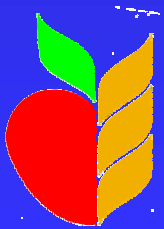


Media Smallpox Seminar



North Dakota Department of Health

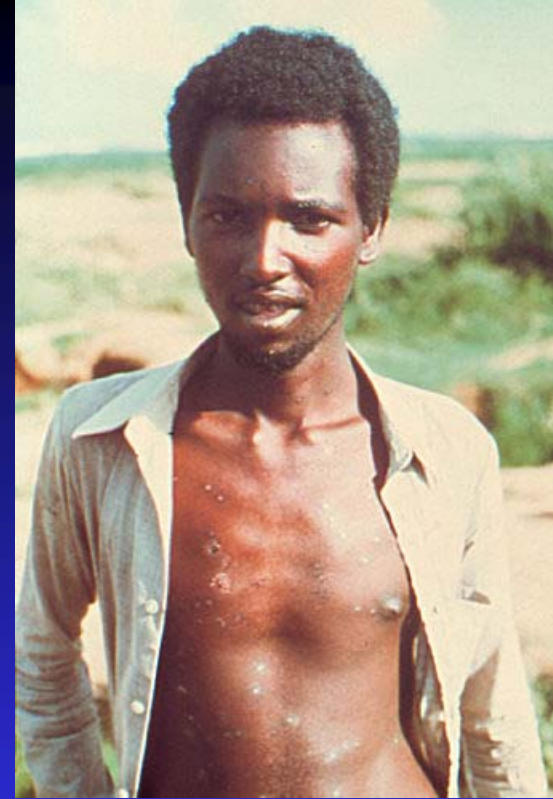
Smallpox Overview

Terry L. Dwelle, MD, MPHTM
State Health Officer
North Dakota Department of
Health



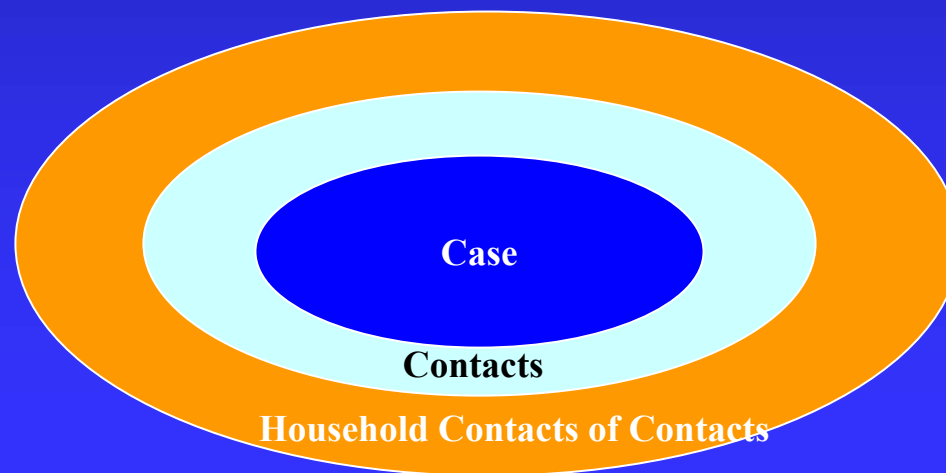
History

- 1977 – Last naturally acquired case in Somalia
- 1978 – Laboratory-related death at the University of Birmingham, England
- 1980 – Global eradication certified by the World Health Organization
- Method of eradication – Ring vaccination, not mass vaccination



Ring Vaccination Concept

- Isolation of confirmed and suspected cases
- Identification, vaccination and surveillance of significant contacts of proven cases
- Vaccination of household contacts of contacts



Smallpox – Basic Facts

- Cause – Variola Virus
- Can infect only humans
- Transmission – Close face to face (generally within 6 feet) via respiratory droplets of a person who has the disease

Smallpox - Disease

- Onset is 12 to 14 days after exposure
- Days 2 to 3 – High fever, bed-ridden, headache and backache
- Days 4 to 5 – Onset of the rash (small bump – blister – pustule – scab)
- Most infectious during the first week of the rash. No longer infectious once the scabs fall off (3 to 4 weeks)
- Death rate is about 30 percent

Smallpox



Smallpox Vaccination

- Live virus vaccine – Vaccinia (this is not the smallpox virus)
- Highly effective in preventing illness or severe disease if given within 3 to 4 days of definite exposure to smallpox

Smallpox Vaccination

- Skin reactions are an indicator that the vaccine was effective (vaccine “take”)
 - 3 to 4 days – Redness and itching
 - 7 to 11 days – Vesicle (blister) develops into a pustule, redness increases
 - 14 to 21 days – Pustule dries, scab forms
 - 21 days – Scabs falls off, leaving a permanent scar
- Commonly see fever and tender, enlarged lymph nodes

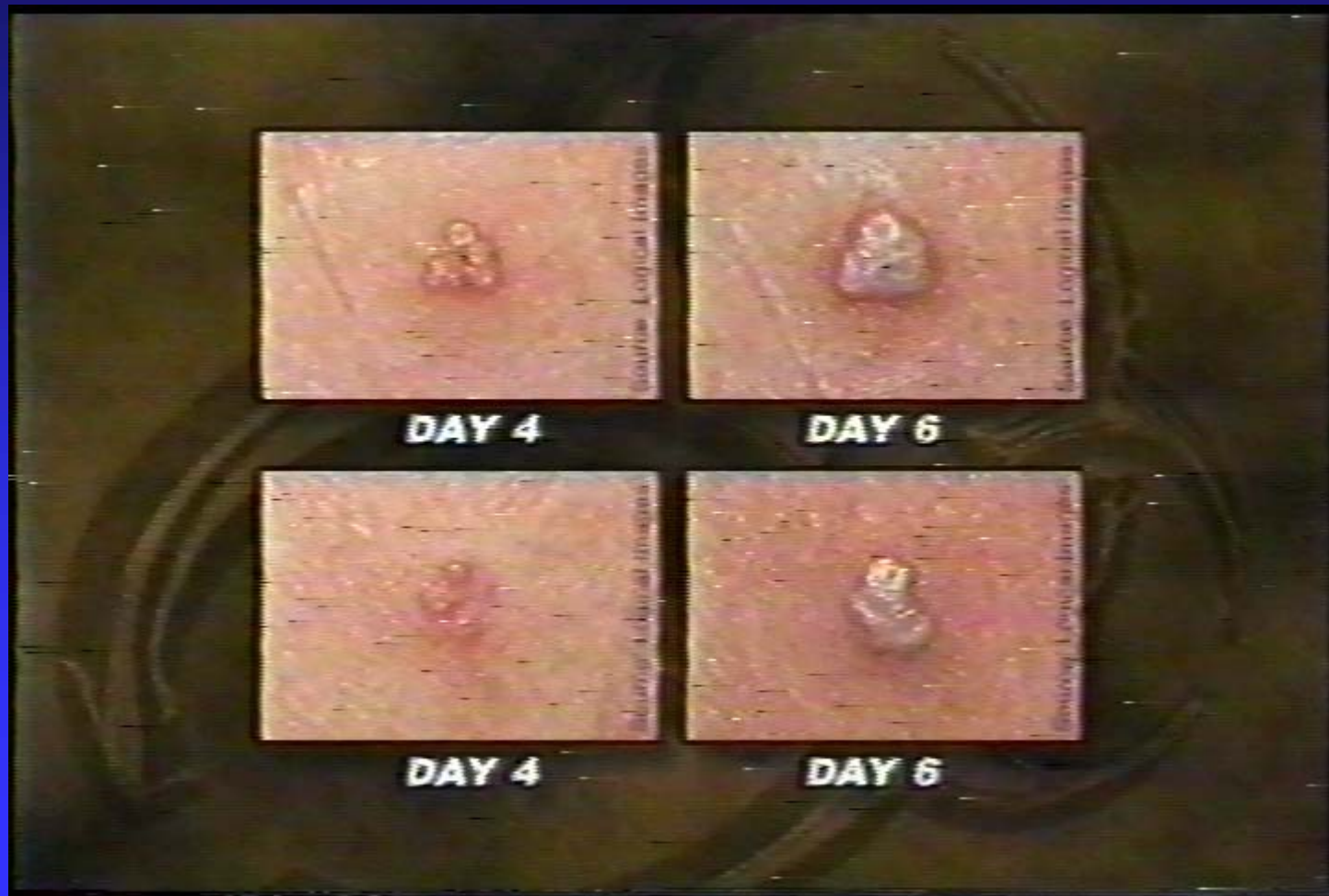


Vaccination – Adverse Reactions

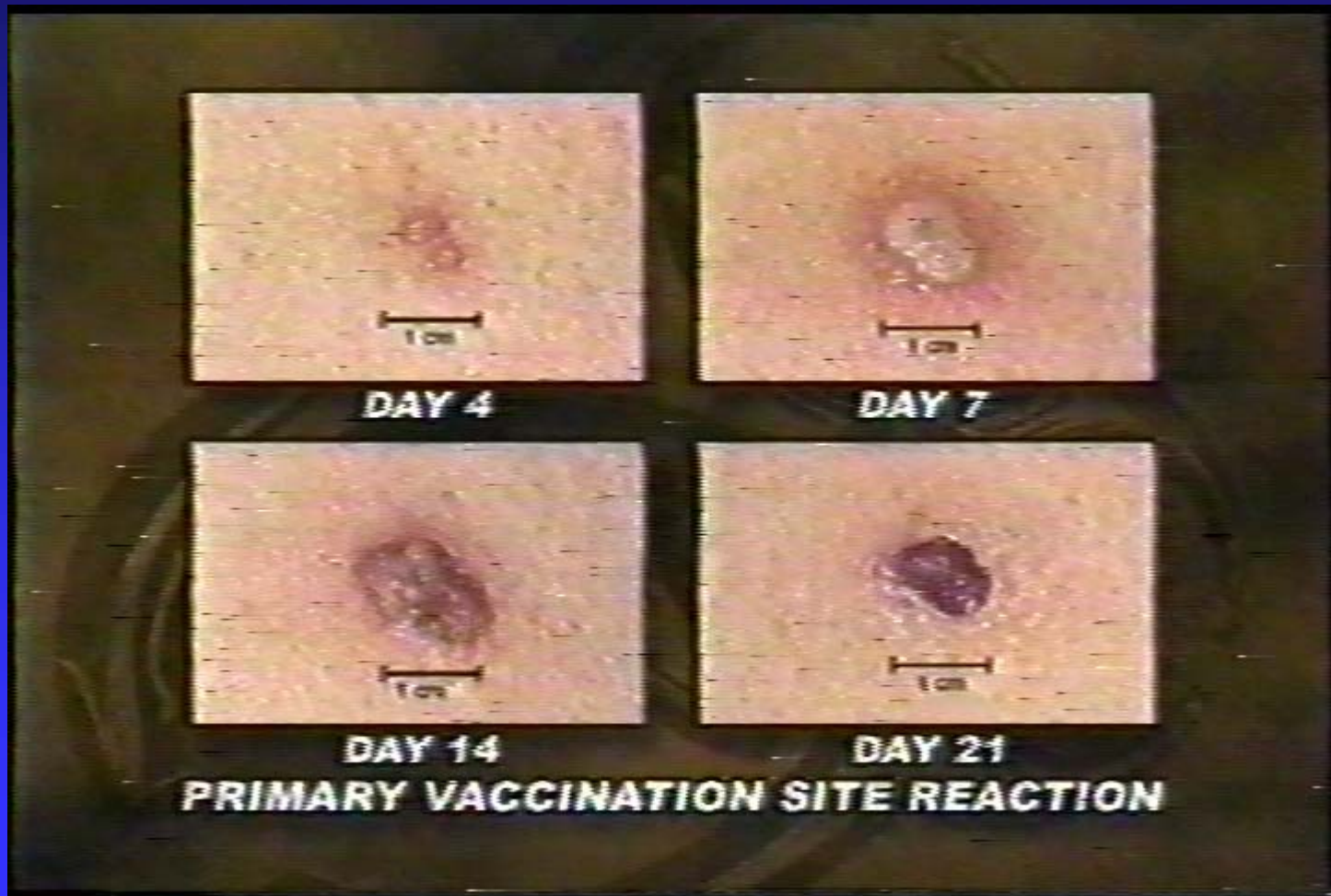
- Death – 1 / million
- Accidental infection of other body part (i.e. eye) – 1 / 2000
- Generalized vaccinia – 1 / 5000
- Eczema vaccinatum – 1 / 26,000
- Post vaccination encephalitis – 1 / 300,000
- Progressive vaccinia – 0.83 / million



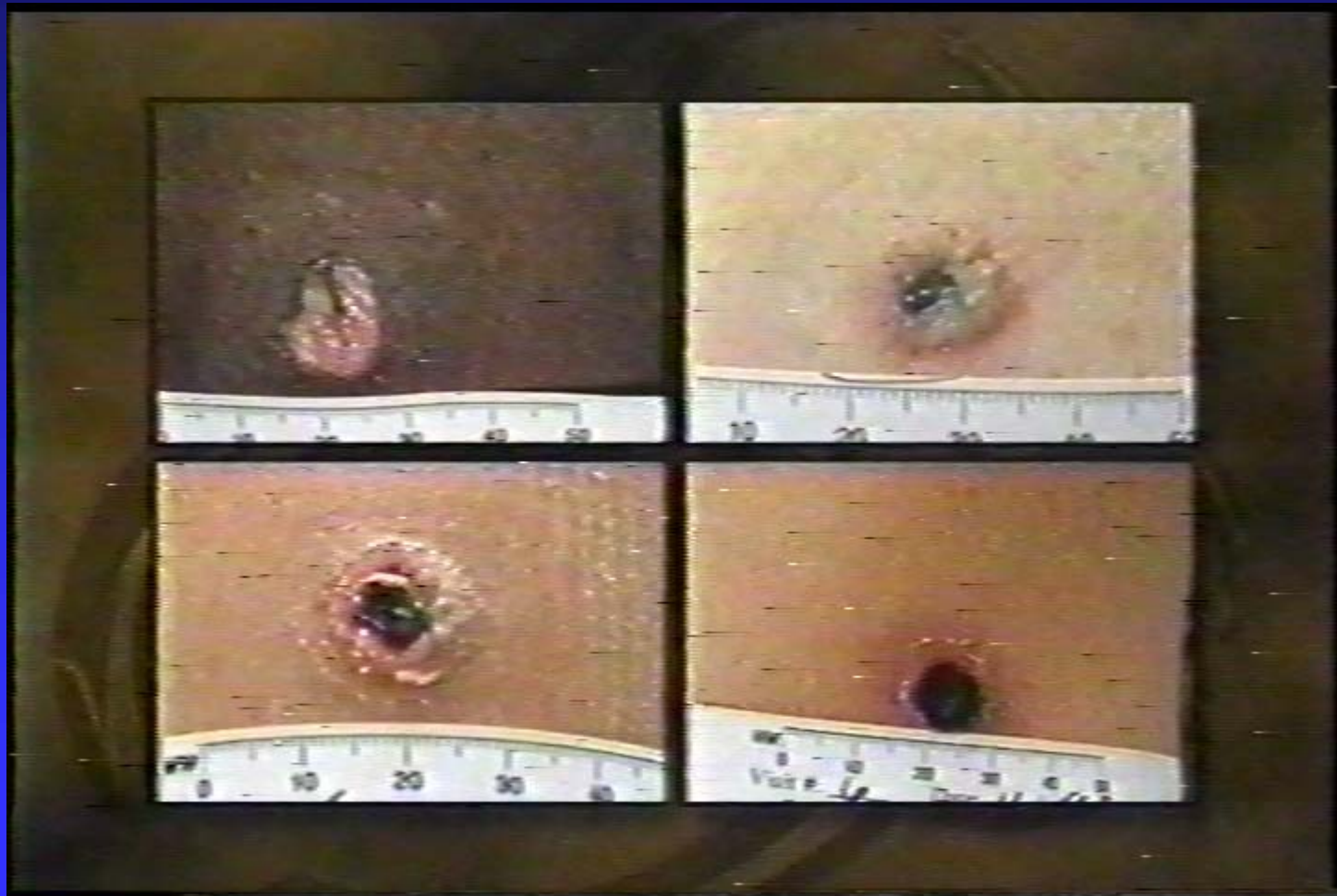
Vaccination Site Progression



Vaccination Site Progression

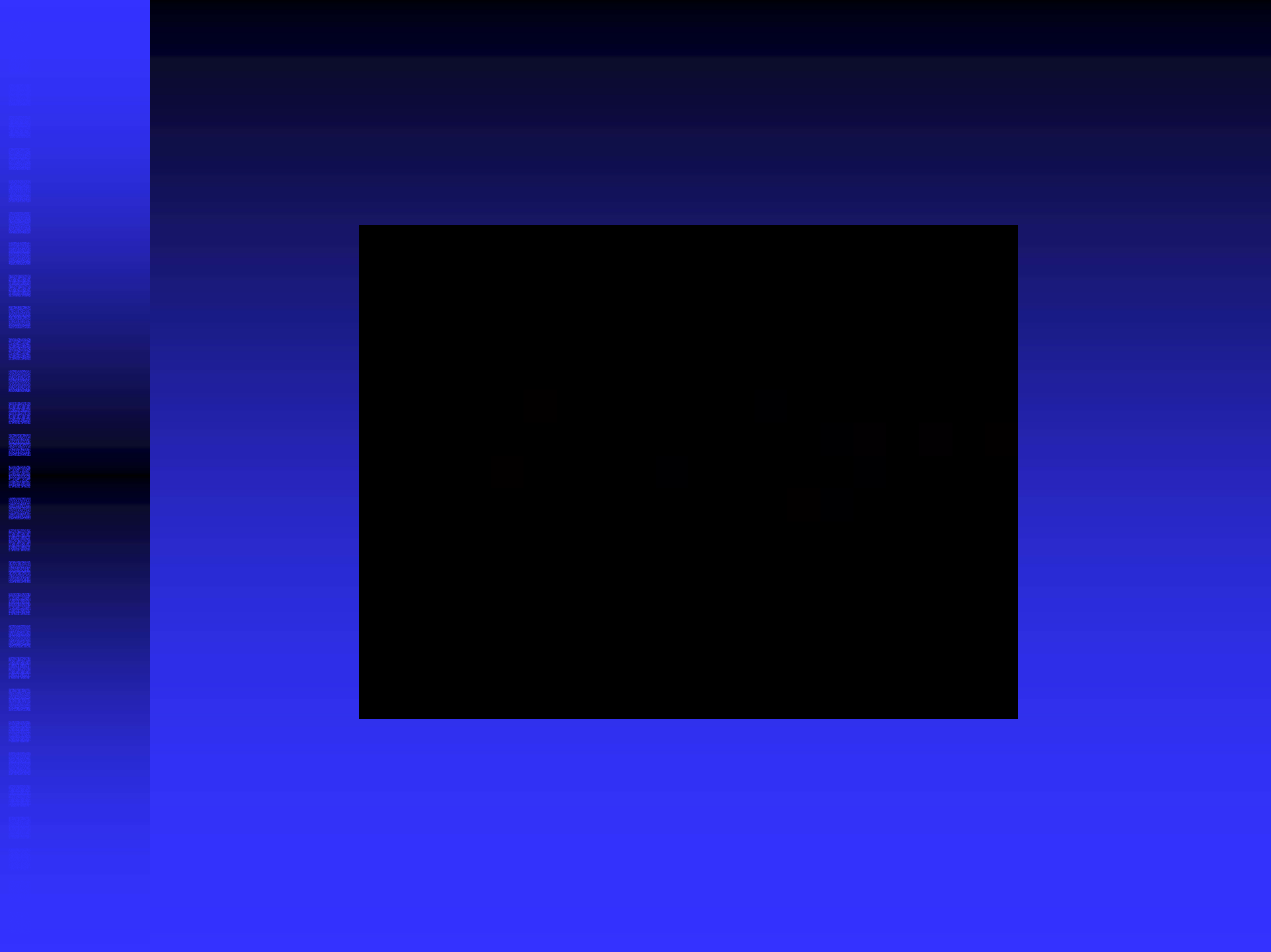


Vaccination Site Progression



Vaccination Site Progression



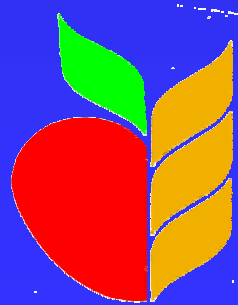


Surveillance for Smallpox

Larry A. Shireley, MS,MPH

State Epidemiologist

North Dakota Department of Health



Early Detection

“Atypical” Rash Illnesses

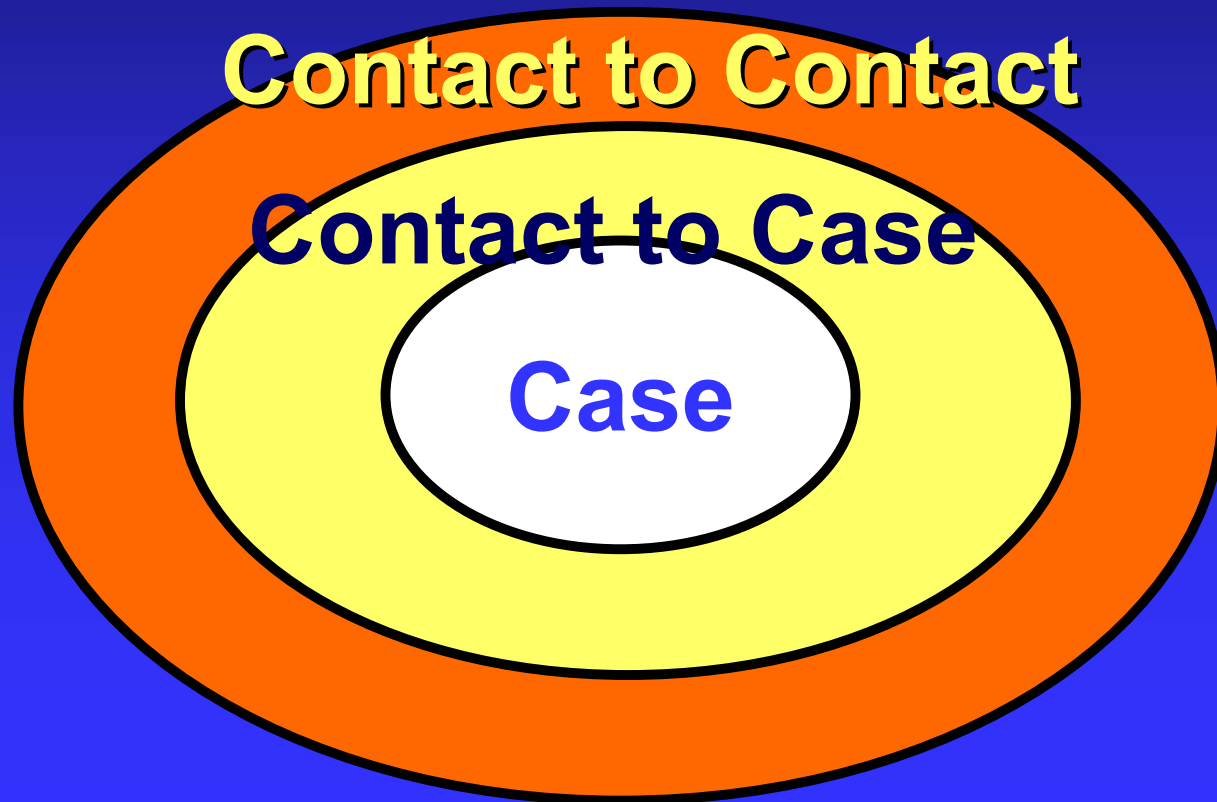
- Rule Out Chickenpox (Varicella)
 - ◆ Reporting of hospitalized patients
 - ◆ Consult with Infectious Disease Physicians/Dermatologists
- ND Public Health Laboratory
 - ◆ Free testing
- Consultation/Confirmation
 - ◆ Centers for Disease Control and Prevention

Syndromic Surveillance

- Regional Ask-A-Nurse
- Emergency Room
- Others
 - ◆ Ambulance “Runs”
 - ◆ Pharmaceutical Sales

Case Investigation

- Ring Vaccination



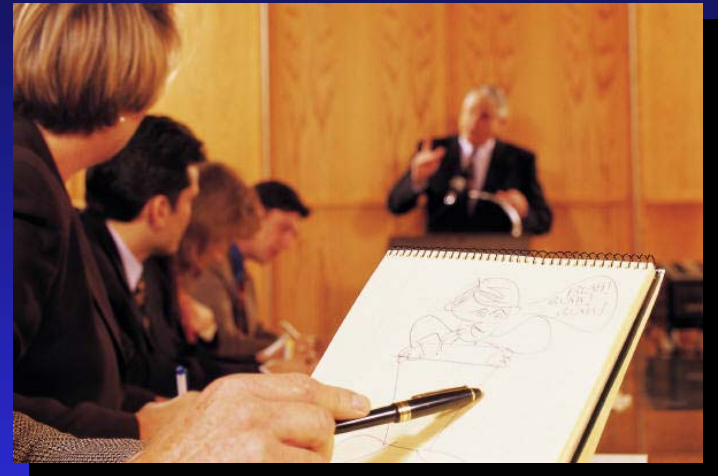
Smallpox Plan Overview

Tim Wiedrich, Director
Bioterrorism Preparedness and Response
North Dakota Department of Health



Smallpox Plan Categories

- Pre-event
 - ◆ Phase I
 - ◆ Initial Responders
 - ◆ Public Health
 - ◆ Hospital
 - ◆ About 2,000



Smallpox Plan Categories

- Pre-event
 - ◆ Phase II
 - ◆ All Responders
 - ◆ Public Health
 - ◆ Hospital
 - ◆ Clinic/Physician
 - ◆ Public Safety
 - Law enforcement
 - Fire
 - EMS



Smallpox Plan Categories

- Pre-event
 - ◆ Phase III
 - ◆ Public



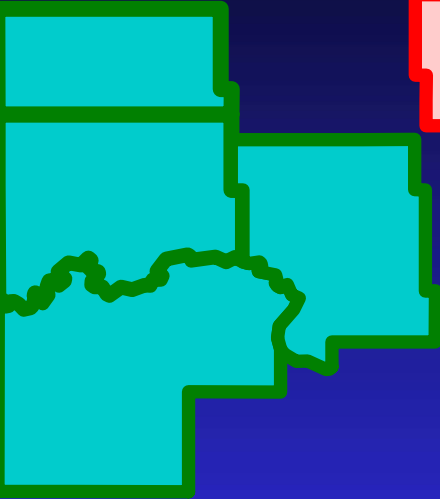
Smallpox Plan Categories

- Post-event
 - ◆ Ring vaccination
 - ◆ Mass vaccination

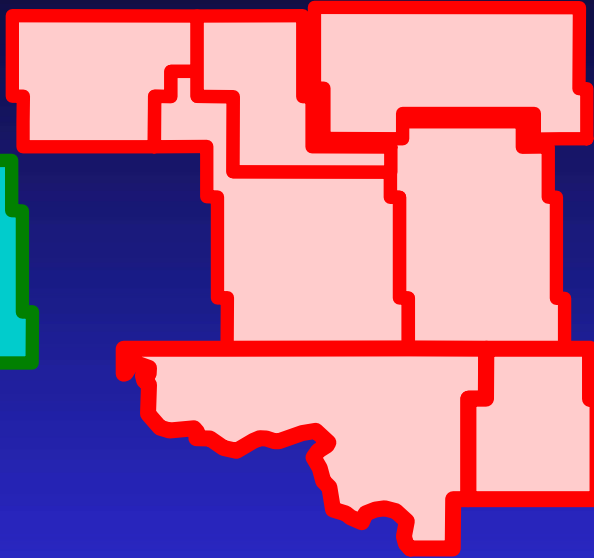


Bioterrorism Regional Planning Areas

North West



North West Central



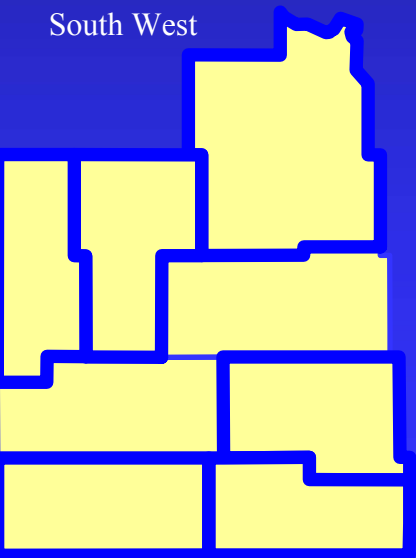
North East Central



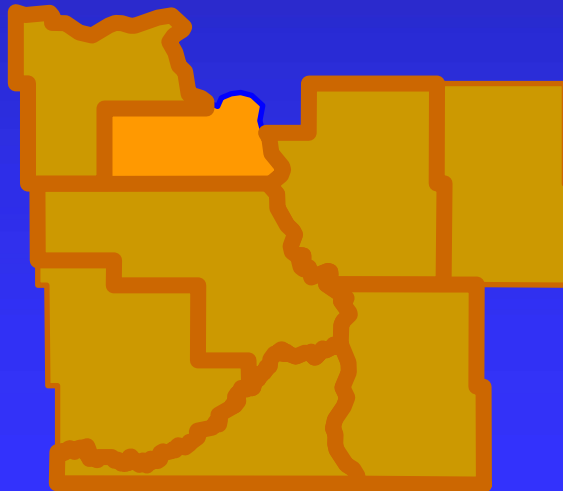
North East



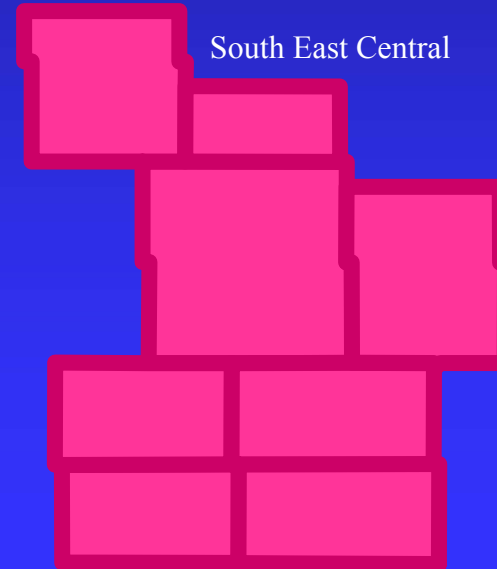
South West



South West Central



South East Central



South East



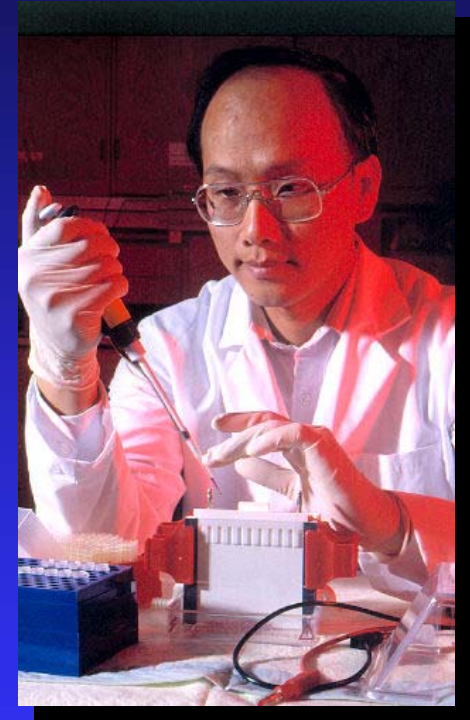
Public Health Regional Resources

- Lead Public Health Units
- Bioterrorism Directors
- Field Epidemiologists
- Medical Consultants
- Public Information Officers



Phase I Pre-event Vaccination Clinics

- State Responsibilities
 - ◆ Receipt and delivery of vaccine
 - ◆ Establishment of regional consultants
 - ◆ Data registration
 - ◆ Training
 - ◆ Public education
- Regional and Local Responsibilities
 - ◆ Identification of public & hospital response teams
 - ◆ Clinic Planning
 - ◆ Site selections
 - ◆ Supply acquisitions
 - ◆ Staffing
 - ◆ Schedule planning
 - ◆ Supervision and evaluation



Smallpox Communications

Loreeta Leer Frank
Public Information Officer
North Dakota Department of Health

Emergency Communication Response

The NDDoH Office of Public Information supports state and local public health officials in their efforts to protect the public in the event of a public health emergency

Objectives

- To provide the public and the media access to accurate, consistent, comprehensive and timely information
- To minimize, as much as possible, public panic and fears
- To coordinate public information response with other local, state and federal partners

Guiding Principle

The public will need information that will help them minimize their risk

Not Business as Usual

A public health emergency:

- ◆ Triggers a level of public interest and media inquiry that requires a response beyond normal operations and resources.
- ◆ Requires a significant diversion of department staff from regular duties.

Recent Events

- Anthrax concerns ~ 2001
- West Nile virus ~ 2002

Smallpox Communication Plan

Within 30 minutes of notification of a smallpox case:

- All media calls to NDDoH routed to Office of Public Information

Smallpox Communication Plan

- State health officer or designee will act as official spokesperson for the department
- News conference held as soon as possible
- Any subsequent news conferences held at consistent, central location

Smallpox Communication Plan

- Regular briefings held as warranted
- If few new details, then news releases and news conferences as necessary
- Updates posted to NDDoH website at least daily
- Public health experts will be available for interviews with media

Confidentiality Issues

- By law, NDDoH cannot release patient-identifying information
 - ◆ Ex. – West Nile virus

Confidentiality Issues

- During smallpox event, confidentiality issues will be balanced with public safety
 - ◆ Smallpox cases will be identified by county
 - ◆ Condition of cases will be described
 - ◆ Name, age and gender not released

Emergencies Are Media Events

- Emergency response would be hampered if media not involved
 - ◆ People rely on media for up-to-date information during an emergency
 - ◆ Media relay important protective actions for the public
 - ◆ Media know how to reach their audiences and what their audiences need

Pledge to Media

The NDDoH will:

- ◆ Respond to your requests for information
- ◆ Arrange access to public health experts
- ◆ Know your deadlines and work to accommodate them
- ◆ Provide accurate facts and information

Public Health's Goal in Emergency Response

To efficiently and effectively reduce
and prevent illness, injury and death
and to return individuals and
communities to normal

Contact Information

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