical falls**.

In a **horizontal fall**, the rider is thrown from the horse and initially moves away from the horse with either upwards or lateral force. This is the more common type of fall. In a **vertical fall**, the horse's legs go quickly out from under them and the horse falls on its side. Think slipping on wet pavement or other slippery surface. This type of fall greatly increases the rider's chances of being caught under the falling body of the horse. These falls generally happen very quickly leaving little time for the rider to react and try to clear themselves from the falling horse. During this type of fall, as in the case of most falls, it is imperative that the rider gets as far away from the falling horse as possible to prevent further serious injury by the horse rolling over the rider's body. Any tendency of the stirrup to remain on the rider's boot increases the danger of being trapped under the falling horse or being kept from moving away to safety. Stirrups that do not easily release the foot, or stirrups that attach to the boot, increase the danger of the rider being injured.

In conclusion, no stirrup can 100% guarantee that a rider will not be caught and exposed to serious injury or even death. However, understanding the reasons why stirrups catch a rider's foot during a fall, should better educate those seeking improved safety when purchasing stirrups and in evaluating stirrups who claim to have safety features. Stirrup safety is a matter of concern for riders of any age, any level of riding experience and for any riding discipline. Pay attention to your stirrup and leather options to reduce your chances of incurring serious injury or even loss of life.

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