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| **Icosahedral**   * Spherical in shape, but a closer look reveals they are icosahedral. * The genetic material is enclosed inside of the capsid. * Viruses with icosahedral structures are released into the environment when the cell dies, breaks down, and lyses, thus releasing the virions. * Examples: poliovirus, rhinovirus, and adenovirus | Image result for icosahedral virus |
| **Envelope**   * Its structure is a conventional icosahedral or helical structure * Its structure is surrounded/enclosed by a lipid bilayer membrane * The envelope of the virus forms when the virus exits the cell via budding mechanism * Examples: influenza, hepatitis C, HIV | Image result for enveloped virus |
| **Complex**   * Its structure is a combination of icosahedral and helical shape * May have a complex outer wall or head-tail structure * The head-tail structure is unique of bacteriophages (viruses that only infect bacteria) * The head of the virus possesses an icosahedral shape with a helical shaped tail * The tail in a bacteriophage is used to attach to the bacterium. It creates a hole in the cell wall, and it inserts its DNA into the cell. * Examples: variola virus (smallpox) | Image result for complex virus  http://www.fabpretty.com/science/microbiology/transmission-and-symptoms-of-virus/ |
| **Helical**   * Its structure is composed of a capsid with a central cavity (hollow tube). * The central cavity is made of proteins arranged in a circular form. * The circular morphology of creates a disk like shape that attaches helically simulating a toy slinky. * The hollow tube shape allows for the nucleic acid to be stored in the middle. * Helical viruses are usually around 15-19 nm wide and 300-500nm. * Example: Tobacco Mosaic Virus | Image result for helical shaped virus  https://commons.wikimedia.org/wiki/File:Helical\_capsid.jpg |