

## SPRING SURVEYS

Surveys are radiographic examinations (aka x-rays) undertaken to identify the presence of Osteochondritis Dissecans (OCD) and small fragments in bone growth. The 'spring' in the title refers to the time of year the radiographs are performed. Surveys are generally first taken when a horse is between 10 and 12 months old.

During that year of growth since birth, a foal's long bones have been growing and strengthening by the continual laying down of a smooth layer of cartilage on the growth plates, located near the end of the bone. As this flexible cartilage matures, it hardens into bone, adding length.

During this process, if the cartilage surface of the growing bone and the joint fails to develop properly, cartilage can be left at the surface, causing an OCD. The OCD is a split or separation of the cartilage surface that has a flap, loose flake or chip. Usually, the OCD will develop by the time a horse is 9 months old, but surveys are not suggested before horses are 10 months old.

The reason why OCD's exist is ultimately found in the naturally-occurring development of a young horse's bones. Interaction between many different factors can also impact upon the likelihood of their development. These factors include genetic predisposition, growth rates, conformation, diet, activity levels, overall health and bloodstock management.

While OCDs may seem serious, in reality they are a common developmental issue and can usually be managed easily. The seriousness of an OCD depends on its nature, size and location. However, most of them are resolved naturally over time and have no effect on performance or racing potential.

It is important to remember that these flaps and chips are very small, measured in millimeters and usually invisible to the naked eye. Indeed before surveys were performed using radiography, OCDs were not recognized without the presence of clinical signs.

OCD's are most frequently found in the stifle, hock and fetlock, but can occur in all joints. Joint inflammation and various degrees of lameness are the most common clinical signs. Radiographs are used both to identify OCD's before clinical signs occur and to confirm the presence of OCD's if clinical signs present themselves.

Radiographs are taken of the hind legs at the fetlock, hock, and stifle joints and of the front legs at the fetlock and knee. The knee is radiographed while lifted and bent so that the joint is open, increasing the likelihood of any small abnormalities being spotted.



Consistent radiographs are important to guarantee the correct view of all joints. To ensure this, the horse must be standing square, with its weight distributed evenly. Once a foal or yearling is standing in the correct position, a veterinarian and an assistant are able to produce images for each of the standard 36 views easily and quickly.

The veterinarian uses a handheld radiography unit with an assistant holding an imaging plate. This equipment shows the radiograph on a screen within seconds of each radiographic image being taken, giving the veterinarian the ability to make sure that all of the images are perfect before moving onto the next horse. Obvious issues are spotted while on location and all radiographs are inspected in greater detail when the images are reviewed back at the office.

While many OCD's or abnormalities will be resolved over time, in some cases they are arthroscopically removed.

Surveys for every yearling entered for sale at Karaka are supplied to the auction house's repository, and these must be taken within 21 days of the sale date. This repository allows veterinary advisors acting for potential buyers to view a specific horse's radiographs at the sale prior to purchase. By performing Spring Surveys, we are able to see joint abnormalities earlier, preventing possible lameness or discomfort and allowing young stock managers to act accordingly long before the horses are prepared for sale or training.

The abundance of data now available on OCD's has shown that the majority are trivial once removed or healed and will not affect racing performance. With this knowledge, and the help and expertise of a veterinarian, buyers can now look at the overall horse without giving undue importance to OCD's.

