Lesson 2 – Case Study: The 1918 Influenza Pandemic – Factors Beyond the Biological that Influence the Spread of Disease

GLOSSARY

Antigenic drift
The accumulation of small genetic changes in a virus so that antibodies resulting from prior viral exposure may no longer be protective. Influenza viruses are particularly good at employing this as a means of maintaining a reservoir of susceptible people to infect.

Antigenic shift
A reassortment or recombination of viral genes resulting in dramatic changes in a virus. The result is that antibodies resulting from previous infections do not recognize the virus. This is the primary mechanism by which influenza pandemics arise.

Epidemic
A high incidence of disease in a particular place and time.

Genotypes
Genetic differences among types of a pathogen that allow for a diversity of surface antigens. This variation means that antibodies against one version may not protect against another version of the same pathogen. For example, there are more than 84 known types of *Streptococcus pneumoniae*, which causes bacterial pneumonia. This variation means that antibodies against one version may not protect against another version of the same pathogen.

Hemagglutinin
One of two surface proteins used to identify influenza viruses. Identified in the naming process using "H".

Neuraminidase
One of two surface proteins used to identify influenza viruses. Identified in the naming process using "N".

Pandemic
A worldwide epidemic that results when virtually an entire population is susceptible to an infection.

1918 Influenza pandemic
One of the deadliest worldwide epidemics in history, estimated to have caused between 50-100 million deaths worldwide.