VIRAL HAEMORRHAGIC SEPTICAEMIA

VHS is a systemic infection caused by a rhabdovirus (VHSV; Egtved virus) belonging to the genus, *Novirhabdovirus*, within the family Rhabdoviridae, of various salmonid and several non-salmonid fishes. The virus is endemic in several areas of the Community and it is present as well in United States and Canada.

INFECTIOUS HAEMOPOIETIC NECROSIS

IHN is a systemic infection caused by a rhabdovirus affecting several species of salmonid fish. The virus is endemic in several areas of the Community and it is present as well in Northern America and the Far East.

KOI HERPES VIRUS DISEASE

The aetiological agent is koi herpesvirus (KHV) in the family *Herpesviridae*. KHVD has been mainly recorded in common carp (*Cyprinus carpio carpio*) and koi carp (*Cyprinus carpio koi*). The infection has been confirmed in several European Union members several Asiatic countries USA and South Africa. It is likely that the virus is present in many more countries, but has not yet been identified.

INFECTIOUS SALMON ANAEMIA

Infectious salmon anaemia (ISA) is an infection with the HPR-deleted genotype of the orthomyxovirus ISAV in sea-farmed Atlantic salmon (*Salmo salar*). The virus may induce a systemic and lethal condition characterised by severe anaemia, variable haemorrhages and necrosis in several organs. The disease course is prolonged with low daily mortality (0.05-0.1%), typically only in a few cages, but the cumulative mortality may become very high. ISA has been reported in Norway, Canada, Chile, Faroe Island, The United Kingdom and USA.

INFECTION WITH MARTEILIA REFRINGENS

In Europe marteiliosis is a disease caused by *Marteilia refringens* in the European flat oyster *Ostrea edulis* and the mussels *Mytilus edulis* and *M. galloprovincialis*. Infection is associated with poor condition index, emaciation of the mollusc and consumption of its reserves of energy (glycogen), discoloration of the digestive gland, cessation of growth and mortalities (particularly in oysters). Mortality appears to be related to sporulation of the parasite. Period of infection is confined to spring and summer, when water temperature is greater than 17°C. It has been reported from Croatia, France, Greece, Italy, Morocco, Portugal and Spain.

INFECTION WITH BONAMIA OSTREAE

Bonamiosis is a lethal infection by the protistan parasite *Bonamia ostreae* of the haemocytes of flat oysters. Lesions occur in the connective tissue of the gills, mantle and digestive gland. These intrahaemocytic protists quickly become systemic with overwhelming numbers of parasites coinciding with the death of the oysters. *Bonamia ostreae* may occur throughout the year, but the highest prevalence is usually observed in winter. *Bonamia ostreae* has been reported from France, Ireland, Italy, the Netherlands, Spain, the United Kingdom (excluding Northern Ireland) and the U.S.A. (California, Maine, Washington State).

WHITE SPOT DISEASE

The causative agent is white spot syndrome virus, a double stranded DNA virus recently assigned to its own new genus, *Whispovirus*, in the family *Nimaviridae*. All farmed penaeid shrimp species are highly susceptible to infection, often resulting in high mortality. Clinical signs appear on-farm after 14-40 days of stocking. The characteristic white spots are not always present, particularly in *P. vannamei*. Mortalities may reach 100% within 5 days after the onset of the disease. Survivors may carry the virus for life and may pass the virus to their progeny by vertical transmission.