

# North Carolina Public Health: The Mighty Oak and the Palm Tree

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Wake AHEC requires all speakers to disclose any relevant financial conflicts of interest.

Dr. Megan Davies does not have any relevant financial conflicts of interest to disclose.

# Strong and Flexible

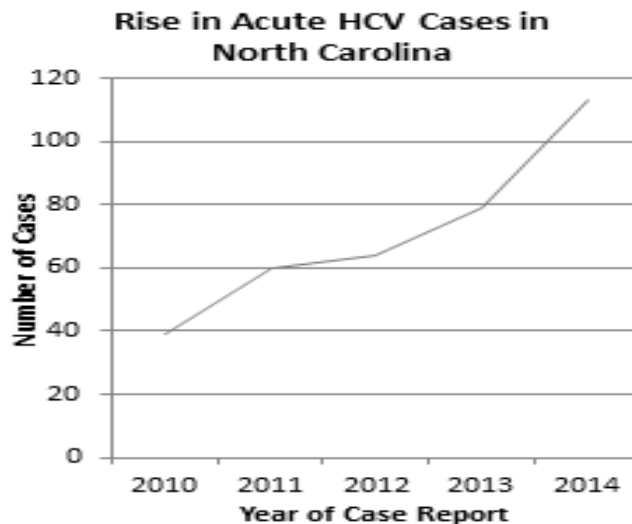
- Science-based
  - Follow epidemiological principles
  - Understand disease transmission
  - Know the literature...or know somebody who knows the literature
- Data driven
  - Surveillance
  - Outbreak investigation
  - Control measures
- Systematic
  - All of the above
  - Tools
- Culturally sensitive

# Role of CD in the LHD

- Core public health
  - Mandated
  - Unique to public health
  - Expected by the community
- Activities
  - Surveillance
  - Outbreak investigation
  - Disease Control
  - Building and keeping the public's trust

# Surveillance

- Case investigation
- Analysis of trends
- Identification of high risk populations



2014 Demographics	N=113
<b>Race/Ethnicity</b>	
White	96 (85%)
Black	5 (4%)
Hispanic	3 (3%)
Other	9 (8%)
<b>Age (years)</b>	
<20	7 (6%)
21-30	47 (41%)
31-40	27 (24%)
41-50	21 (19%)
>50	11 (10%)
<b>Reported Risk Factors*</b>	
Injection Drug Use	42 (37%)
Multiple (>1) sexual partners	5 (4%)
Men who have sex with men (MSM)	2 (2%)
History of blood transfusions	1 (1%)
Missing Data	63 (56%)

\*Number of individuals that endorsed each risk factor

# Outbreak Investigation

## **10 Steps of an Outbreak Investigation**

1. Identify investigation team and resources
2. Establish existence of an outbreak
3. Verify the diagnosis
4. Construct case definition
5. Case finding: Find cases systematically / develop line list
6. Perform descriptive epidemiology / develop hypotheses
7. Evaluate hypotheses / perform additional studies (as necessary)
8. Implement control measures
9. Communicate findings
10. Maintain surveillance

## North Carolina Division of Public Health Outbreak Report Form

Within 30 days of the end of an outbreak, complete this form and e-mail it to your TATP nurse consultant. The consultant will assure creation of a NCEDSS outbreak event and attachment of this form and a line list. **Do not**

### General Information

Today's Date  County  Person completing this form   
Lead Investigator  Title

### Outbreak Information

Date LHD notified  Date investigation initiated  Suspected t   
Facility Name / Setting  Facility Address   
Setting Type:  Nursing Home  Assisted Living  School  Day Care  Prison  City   
 Restaurant  Community  Other:  NCEDSS Event   
Date of Illness Onset for 1st Case  Date of Illness Onset for Last

# Disease Control

- Treatment as Prevention
  - STIs
  - TB
  - HIV
- Post-exposure Prophylaxis (PEP)
  - Rabies
  - Invasive meningococcal disease
  - Pertussis and measles
- Other Control Measures
  - Isolation and Quarantine
  - Environmental control measures



# Cultural Awareness

- Knowing your community
  - Diverse communities
  - Varying experiences of interacting with government
  - Respect and compassion

# Communicable Disease

Communicable Disease surveillance, outbreak response, and disease control will remain central to the work of local health departments no matter what else changes around us.