**1. Bacterial and viral infections**

The two most serious diseases that fall into this category are equine influenza (viral) and Strangles (bacterial). The nature of bacteria and viruses means that these diseases are highly contagious and can spread very rapidly between horses. It is therefore essential that they are recognised and treated early. Other infections include pneumonia, herpesvirus,adenovirus and rhinovirus. Foals and young growing animals are very susceptible to infectious respiratory conditions so it is essential to monitor them closely and to contact your vet at the first signs of a problem.

**2. Parasitic infections**

Parasites are organisms that live on or within a host and take nourishment from that host - horses are prone to several parasites, worms being the most common. Lungworm spends part of its lifecycle in the lungs and respiratory tract of horses and ponies causing chronic coughing. About 70% of donkeys in the UK are infected with lungworm but they rarely show any signs of infection. Horses and ponies that graze with donkeys are at particular risk of catching this parasite.

**3. Allergies**

Just as humans can have allergies to pollen and dust resulting in sneezing and breathing problems, horses can too. The term used to describe respiratory allergy in horses is chronic obstructive pulmonary disease (COPD). This describes a condition that is very similar to asthma in humans. It may be triggered by an allergic or irritant reaction to the dust or pollen in hay and straw and results in a narrowing of the airways leading to coughing, loss of performance in competitive animals and, in severe cases, wheezing and breathing difficulties. There is also a related condition called summer pasture-associated obstructive pulmonary disease (SPAOPD) which may be caused by pollen and is seen during the warmer summer months.

**4. Anatomical problems**

Horses can develop physical problems within the structures of the respiratory tract (pharynx, larynx, soft palate, epiglottis, trachea) which can cause partial obstruction of the airways. This can result in abnormal respiratory noises ('whistling' and 'roaring') and impaired breathing. Large breeds (such as warmbloods) are most prone to these problems, especially if doing competitive work, but in most cases they can be corrected by surgery.

**5. Exercise-induced ('bleeder')**

Exercise-induced pulmonary haemorrhage (EIPH) is seen primarily in racehorses but can affect any horse. After strenuous exercise, affected horses will be seen to suffer nosebleeds. It is now known that this bleeding stems from the lungs and is therefore a serious problem. Research continues into the cause of the problem, but it is currently thought to result from the extreme high blood pressures endured by the smallest blood vessels in the lungs during intense exercise.