

Smallpox – Quick Reference

(Revised 01/09/02)

Any suspected or confirmed case of smallpox MUST BE TREATED AS A PUBLIC HEALTH EMERGENCY and reported to the infection control practitioner Sasha Madison (1-6167) or Tammy Schaffner (1-6163) or Jane Freeburn (LPCH) (1-8503) and the Santa Clara County Public Health Department. (408) 885-4214 after hours (408) 299-2501.

Epidemiology:

- Transmission: highly infectious after aerosolization; person-to-person contact with respiratory secretions; coughing patients most contagious; contact with lesions and fomites (clothes and bed linens).
- Persons vaccinated prior to 1972 **DO NOT** likely have full immunity against smallpox but may have some level of protection against the worst effects of the disease. Persons vaccinated multiple times (military prior to 1990 and foreign travelers prior to 1972) likely have comparatively increased levels of immunity against smallpox but their level of immunity is uncertain.

Incubation Period:

- Average 12 – 14 days; range 7-17 days.

Clinical Disease:

Acute onset of malaise, rigors, vomiting, headache, backache, possible delirium; high fever (up to 40.5 C) at or just prior to onset of rash; maculopapular rash predominate on face and mucous membranes of mouth, pharynx, migrating to forearms, legs, palms and soles then to trunk.

Diagnosis:

Presumptive diagnosis based on signs and symptoms.

Differential Diagnosis:

Chicken pox, allergic contact dermatitis, erythema multiforme with bullae, secondary syphilis, atypical measles, molluscum contagiosum. (Chicken pox eruptions are more numerous on trunk than on face and extremities. Lesions occur in crops in different stages of development and are superficial with rare scar formation).

Treatment:

Provide supportive care, pain and fever control, sedation for delirium; maintain hydration; antibiotics for secondary infection.

Prophylaxis:

- Smallpox vaccine would be required for all persons exposed or anyone with close personal contact with a smallpox case
- Vaccine is most effective if given before or within 4 days of exposure.
- Ideally, all exposed persons should be placed in strict quarantine for 17 days after last contact with a smallpox case

Isolation:

Immediately isolate all individuals in whom smallpox is suspected, preferably at home (See Reference: Infection Control Precautions for Suspected Bioterrorism Agent Disease)

Reference: Cahill, Christine K., MS, RN, CIC, Infection Control Consultant, California Department of Health Services. Licensing & Certification Program. [California Hospital Bioterrorism Response Planning Guide](#), Section 2-C-1 – Smallpox (Variola)

Primary Author: Madison, Sasha, MPH, CIC, Manager, Infection Control & Epidemiology Department, Stanford Hospital and Clinics.