Medical Surveillance
Medical Surveillance

Criteria

- Based on risk assessment
- Pre-placement
  - evaluate physical requirements
- Periodic review
The probability of infection

- Implies an estimate of numbers exists
- Predict an outcome given similar events
Medical Surveillance

Risk Assessment

- What is the natural host?
- Does agent cross species barriers?
- Wild-type agent or attenuated?
- Infectious for normal healthy adult?
- What if adult is immunocompromised?
Mode of transmission?
- contact
- fomites
- mucous membrane exposure
- ingestion
- inoculation or insect bites
- inhalation
- sex
Medical Surveillance
Risk Assessment

- Volume being manipulated?
- Concentration of agent?
- Infectious dose?
- Past history of lab-associated infection?
- Secondary spread in community?
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Risk Assessment

- Prophylaxis
  - Immunizations available?
  - Pharmaceuticals?
  - Effectiveness?

- Post-Exposure
  - Anti-microbial agents?
  - Pharmaceuticals?
  - Effectiveness?
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Risk Assessment

- Dealing with an unknown agent?
  - epidemiological data
  - patterns parallel to other agents
  - data from animal studies
  - route of infection
Top management
- overall safety policy
- resource allocation

Supervisor
- implement policies
- training, practices & procedures, access

Workers
- strict & rigorous attention to details of practices and procedures
- report incidents and exposures
Medical Surveillance
Risk Management

- Occupational Health Clinic
- Immunizations, chemotherapy
- Medical surveillance programs
- Incident (emergency) response
- Incident investigation