TO: Physicians and other Health Care Providers

Please distribute a copy of this information to each provider in your organization.

Questions regarding this information may be directed to the office of:

Alan Melnick, MD, MPH, CPH
Health Officer
Clark County Public Health
Phone: (360) 397-8412

Alert categories:

- **Health Alert**: conveys the highest level of importance; warrants immediate action or attention.

- **Health Advisory**: provides important information for a specific incident or situation; may not require immediate action.

- **Health Update**: provides updated information regarding an incident or situation; no immediate action necessary.

To subscribe or unsubscribe from this listserv, email: Tippy.Hartford@clark.wa.gov.
Summary

Clark County Public Health (CCPH) was recently notified of a laboratory-confirmed case of mumps in an individual who attended Union High School during their contagious period in late March. Although risk of transmission is considered low, CCPH is working with the school to notify students, parents, and staff of the exposure (see enclosed school notification letter), and to provide additional information about mumps identification, prevention, and response. This notification may result in calls to local healthcare providers with questions or concerns about the disease.

Requested Actions

• Consider mumps in the differential diagnosis of patients with compatible symptoms
  Any person who has parotitis should be evaluated. Even fully vaccinated persons can develop parotitis or mild, nonspecific symptoms such as fever, malaise, or testicular pain. In the absence of parotitis, clinicians should evaluate the full differential diagnosis of mild, nonspecific etiologies before requesting mumps testing. Providers are encouraged to use the enclosed Suspect Mumps Worksheet in evaluating patients with mumps exposure or mumps-like symptoms.

• Report suspect and confirmed cases to CCPH within 24 hours
  In Washington State, a suspect mumps case is reportable to public health within 24 hours. Please report to CCPH using the Suspect Mumps Worksheet or by contacting the Communicable Disease Unit at (360) 397.8182. Early notification allows early follow-up by public health.

• Contact CCPH prior to specimen submission to the WA State Public Health Lab
  All requests for mumps testing through the Washington State Public Health Lab must first be approved by CCPH prior to specimen submission.

Additional Information

Washington State Department of Health:
https://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/NotifiableConditions/Mumps

Centers for Disease Control and Prevention:
https://www.cdc.gov/mumps/hcp.html

CCPH Communicable Disease Program:
Phone: (360) 397.8182 | Fax: (360) 397.8080 (secure line)

To subscribe or unsubscribe from this listserv, email: Tippy.Hartford@clark.wa.gov.
Suspect Mumps Worksheet

SUSPECT and CONFIRMED cases are reportable to Clark County Public Health within 24 hours

Date submitted to CCPH: ___ / ___ /_____

| Patient Name: | MRN: | Sex: □ M □ F | DOB: ___ / ___ /_____
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<tr>
<td>Evaluating Clinician:</td>
<td>Date of Eval: ___ / ___ /_____</td>
<td>Clinician Phone: (___) -</td>
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INSTRUCTIONS:
1. Consider mumps in the differential diagnosis of patients with compatible symptoms, including:
   - Non-specific prodrome of low-grade fever, malaise, headache, myalgia, and anorexia.
   - Swollen tender salivary glands near lower ears on one or both sides (parotitis).
   - Orchitis (may develop in <10% of males with mumps infection).

2. Complete the sections below by checking the box for all that apply, then fax to CCPH at (360) 397.8080.
3. Mumps is highly suspected if you answered YES to at least one item in section A.

Section A: Does the patient have any of the following characteristics?

☐ 2 or more days of clinically diagnosed parotitis or salivary gland swelling.
☐ Clinically diagnosed orchitis or oophoritis unexplained by any other likely diagnosis.
☐ Positive lab result (IgM or PCR) with no mumps clinical symptoms (with or without epidemiological linkage to a confirmed or probable case).

Onset date: ___ / ___ /_____

Onset date: ___ / ___ /_____

Type of lab:

Section B:

☐ Ever received the MMR vaccine?

☐ Dates of MMR vaccine known?
   - Dose #1: ___ / ___ /_____
   - Dose #2: ___ / ___ /_____

☐ Known exposure to a suspect or confirmed mumps case?

Contact was within 3 days before and 5 days after parotitis onset in index case.

Exposure date: ___ / ___ /_____

Details of exposure:

For any suspect case IMMEDIATELY:

☐ Initiate droplet and standard precautions per your facilities infection control procedures. Ensure suspect mumps cases wear a mask that covers the nose and mouth and ensure that only staff with documented immunity to mumps are allowed to enter the patient’s room.

☐ Call CCPH to report the suspect case and to arrange PCR testing at the Washington State Public Health Lab. All health care providers must receive approval from CCPH prior to specimen submission.

☐ Exclude patient from school, work and other public places until the 6th day after onset of parotitis. Notify patient that CCPH may contact them if their test is positive.

☐ Once testing is approved by CCPH, order RT-PCR for mumps through the Washington State Public Health Lab, following instructions on page 2.

For CCPH Use Only

Public health lab testing: □ Approved □ Not approved

CCPH staff initials: __________

Date: ___ / ___ /_____

Date revised: 4/13/2018
Specimen Collection Instructions

☐ Determine which specimens need to be collected:

- For days 0-3 after onset of parotitis (with the day of onset being day 0), collect a buccal swab.
  ➔ Massage the parotid gland for about 30 seconds prior to collecting specimen. Place a Dacron (or polyester, NOT cotton) swab between the rear molars and cheek (on the affected side if parotitis is unilateral) and leave in place 10-15 seconds. Place swab in a tube containing 2-3 mL of cold viral transport medium.
  ➔ Tape or parafilm the specimen collection tube to prevent leaking. Make sure patient name and second identifier are on the specimen label.

- For days 4-10 after onset of parotitis (with the day of onset being day 0), collect both a buccal swab and urine.
  ➔ Collect buccal swab as described above.
  ➔ Collect urine (between 10-50 ccs) in a sterile cup. Keep cold after collection and during shipment. Send urine in a sputum cup if possible as these leak less in shipment.
  ➔ Tape or parafilm the specimen collection containers to prevent leaking. Make sure patient name and second identifier are on the specimen labels.

☐ Collect specimen(s) following the Public Health Lab mumps RT-PCR collection guidelines: http://www.doh.wa.gov/Portals/1/Documents/5240/SCSI-Mumps-RTPCR-V2.pdf

☐ When ordering, indicate that specimens are to be shipped to Washington State Public Health Laboratories for RT-PCR for mumps.

☐ Complete the Public Health Lab Virology Specimen Submission form for each specimen submitted: http://www.doh.wa.gov/Portals/1/Documents/5230/302-017-SerVirHIV.pdf

Make sure all of the following information is filled out on the virology form:

- Patient name, second identifier (e.g. date of birth), and county of residence.
- Specimen type, date of collection, onset date and test requested (mumps RT-PCR).
- Submitter name, address, and telephone/fax numbers.

☐ Consider commercial testing for IgM and IgG in addition to the above test.

If serologic testing is desired, serum can be sent commercially (do not send to Washington State Public Health Lab) and both IgM and IgG results should be requested. Please note, follow up to determine IgG results will be important for patients with unknown vaccination status, since a negative PCR cannot rule out mumps on a person previously exposed to mumps antigen, either by vaccination or previous infection.

CCPH Communicable Disease Unit:
Phone: (360) 397.8182       Fax: (360) 397.8080
Dear Union High School Parent or Staff,

This letter is to inform you that an individual at Union High School has been diagnosed with mumps. Although risk of transmission to you or your child is low, this letter provides information specific to checking vaccination history for protection against mumps, and what to do if you/your child develops symptoms of mumps.

**What is mumps?**
Mumps is an illness caused by a virus that can lead to fever, headache, tiredness, loss of appetite, and swelling/pain of the cheeks and jaw. Severe complications are rare, but may include swelling of the brain and/or tissue covering the brain and spinal cord, deafness, and swelling of the testicles or ovaries. Up to 30% of people with mumps infection will have no symptoms. Symptoms usually appear 16-18 days after a person is exposed to the virus, but could occur 12-25 days after exposure.

**How is mumps spread?**
A person with mumps can spread the virus by coughing, sneezing, or talking. It can also be spread when an ill person shares drinking cups or forks and spoons, and when they touch objects or surfaces with unwashed hands that are then touched by others.

**Who is at higher risk of getting mumps?**
- Infants who are too young to get the mumps vaccine (under 1 year of age);
- Children over 1 year of age who did not get at least 1 shot of MMR (2 shots are required for school-aged children); and
- Adults born in or after 1957 who were not vaccinated or who did not previously have mumps (adults born before 1957 likely had mumps as children and are usually considered protected from the virus).

**What should I do now?**
It’s very important that you check your/your child’s vaccination history for protection against mumps. The CDC recommends two shots of MMR (measles-mumps-rubella) vaccine, which is administered during routine childhood vaccinations. If you/your child do not have evidence of immunity against the mumps virus, and if more mumps cases are identified at your school, it is possible you/your child may be asked not to attend school until the outbreak is over. If you/your child have not received two MMR shots, please seek vaccination at a healthcare provider’s office or visit your local pharmacy.

Please note that, while the MMR is a very good vaccine (one shot is 78% effective, while two shots are 88% effective), even with vaccination, there is still a slight chance that someone can become sick with mumps.
Watch for symptoms of mumps (fever, headache, tiredness, loss of appetite, and swelling/pain of the cheeks and jaw). If you/your child develop any of the symptoms, you should:

- Call a healthcare provider and tell them about the observed symptoms and the potential exposure to mumps. Share this letter with the healthcare provider. If you visit a provider’s office, please call the office beforehand so they can take steps to prevent others from getting sick.
- Until observed by a healthcare provider and no longer symptomatic, ill individuals should stay home and avoid other people and public settings.

Please see the attached mumps Frequently Asked Questions for more information. If you have additional questions, please call your healthcare provider, the school nurse, or Clark County Public Health at 360-397-8182.

Sincerely,

Clark County Public Health
Communicable Disease Staff
Mumps

What is mumps?
Mumps is a disease caused by a virus. Mumps is best known for the facial and jaw swelling that can be caused by the virus.

Who is most susceptible to mumps?
Anyone born January 1, 1957 or later who has not had mumps or has not been vaccinated is susceptible to mumps.

How is mumps spread?
Mumps spreads person to person via droplets of saliva or mucus from the mouth, nose or throat of an infected person, usually when the person coughs, sneezes or talks. The virus can also be spread when someone with mumps touches items or surfaces without washing their hands and then someone else touches the same surface and rubs their mouth or nose.

What are the symptoms of the disease?
Individuals with mumps usually first feel sick with nonspecific symptoms like headache, loss of appetite and low-grade fever. The most well-known sign of mumps is parotitis, the swelling of the salivary glands below the ear. Some people with mumps have very mild symptoms or no symptoms at all.

How soon after an infection do the symptoms appear?
Symptoms may appear 12-25 days after exposure, usually 16-18 days after exposure.

When and for how long is a person able to spread mumps?
People can spread mumps from 3 days before until 5 days after parotitis (swelling of the salivary glands) begins.

Does infection with mumps make a person immune?
Yes. After illness, a person probably has lifelong immunity to mumps.

Is there a treatment for mumps?
No, there is no specific treatment beyond bed rest, fluids, and control of fever. There may be additional treatment if complications develop.

How serious mumps?
In children, mumps is usually a mild disease. Adults may have more serious disease and more complications.

What are the complications associated with mumps?
Up to 10% of post-pubertal males experience orchitis (testicular inflammation), which may involve pain, swelling, nausea, vomiting and fever, with tenderness of the area possibly lasting for weeks. Inflammation of the ovaries (oophoritis) and/or breasts (mastitis) can occur in females who have reached puberty.

An increase in spontaneous abortion (miscarriage) has been found among women who developed mumps during the first trimester of pregnancy in some studies but not others. Deafness, inflammation of the brain (encephalitis), and inflammation of the tissue covering the brain and spinal cord (meningitis) are also rare complications.

How common is mumps?
Due to good immunization coverage, mumps is now rare in the United States. From year to year, mumps cases can range from roughly a couple hundred to a couple thousand.

In some years, there are more cases of mumps than usual because of outbreaks. A major factor contributing to outbreaks is being in a crowded environment, such as attending the same class or being in a dormitory with a person who has mumps. Mumps outbreaks on university campuses can be common.

Are there vaccines for mumps?
Yes. Mumps is usually combined with measles and rubella in the MMR vaccine.

- Children should receive two doses of MMR vaccine: the first at 12 to 15 months of age and the second at 4 to 6 years of age.
- Adults born before January 1, 1957 are assumed to be immune to mumps. Other adults (except for pregnant women) who have not had mumps or been vaccinated are at risk and should get at least one dose of MMR vaccine. Pregnant women should not be vaccinated until after delivery.
- Certain adults (such as healthcare workers, international travelers, or adults attending post high school educational institutions) should receive two doses of MMR vaccine.

How effective is the mumps vaccine?
MMR vaccine prevents most, but not all, cases of mumps and complications caused by the disease. Two doses of the

Adapted from Spokane Regional Health District - April 2018
vaccine are 88% (range: 66%-95%) effective at preventing mumps; one dose is 78% (range: 49%-92%) effective.

The first vaccine against mumps was licensed in the United States in 1967. By 2005, mumps rates declined by more than 99% thanks to high two-dose vaccination coverage among children.

What can be done to prevent the spread of mumps?

- Protect your self and your children by vaccinating or ensuring immunity to mumps.
- Wash your hands often with warm water and soap throughout the day.
- Avoid sharing personal items, such as classes, cups, or eating utensils.
- Cover your cough and sneezes with your arm or a tissue (and then throwing the tissue away). Wash your hands after coughing and sneezing.
- Avoid being around people who are ill. Stay home and away from others if you are ill yourself.
- If you think you might have been exposed to mumps and need to seek healthcare, call ahead so appropriate measures can be taken to protect other patients and staff.

For more information:

Clark County Public Health
Communicable Disease
(360) 397-8182