

**Topic: Smallpox**  
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**Group – A**

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# Smallpox

- **Smallpox is a highly contagious disease caused by the smallpox virus, an orthopoxvirus.**
- **It causes death in up to 30%.**
- **Natural infection has been eradicated.**
- **The main concern for outbreaks is from bioterrorism.**
- **Severe constitutional symptoms and a characteristic pustular rash develop.**

- Treatment is generally supportive and potentially with antiviral drugs.
- Prevention involves vaccination, which, because of its risks, is done selectively.
- No cases of smallpox have occurred in the world since 1977 because of worldwide vaccination. In 1980, the World Health Organization (WHO) recommended discontinuation of routine smallpox vaccination

- Routine vaccination in the US ended in 1972.
- Because humans are the only natural host of the smallpox virus
- The virus cannot survive  $> 2$  days in the environment, WHO has declared natural infection eradicated.
- Concerns about bioterrorism using smallpox virus from retained research stores or even from synthetically created virus raise the possibility of a recurrence

# What Are the Symptoms of Smallpox?

- Historical accounts show that when someone was infected with the smallpox virus, they had no symptoms for between seven and 17 days. However, once the incubation period (or virus development phase) was over, the following flu-like symptoms occurred:
  - high fever
  - chills
  - headache
  - severe back pain
  - abdominal pain
  - vomiting

- These symptoms would go away within two to three days.
- Then the patient would feel better.
- However, just as the patient started to feel better, a rash would appear.
- The rash started on the face and then spread to the hands, forearms, and the main part of the body.
- The person would be highly contagious until the rash disappeared.

- Within two days of appearance, the rash would develop into abscesses that filled with fluid and pus.
- The abscesses would break open and scab over.
- The scabs would eventually fall off, leaving pit mark scars.
- Until the scabs fell off, the person remained contagious.