

Classification

- BVDV is an RNA virus. It is a member of the *Pestivirus* genus, belonging to the family *Flaviviridae* ¹
- Two BVDV genotypes are recognized, based on the nucleotide sequence of the 5'untranslated (UTR) region; BVDV-1 and BVDV-2. BVDV-1 isolates have been grouped into 16 subtypes (a -p) and BVDV-2 has currently been grouped into 3 subtypes (a - c) ²
- BVDV strains can be further divided into distinct biotypes (cytopathic or non-cytopathic) according to their effects on tissue cell culture ¹³
 - cytopathic (cp) biotypes, formed via mutation of non-cytopathic (ncp) biotypes, induce apoptosis in cultured cells
 - Non-cytopathic (ncp) viruses can induce persistent infection in cells and have an intact NS2/3 protein. In cp viruses the NS2/3 protein is either cleaved to NS2 and NS3 or there is a duplication of viral RNA containing an additional NS3 region.
- Recently a new strain (BVDV 3, HoBi-like or atypical pestivirus) has been isolated from FBS from Brazil and is causing concern. It is currently thought that this strain is a problem across Brazil. ³

