West Virginia Department of Health and Human Resources
Smallpox: Information for Public Health Officials

Virus

Unique Epidemiological Characteristics
- No natural reservoir anywhere in the world
- Implications for investigation: Case is BT until proven otherwise (i.e., lab accident)
- Incubation period: 7-17 days
- Person-to-person transmission by droplets > contact with contaminated clothing and bedding > aerosol
- Mortality: 30% in pre-erradication era
- Environmental: not environmentally hardy.
- Prophylaxis: vaccine is effective if administered within 72 hours of exposure
- Treatment: none

Laboratory confirmation:
- CDC
- Implications: Hospital personnel must be trained in recognition of smallpox so that persons are presumptively isolated.

Employee Health:
- Vaccine and personal protective equipment recommended for persons who will have contact with smallpox-infected individuals
- Contraindications (pre-event - not a comprehensive list):
  - immunosuppression, eczema or exfoliative skin condition, or pregnancy in vaccine candidate OR household member of vaccine candidate
  - Age < 18
  - Vaccine component allergy
- Employees who will have face-to-face contact with smallpox patients MUST have been vaccinated (with documented take) AND fit-tested with an N-95 mask. In addition, contact precautions (gloves, gown) are required

Lifesaving interventions - in order:
- Recognition / reporting / case-finding + airborne and contact isolation of cases
- Contact tracing and ring vaccination
- Collect and analyze risk information to identify source AND
  - identify the exposed population to be placed under surveillance AND
  - identify household contacts of exposed so they can be vaccinated.

Training considerations
- Physicians: recognition / reporting / isolation / employee health
- ICPs: reporting, active surveillance procedures / vaccination / isolation / employee health
- Labs: procedure for referral of specimens to CDC.
- Local health departments, regional epidemiologists: Investigation / vaccination / isolation / employee health
- IDEP / DSDC / BPH: employee health / investigation / isolation / vaccination / priorities for prevention and control

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