CONCEPT: STAGES OF INFECTIOUS DISEASE PROGRESSSION

●The progression of an _____ (*short-term*) infectious disease involves a series of stages that the host experiences:

1) Incubation Period: time between initial *introduction*/*replication* of pathogen & when signs/symptoms may arise.

□ Can take days, weeks, or even years depending on *growth rate*, *host conditions*, & *# of infectious agents*.

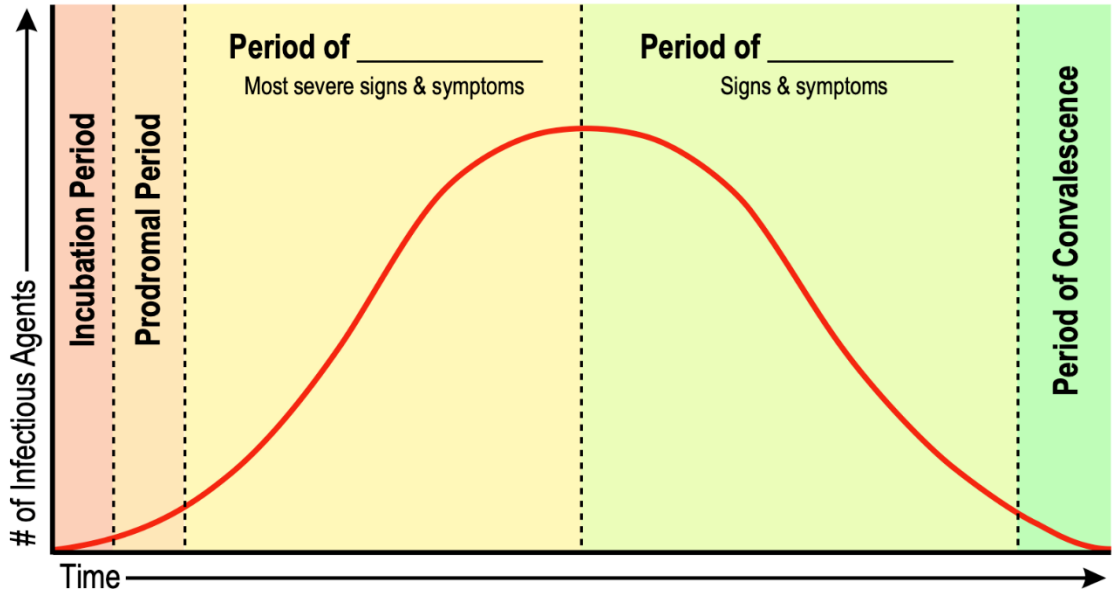
2) Prodromal Period: an *occasional* period of *early*, vague symptoms such as malaise/discomfort & headaches.

3) Period of Illness: period where a person *may* experience the strongest _____ & *symptoms* of disease.

4) Period of Decline: period where any signs & symptoms start to *decline* (or go away).

5) Period of Convalescence: period of _____ & recouperation where host eliminates pathogen.

□ Host immune system may still be weak & is susceptible to developing secondary infections.



PRACTICE: Use the following information to answer the next two practice problems.

Times and dates of Bob's symptoms of disease:

- January 7th: Bob is scratched and bitten by a stray dog.
- January 9th: The stray dog is found dead. Animal control finds that the dog has *Yersinia pestis* (bubonic plague).
- January 10th: Bob has fever, chills, and vomiting.
- January 11th: Bob is hospitalized with diarrhea & has swollen lymph nodes.
  - Doctors find Bob is infected with *Yersinia pestis* and give him antibiotics.
- January 21st: Bob's vitals return to normal and he is released from the hospital.

PRACTICE: Identify the incubation period for Bob's case of the bubonic plague:

a) January 10th-21st. b) January 10th-11th. c) January 7th-21st. d) January 7th-9th.

PRACTICE: Identify the prodromal period for Bob's case of the bubonic plague:

a) January 10th-21st. b) January 10th-11th. c) January 7th-21st. d) January 7th-9th.

CONCEPT: STAGES OF INFECTIOUS DISEASE PROGRESSSION

Chronic & Latent Infection Disease Progression

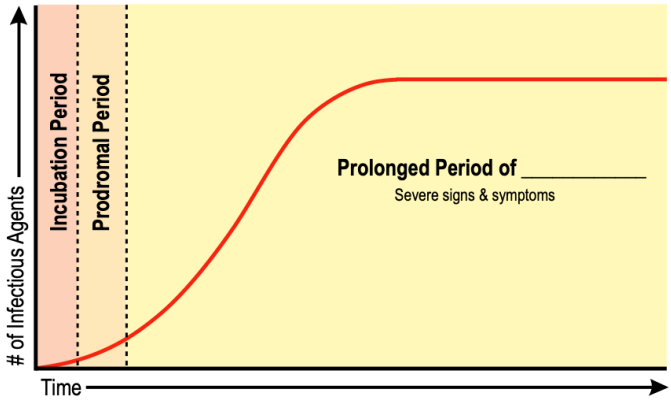
●Progression of a _____ (*long-term*) infectious disease is characterized by a *prolonged period of illness*.

●Progression of a _____ (*reoccurring*) infectious disease is characterized by *periods of latency & resurgence*.

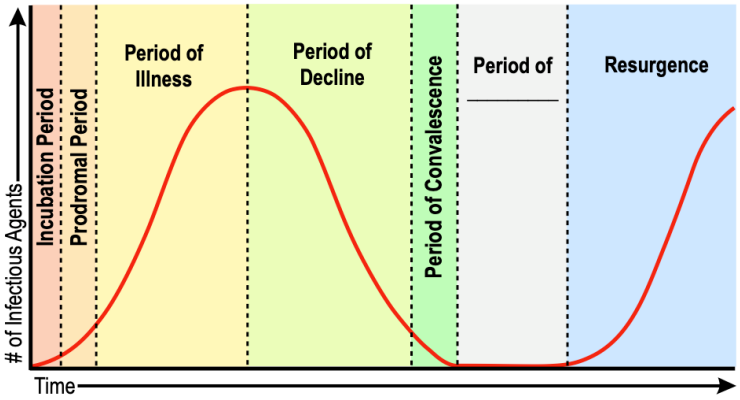
□ *Recall:* **Latency:** a state where an infection is "_____/inactive/hidden".

□ **Resurgence:** a period *after* the latent state where an infectious agent reactivates (or returns) & replicates.

Chronic Infection



Latent Infection



PRACTICE: Most individuals become infected with varicella zoster virus (VZV) during childhood which results in a disease commonly known as chicken pox. After the individual recovers from chicken pox the virus remains dormant in their body. This virus will commonly re-emerge when the individual reaches an advanced age and cause a disease commonly known as shingles. The shingles disease is what stage in the disease progression of the varicella zoster virus?

a) Period of latency.
b) Period of illness.
c) Period of decline.
d) Period of resurgence.

PRACTICE: Individuals infected with human immunodeficiency virus (HIV) begin to show flu-like symptoms 2-4 weeks after infection. During this period, HIV is rapidly multiplying in the body. HIV will continue to slowly multiply within infected individuals for the remainder of their lives (although this can be lessened with antiretroviral therapy). HIV is an example of what type of disease?

a) Latent infectious disease.
b) Opportunistic infectious disease.
c) Chronic infectious disease.
d) Noncommunicable infectious disease.