Foundational Public Health Services

Chickenpox

June 28, 2017
Clark County Board of Health
Clark County, WA

Madison Riethman – CDC/CSTE Applied Epidemiology Fellow
Agenda

- Chickenpox overview
- About the vaccine
- Risks and impact
- Public Health activities
Chickenpox
Overview

- Caused by varicella virus
- Most common in children under 10
- Highly contagious
- Spread through respiratory secretions and contact with active pox
• Vaccine available since 1995

• Two dose recommendation
  – 97% effective after one dose
  – 99% effective with two doses

• Immunization schedule
  – Dose 1: 12-15 months
  – Dose 2: 4-6 years
Chickenpox
Why is this important?

- Severe disease complications
- Vulnerable populations
  - Immunocompromised
  - Pregnant
  - Infants
  - Cannot receive vaccination
- Preventing transmission
- Identifying outbreaks
Chickenpox
Public Health Activities

• Case investigation
• Disease surveillance
• Outbreak response
• Community outreach
## Chickenpox Case Investigation

### REPORT SOURCE
- LHJ notification date: __/__/__
- Investigation start date: __/__/__
- Reporter's name: ____________________________
- Reporter's phone: ____________________________
- Primary HCP name: ____________________________
- Primary HCP phone: ____________________________

### PATIENT INFORMATION
- Name (last, first): ____________________________
- Address: ____________________________________
- City/State/Zip: ________________________________
- Phone(s)/Email: ______________________________
- All contact: □ Parent/guardian □ Spouse □ Other
- Occupation/grade: ____________________________
- Employer/worksite: ____________________________
- School/child care name: ________________________

### CLINICAL INFORMATION
- Onset date: __/__/__
- Diagnosis date: __/__/__
- Illness duration: ______ days
- Signs and Symptoms
  - Rash: □ Yes □ No □ DK □ NA
    - Onset date: __/__/__
    - Maculopapular Rash
      - Type: __________
      - Number of lesions (mark one):
        - < 50
        - 50-249
        - 250-499
        - ≥ 500
- Other explanation for rash: ____________________
- Fever: □ Yes □ No □ DK □ NA
  - □ Oral □ Rectal □ Other □ Unk

### Vaccination status of case
- □ Yes □ No □ DK □ NA
- Ever received varicella containing vaccine:
- Number of doses varicella vaccine prior to illness:
  - Dose 1: _________ Type: __________ Date received: __/__/__ Provider: ____________________________
  - Dose 2: _________ Type: __________ Date received: __/__/__ Provider: ____________________________
- □ Yes □ No □ DK □ NA
- Ever received varicella vaccine:
- Vaccine series not up to date reason:
  - □ Religious exemption
  - □ Medical contraindication

6/26/2017
• Schools and daycares report individual cases
  – Identify and prevent outbreaks/clusters
  – Suggest if there are vaccine handling issues

• 2017 YTD: 30 cases
  – 2 schools with ≥5 cases
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Surveillance - Impact in Clark County

Chickenpox Cases Reported to Clark County, by Case Classification
2015-2017 YTD

- 2015: 42 cases (42 probable)
- 2016: 33 cases (10 probable, 23 confirmed)
- 2017 YTD: 30 cases (22 probable, 8 confirmed)

Legend:
- Probable
- Confirmed
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Surveillance - Impact in Clark County

Chickenpox Cases Report to Clark County, by Age
2015-2017 YTD

- Number of Cases
- Age (Years)

- <1
- 1-3
- 4-6
- 7-10
- 11-15
- >15

- 2017 YTD
- 2016
- 2015
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Surveillance - Impact in Clark County
Defining an outbreak:

• 5+ cases, linked in place and time – CDC designation

• Work with school to implement outbreak response.
1. Strengthen response capacity
2. Work with schools to confirm presence of outbreak
3. Provide recommendations for control measures in schools
4. Surveillance - data management and analysis
5. Determine end of outbreak

| Clark County School Chickenpox Outbreaks, 2017 |
|-----------------|-----------------|-----------------|
|                | Outbreak 1      | Outbreak 2      |
| Number of cases| 9               | 9               |
| Duration of outbreak | 16 weeks      | 9 weeks*        |
| Schoolwide vaccination rate | 94.4%       | 89.5%           |
| Percent of cases with up to date vaccination | 11.1%        | 22.2%           |

*Outbreak duration was shortened due to end of school year
• In outbreak situations, Public Health may recommend exclusion.
  – Why is this done?

• All individuals who cannot provide proof of immunity:
  – Chickenpox: 21-days from last exposure at school.

• Proof of immunity:
  – Vaccination
  – Serology
  – Provider diagnosis of previous disease
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Community Outreach

- Collaboration to implement precautions and recommendations
- Partnership with health care organizations to provide response and care measures
- Provide partner education
- Media response

Chickenpox outbreak hits Vancouver elementary
Walnut Grove has a 10% rate of unvaccinated students

Amy Freasier and KOIN 6 News Staff
Published: June 8, 2017, 4:05 pm | Updated: June 8, 2017, 6:40 pm
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Summary

• Chickenpox remains a notable presence in our community

• Severe complications can arise from chickenpox, especially among vulnerable individuals

• CCPH works:
  – to prevent illness through data sharing and education
  – to strengthen response systems by working with partners

• Strong surveillance and response mechanisms are essential for rapid disease detection and outbreak mitigation.
Questions?

Madison Riethman, MPH
CDC/CSTE Applied Epidemiology Fellow

madison.riethman@clark.wa.gov
360.397.8242