

INCUBATION PERIOD

Time interval between invasion by an infectious agent & appearance of the first sign or symptom of the disease.

During incubation period agent undergoes multiplication in the host, when sufficient density of the agent is built up in the host, health equilibrium is disturbed & the disease becomes overt

- Uses of incubation period

Tracing the source of infection & contacts = Follow the trail of spread of infections

Determining the Period of surveillance = Usually equal to maximum incubation

period

Applying Immunization principles =
Knowledge of incubation period helps us
to prevent clinical illness by active or
passive immunizations

Identification of point source or
propagated epidemics = Point source
epidemic- all the c

Propagated epidemic- cases occur later
than known length of incubation period

Estimating prognosis = prognosis is poor in
diseases (e.g. tetanus, rabies) with
shorter incubation period

INCUBATION DEPENDS

ON

infective dose $\emptyset$ portal of entry

individual susceptibility

Generation time of the pathogen = interval of time between recipient of infection by a host & maximal infectivity of that host

Roughly equal to the incubation period

Application of incubation period

- Application of incubation period •
 - * To differentiate primary case from secondary case •
 - * To find out time for quarantine •

unset;"> * To prevent infection to the contacts of the infected person

Median incubation period

> Time required for 50% of the cases to occur following exposure

Latent period

> Used in Non Infectious Diseases as the equivalent of incubation period in infectious diseases

- Defined as period from disease initiation to disease detection Window period

- time required between Exposure to laboratory detection of

disease

- All of the following are used as a proxy measures for incubation period in disease

- * Latent period, Serial interval, Generation time

- Diseases communicable or highly transmitted during later part of incubation period

- * Measles, Pertussis (whooping cough), hepatitis A

- Diseases with incubation period < 10 days - Cholera, influenza, plague

- Disease infectious before & after onset of symptoms - Measles, Mumps, Hep B &