- 4. Positive sense ssRNA (retro-) viruses use viral RNA-dependent DNA polymerase to produce dsDNA, which is incorporated into the host cell genome by viral integrase. It is then transcribed by host DNA-dependent RNA polymerase to produce mRNA.
- Viral genome replication can occur as follows:
- 1. DNA viruses use host DNA-dependent DNA polymerase to replicate their genome.
- 2. Positive sense ssRNA viruses use virally coded RNA-dependent RNA polymerase to produce negative sense cRNA, which is then used to produce positive sense RNA.
- 3. Negative sense ssRNA & +/- sense dsRNA use virally carried RNAdependent RNA polymerase to produce positive sense RNA.
- 4. Positive sense ssRNA (retro-) viruses uses virally coded RNA-dependent DNA polymerase to produce dsDNA, which is then used to produce positive sense RNA by host DNA-dependent RNA polymerase.



