Virus diseases

Bee viruses are believed to be the cause of colony collapse in most cases of bee disease. AFB and EFB can kill on their own but the other bee diseases debilitate the colony by putting the bees under stress with the viruses finishing them off.
From this is obvious that by controlling the other diseases the effects of the viruses can be prevented or at least moderated.
The following is a list of some of the more common bee virus diseases

Deformed wing virus
It is likely that this virus is associated with Varroa. The mite transmits the virus in the same way as ABPV.
Pupae are infected at the white eye stage usually survive but are born with poorly developed wings and soon die.

Black Queen Cell Virus
This virus is associated with Nosema. It kills brood in queen cells which become very dark in colour. The larval appearance is similar to Sacbrood.

Filamentous Virus
This is associated with Nosema and multiplies in the fat bodies and ovarian tissue of adult workers.
In severely affected bees the haemolymph becomes milky due to the virus particles.
The virus has a peak of infection in May and a trough in September.
No specific signs of the infection have been seen.

Bee Virus Y
This virus is associated with Nosema. It occurs in adult bees in the early summer .
There are no specific signs associated with the virus.

Bee Virus X
This viral disease is associated with Amoeba disease. It is known to shorten the life of the bee and is active in late winter. It is likely to be the cause of colony collapse in bees heavily infected with Amoeba.

Cloudy Wing Virus
This is common in the UK with about 15% of colonies affected. The only signs are a loss of transparency of the wing when heavily infected. It is believed to be spread in the air entering through the trachea. Infected individuals soon die.

Slow Paralysis Virus
Experimental infection causes death in about 12 days. The disease has shown a marked increase in prevalence over the past few years and caused brood and adult disease in association with Varroa