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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 virushttp://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 virushttps://commons.wikimedia.org/wiki/File:Helical\_capsid.jpg |