

# MUMPS IN KENTUCKY

Robert L. Brawley, MD, MPH, FSHEA  
Chief, Infectious Disease Branch  
Division of Epidemiology and Health Planning

Melissa Eastman, RN  
Division of Epidemiology and Health Planning  
Immunization Program



## Signs and Symptoms

- Fever
- Headache
- Muscle Aches
- Tiredness
- Loss of appetite
- Parotitis - swollen glands under the ears or jaws



## Complications

- **Children**
  - Deafness
  - Encephalitis
- **Adolescents and Adults**
  - Orchitis
  - Oophoritis
- **Adults**
  - Meningitis
  - Pancreatitis
- **Pregnancy**
  - Miscarriage during the early months of pregnancy

3

## How Mumps Spreads

Mumps spreads when an infected person coughs or sneezes or if infected droplets are transferred to an object.

- 1-2 days before parotitis
- Up to 5 days after the onset of parotitis

4

## Incubation and Exclusion Period

Cases can occur from 12 to 25 days after exposure but it is usually between 16-18 days.

Exclusion is 5 days from the onset of swelling

5

## Prevention

- Vaccination with 2 doses of MMR vaccine
- Education
  - Colleges and Universities
  - Communities
  - Schools
    - <http://chfs.ky.gov/dph/epi/immunization.htm>

6

## What can be done to prevent mumps from spreading?

- Cover mouth and nose when sneezing or coughing
- Wash hands often with soap and water
- Avoid sharing drinks or eating utensils
- Disinfecting frequently touched surfaces such as toys, doorknobs, tables, and counters.

7

## Presumptive Evidence of Immunity for Healthcare Workers

- written documentation of vaccination with 2 doses of live mumps or MMR vaccine administered at least 28 days apart,
- laboratory evidence of immunity,
- laboratory confirmation of disease, or
- birth before 1957.

8

## Presumptive Evidence of Immunity for Healthcare Workers

- Birth before 1957
  - CONSIDER vaccination with 2 doses:
    - Unvaccinated personnel without laboratory evidence of mumps or lab confirmation of disease
  - RECOMMEND vaccination with 2 doses:
    - Unvaccinated personnel without laboratory evidence of mumps or lab confirmation of disease DURING AN OUTBREAK

9

## Laboratory Testing

- **Mumps RT-PCR – preferred testing**
  - Buccal swab or throat swab
    - Within 3 days but not more than 8 days after parotitis
      - Shipping/storage:
        - Store in 2 mL viral transport media at 4° C if shipping within 24 hours
        - If shipping is delayed, freeze at -70° C and ship frozen
- **Mumps IgM antibody**

10

## Mumps RT-PCR Testing

Note this info from CDC on obtaining a specimen for RT-PCR:

"Parotid duct swabs yield the best viral sample. This is particularly true when the salivary gland area is massaged approximately 30 seconds prior to swabbing the buccal/parotid duct, so that the specimen contains the secretions from the parotid or other salivary duct glands. Efforts should be made to obtain the specimen as soon as possible after onset of parotitis. Clinical specimens should ideally be obtained within three days and not more than eight days after parotitis onset.", <http://www.cdc.gov/vaccines/pubs/surv-manual/chpt09-mumps.html#laboratory>

11

## Vaccine Information

- Vaccine for Children (VFC)
- Outbreak funds for purchasing vaccines (317)
- Rita Lathrem, Vaccine Accountability Rep.
  - 502-564-4478 ext. 4258 or  
rita.lathrem@ky.gov

12



## Questions about Mumps

Melissa Eastman, RN  
Division of Epidemiology and Health Planning  
Immunization Program  
502-564-4478 ext. 4254  
[melissa.eastman@ky.gov](mailto:melissa.eastman@ky.gov)