

## **RIDING HELMET LIFESPAN**

Bruce Blake, helmet expert and CEO of Lexington Safety Products, states that the useful life of an ASTM riding helmet should never exceed five years. Studies show that UV light significantly degrades helmet materials, especially after six years.

To expand on this, we provide additional information from an article entitled, A Helmet's Lifespan published in Horse Country Safety Pages (7/4/98), by Dru Malavase. According to this article, ASTM has never added a section on aging to the standard because they could find nothing in the literature that gives any meaningful guidance. According to the article, ASTM has standards for testing aging of various plastics, but they could not find that the role of helmet covers, either permanent or removable, in cutting down UV exposure, had been studied or considered.

The author tells us that heat, cold, ultraviolet light, and the air in your barn can affect plastics used in riding helmets. The article explains that a helmet with a polypropylene liner has a certain amount of recovery from a blow, and can probably withstand being dropped on the tack room floor several times without the weight of a head in it - but no one knows how many times. The heavy fall may still require this helmet to be checked since so much damage is not obvious unless the helmet is taken apart for inspection.

The article explains that one must also consider that the five-year life span starts from the date the helmet is manufactured, not from the date of purchase. ASTM helmets are required to have the manufacturer's name and production date on a permanent label inside. It is important to check this date before purchase, so you do not buy a helmet that has already set on the tack shop shelf for three years, leaving only two years of life span remaining for that helmet.

The article advises that if a helmet has had hard use (during its life span), it will need to be inspected by the manufacturer or destroyed and replaced. Serious damage cannot always be seen or felt. Some of the signs of hard use are the following:

1. Harness pulling loose from helmet
2. Squeeze clips with broken teeth
3. White helmet turning yellow
4. Black velvet helmet turning beige
5. Surface cracks, holes or dents
6. Chunks missing from the liner
7. Liner squashed down in places
8. Shell or liner cracked through

The above list was developed after consultation with helmet manufacturers. It is meant to be meaningful when looking at ultra-lightweight helmets as well as more conventional models.