What is the flu?
- mainly effects the respiratory system
- annual epidemic from October-February
- effects 9.3 million people each year in U.S. since 2010 (1)

How does the flu work?
- Influenza A and B virus broken down into subtypes and strains (1)
- change in virus occur due to evolutionary pressure (3)
- Influenza virus can change via two different pathways:
  1. **Antigenic drift** → change in virus genes
  2. **Antigenic shift** → change in surface protein in influenza A (1)

How is the flu vaccine made/given?
- can be grown egg-based, cell-based, or recombinant-based (4)
- administered through a shot (inactivated vaccine) or nasal spray (weakened vaccine) (1)

How effective is the flu vaccine?
- vaccine made based on predicted dominant strain
- 40-60% effectiveness (2)
- age/exposure/immune system play a key role in its effectiveness (2)

References

