

# Coordinating a Smallpox Vaccination Clinic Training



Communicable Disease Service-Bioterrorism Unit  
New Jersey Hospital Association  
February 11, 2004

# Smallpox...A Brief History

- **Orthopox: variola virus**
- **Naturally occurring smallpox eradicated**
- **Civilian vaccination ended in 1972**
- **First time immunization for security rather than public health**

A single case-patient of smallpox anywhere in the world would be considered a **public health emergency** and require an immediate and coordinated response to contain the outbreak, prevent further infection, and control panic.



# Assumptions

- **Voluntary vaccination**
- **Response team members only**
- **<100 individuals per clinic**
- **Clinical Accuracy vs. Patient Throughput**
- **Sufficient time to pre-plan**

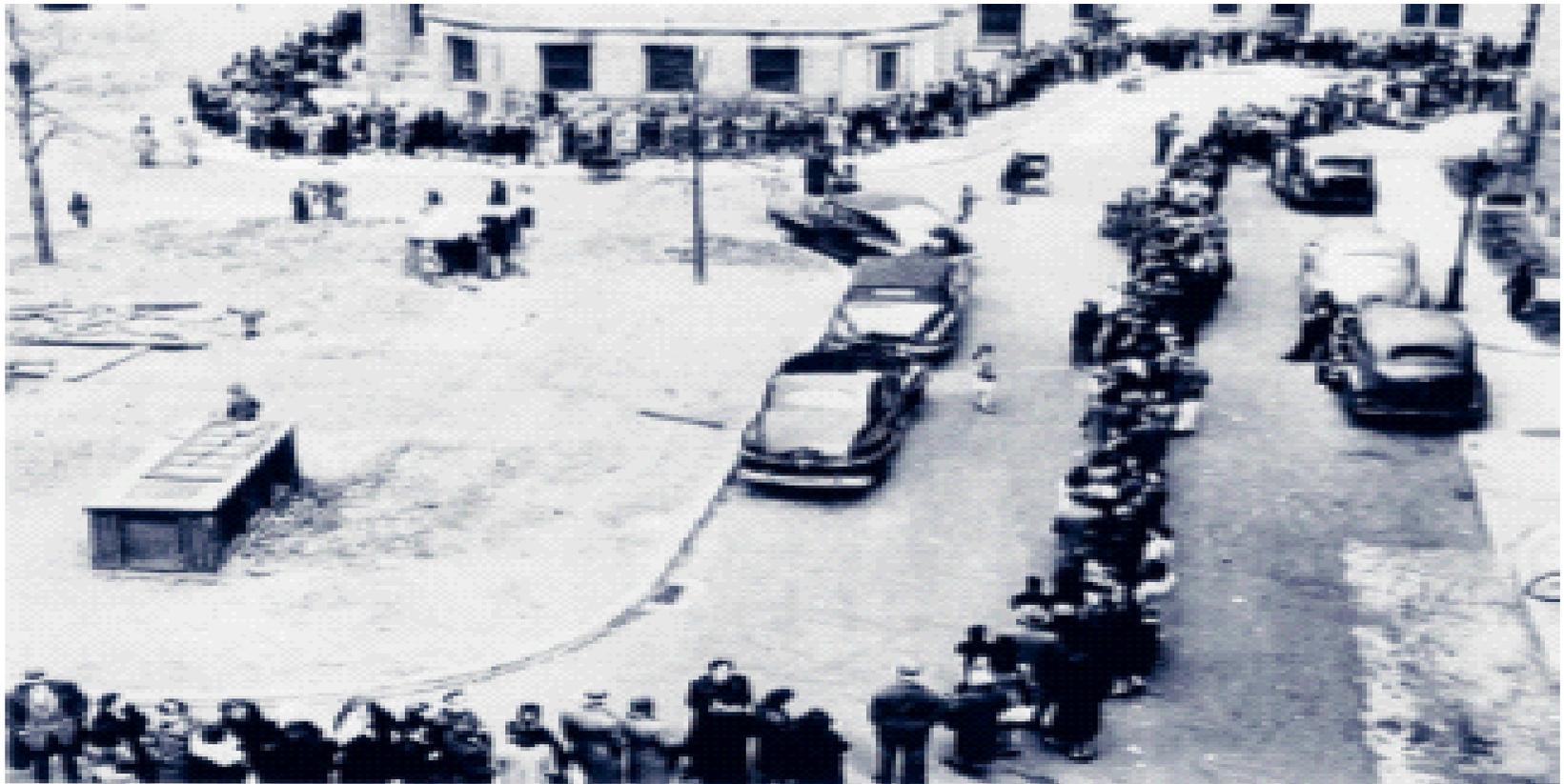
# Smallpox is Different

- **Natural disease eradicated**
- **Protect against a biological weapon**
- **How to establish risk/benefit ratio?**



# Clinic Logistics

**FIGURE 1. New York City residents line up for vaccinations during a smallpox vaccination campaign — New York City, 1947**



Photo/Associated Press

# Pre-Clinic Issues

- **Planning**
- **Staffing**
- **Pre-Education**
- **Technology**
- **Vaccine considerations**



# Planning

- **Locally**
  - Hospital
  - Health Department
- **Regionally**
  - LINCS Agencies
  - State Regions



## Northwest

Sussex, Warren, Morris, Passaic

## Northeast

Bergen, Essex, Hudson

## Central West

Hunterdon, Somerset, Mercer

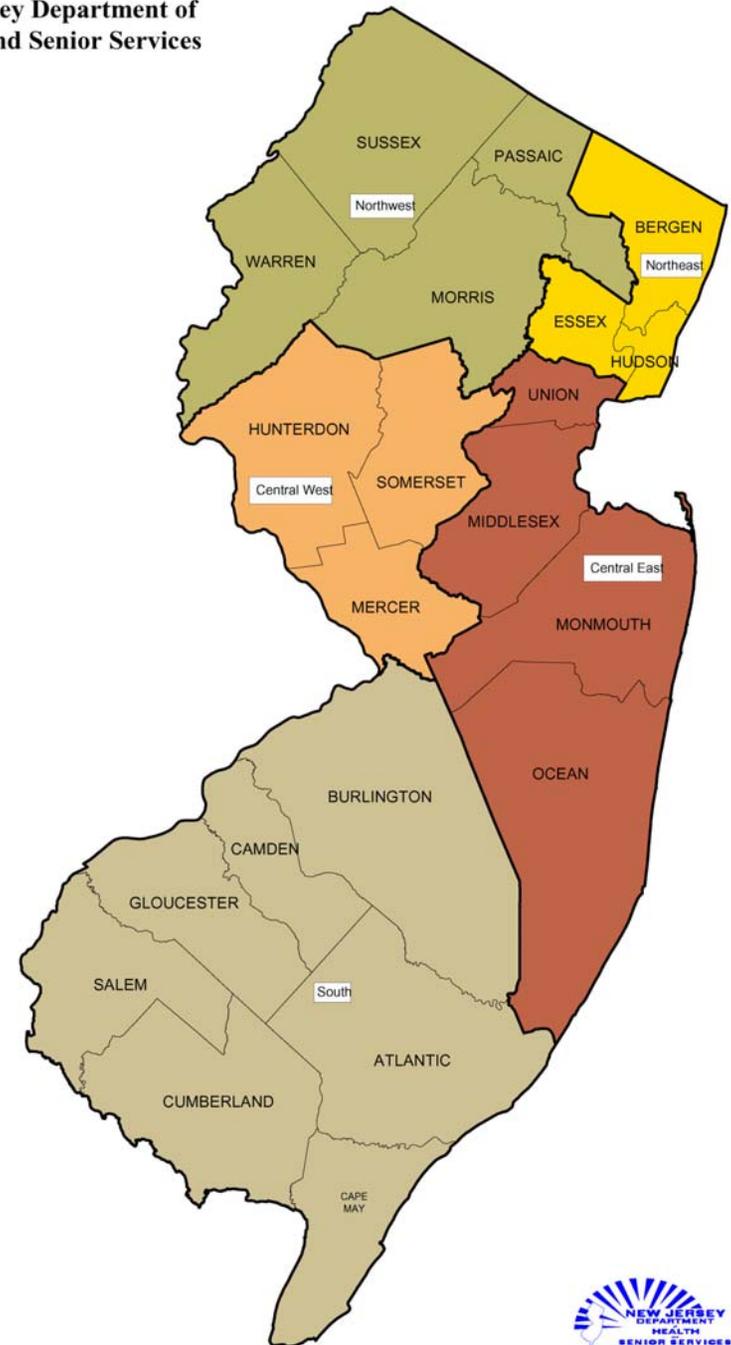
## Central East

Union, Middlesex, Monmouth, Ocean

## South

Burlington, Camden, Gloucester, Salem, Cumberland, Cape May, Atlantic

New Jersey Department of  
Health and Senior Services  
Sections



# Planning

- **Clinic Planner**



- **Clinical Manager**

# Planning

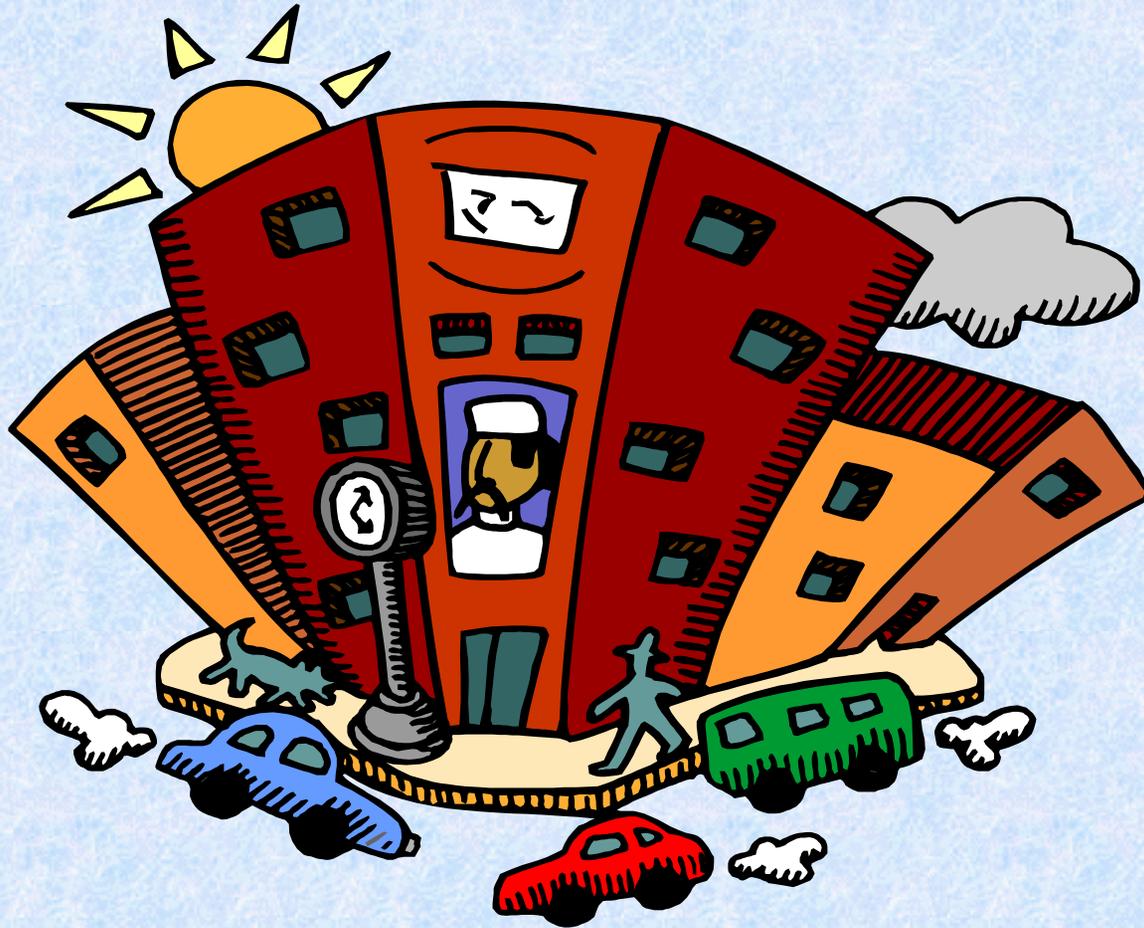
- **Notify NJDHSS**
- **Identify staff**
  - Determine staffing needs
- **Identify site(s)**
- **Publicize clinic to “vaccinees”**
- **Obtain supplies/equipment**



# Planning

- **Identify hospitals to treat Adverse Events**
- **Identify staff and site(s) for “take” reads**
- **Identify staff to perform active surveillance and record Adverse Events**

# Selecting a Site

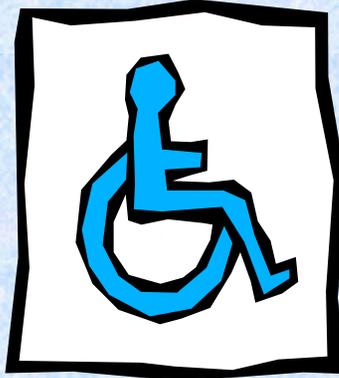


# Site(s) should have:

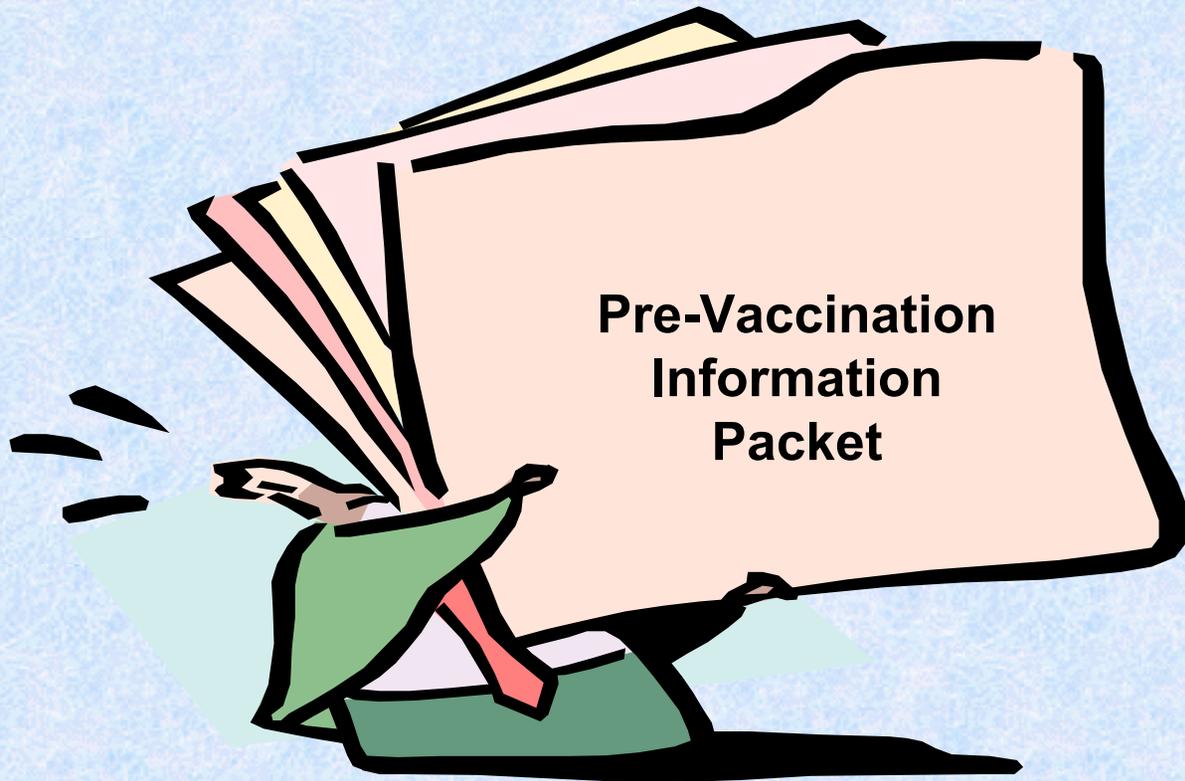
- **Parking**
- **Lighting**
- **Heating/Cooling**
- **Restrooms**
- **Accessible accommodations**



- **Internet access**
- **Electrical outlets**
- **Tables and chairs**
- **Screens/barriers**
- **Security and refrigeration for vaccine**



# Pre-Education



# Pre-Education

- **At least 1 week prior to clinic**
- **Assists in decision making process**
- **CDC materials MUST be used and may not be altered**
- **Materials on the web: [www.bt.cdc.gov](http://www.bt.cdc.gov)**



# Liability and Compensation

- **Section 304 of the Homeland Security Act**
- **Smallpox Emergency Personnel Protection Act of 2003**



# Clinic Workstations

- Check-in

- Registration

- Education

- Medical Screening

- Medical Consultation



- Vaccination

- After Care/  
Observation

- Mental  
Health/Crisis  
Counseling

- Check-out

# Staffing

- **Nurses**
- **Physician(s)**
- **Health Educators**
- **Security**
- **Volunteers**
- **Paramedic/EMS**
- **Mental health counselors**
- **IT specialists**
- **Administrative personnel**

# Staff Training

- **All staff should attend a Pre-Education session**
- **Vaccinator and “Take” reader training**
- **PVS training**
- **Clinic Day “Orientation” for all staff**



# Technology Requirements

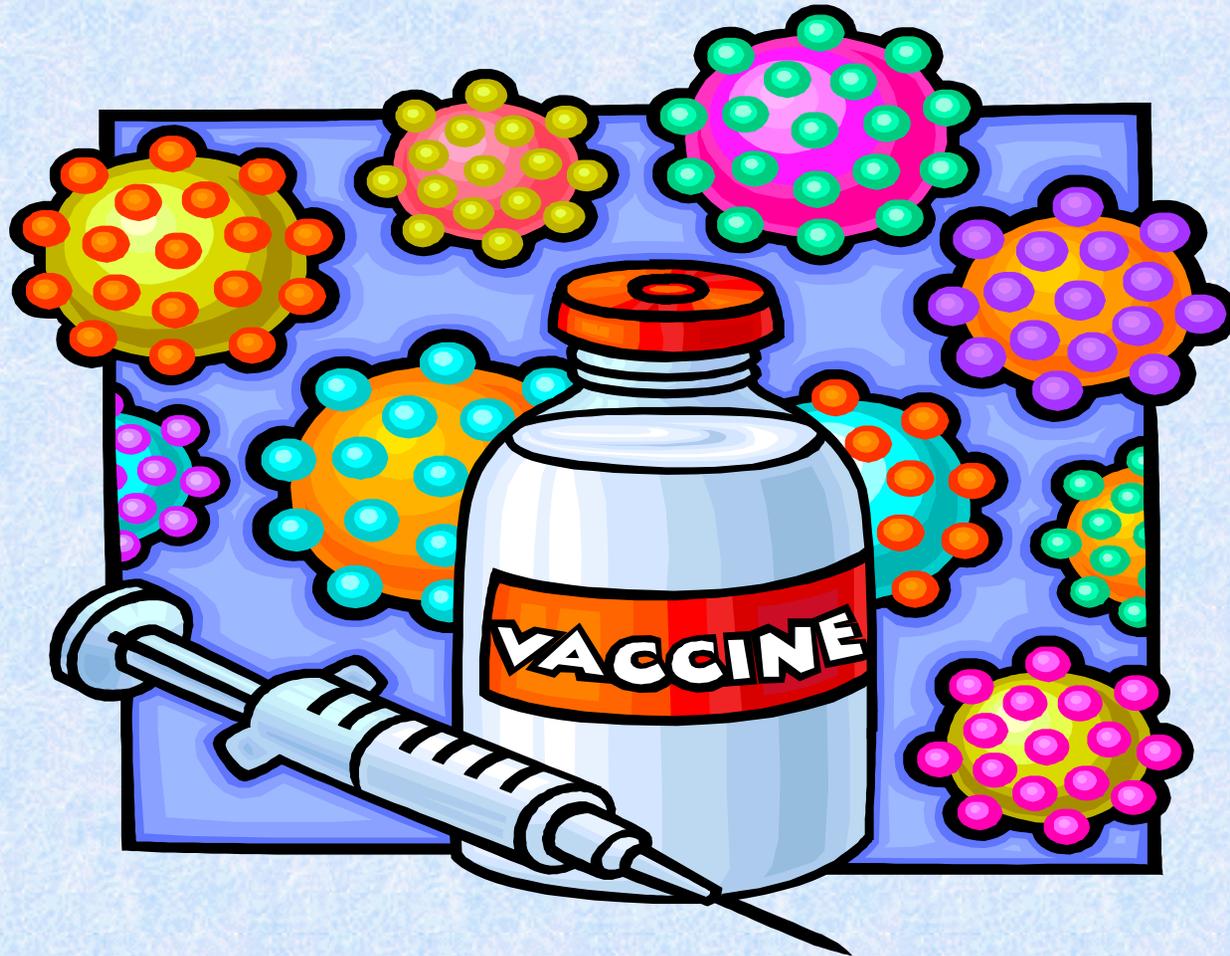


# Technology Requirements

- **Access to NJ Preparedness Vaccination System (PVS)**
- **Internet required for PVS**
- **Computers needed at various stations at clinic**



# Vaccine Considerations

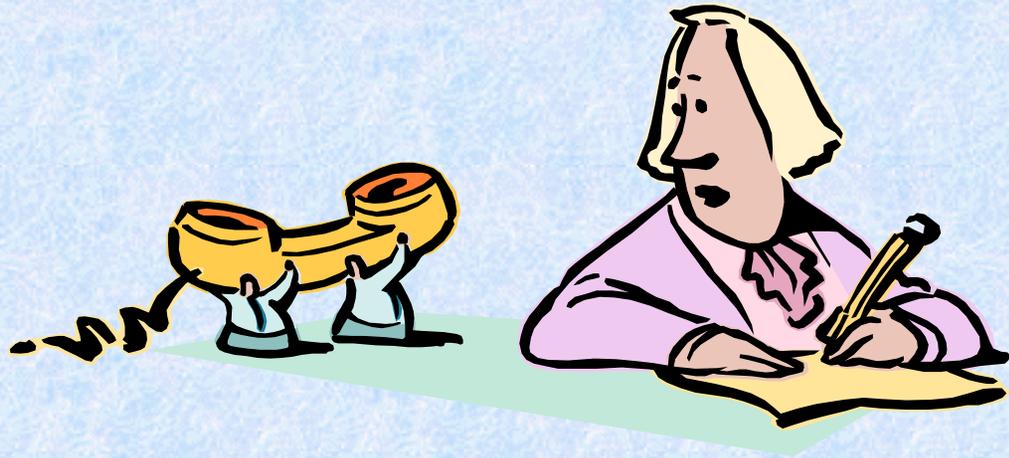




- **Contact NJDHSS to obtain vaccine**
- **Live virus vaccine**
- **Administered by physicians and registered nurses with NJ license only**
- **Must be trained to administer smallpox vaccine**

# Post-Clinic Issues

- Follow-up



- Adverse Events

# Vaccinee Follow Up

- **Vaccination site care**
- **Symptom diary**
- **“Take” reading**
- **Dealing with problems**

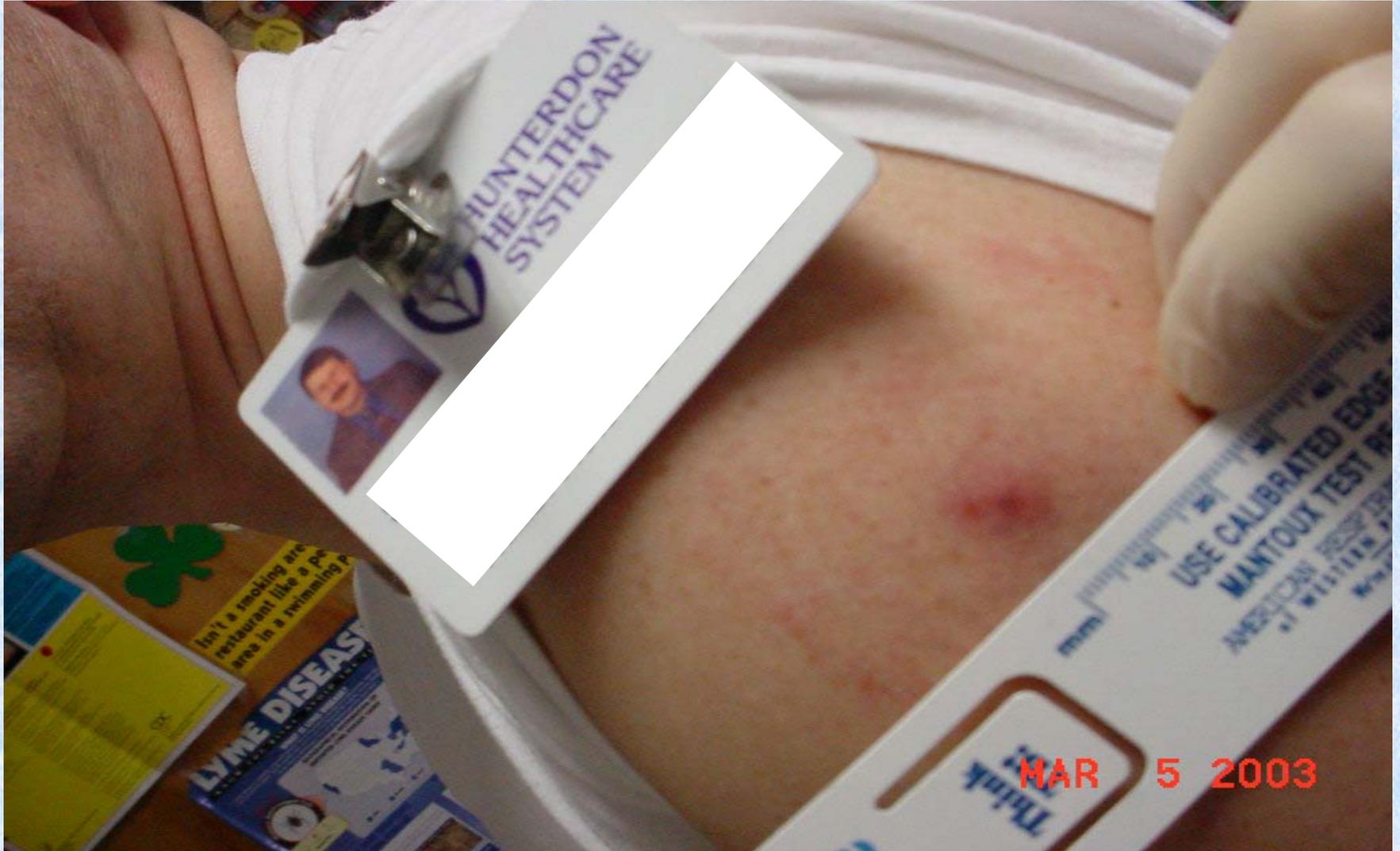


# Clinical Manager Follow Up

- **Assure vaccinees have take reading**
  - Phone reminder
  - No reading = unsuccessful vaccination
- **Perform active surveillance**
- **Report adverse events information**

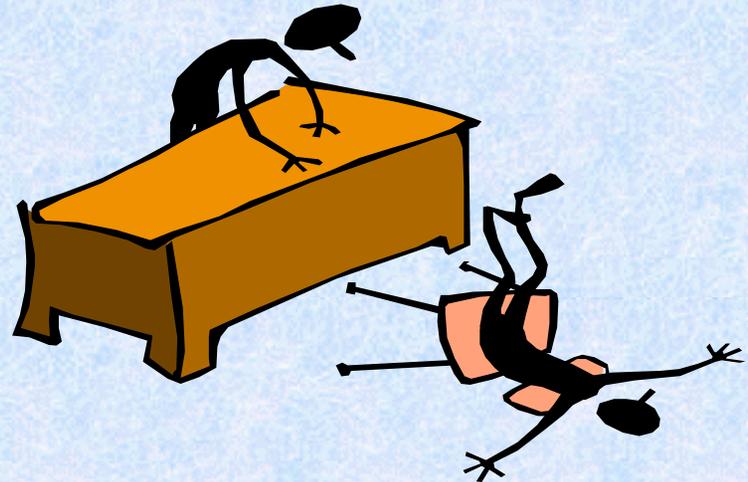


# “Take” Readings



# Adverse Events

- **What is an Adverse Event?**
- **First consideration is medical treatment**
- **The San Francisco Experience**



# Adverse Events

- **NJDHSS is notified**
- **NJDHSS informs CDC via VAERS form**



***Adverse Events Associated with Smallpox Vaccination in  
United States, January 24-November 30, 2003***

<b>Adverse Event</b>	<b>Military</b>	<b>Civilian</b>
<b>Eczema vaccinatum</b>	<b>0</b>	<b>0</b>
<b>Erythema multiforme major</b>	<b>0</b>	<b>0</b>
<b>Fetal vaccinia</b>	<b>0</b>	<b>0</b>
<b>Generalized vaccinia</b>	<b>35</b>	<b>3</b>
<b>Inadvertent inoculation, non-ocular</b>	<b>2</b>	<b>20</b>
<b>Myocarditis/pericarditis</b>	<b>69</b>	<b>22</b>
<b>Ocular vaccinia</b>	<b>0</b>	<b>3</b>
<b>Postvaccinial encephalitis</b>	<b>1</b>	<b>1</b>
<b>Progressive vaccinia</b>	<b>0</b>	<b>0</b>
<b>Pyogenic infection of vaccination site</b>	<b>0</b>	<b>0</b>
<b>Other serious adverse events</b>	<b>Not reported</b>	<b>90</b>
<b>Other non-serious adverse events</b>	<b>Not reported</b>	<b>707</b>

# Evaluation

- Assess strengths and weaknesses
- All participants evaluate clinic
- Types of evaluations
  - “Hotwash”
  - Survey
  - Informal assessment

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**NJDHSS**

**Communicable Disease Service**

**Bioterrorism Unit**

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