# Pediatric Readiness Program Education Session


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# Measles, Chickenpox, Pertussis! Oh My!

## Quickly Identifying Contagious Patients and Minimizing Exposures

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# CME Disclosure Statement

None of the planners and faculty for this educational activity have relevant financial relationship(s) to disclose with ineligible companies whose primary business is producing, marketing, selling, reselling, or distributing healthcare products used by or on patients.

# Learning Objectives

- Summarize the concept of syndromic surveillance
- Demonstrate a general knowledge of transmission-based precautions to prevent the spread of infectious diseases
- Recognize the key signs and symptoms to identify patients with measles, chickenpox, and pertussis

# ”Why is early identification and isolation so important?”

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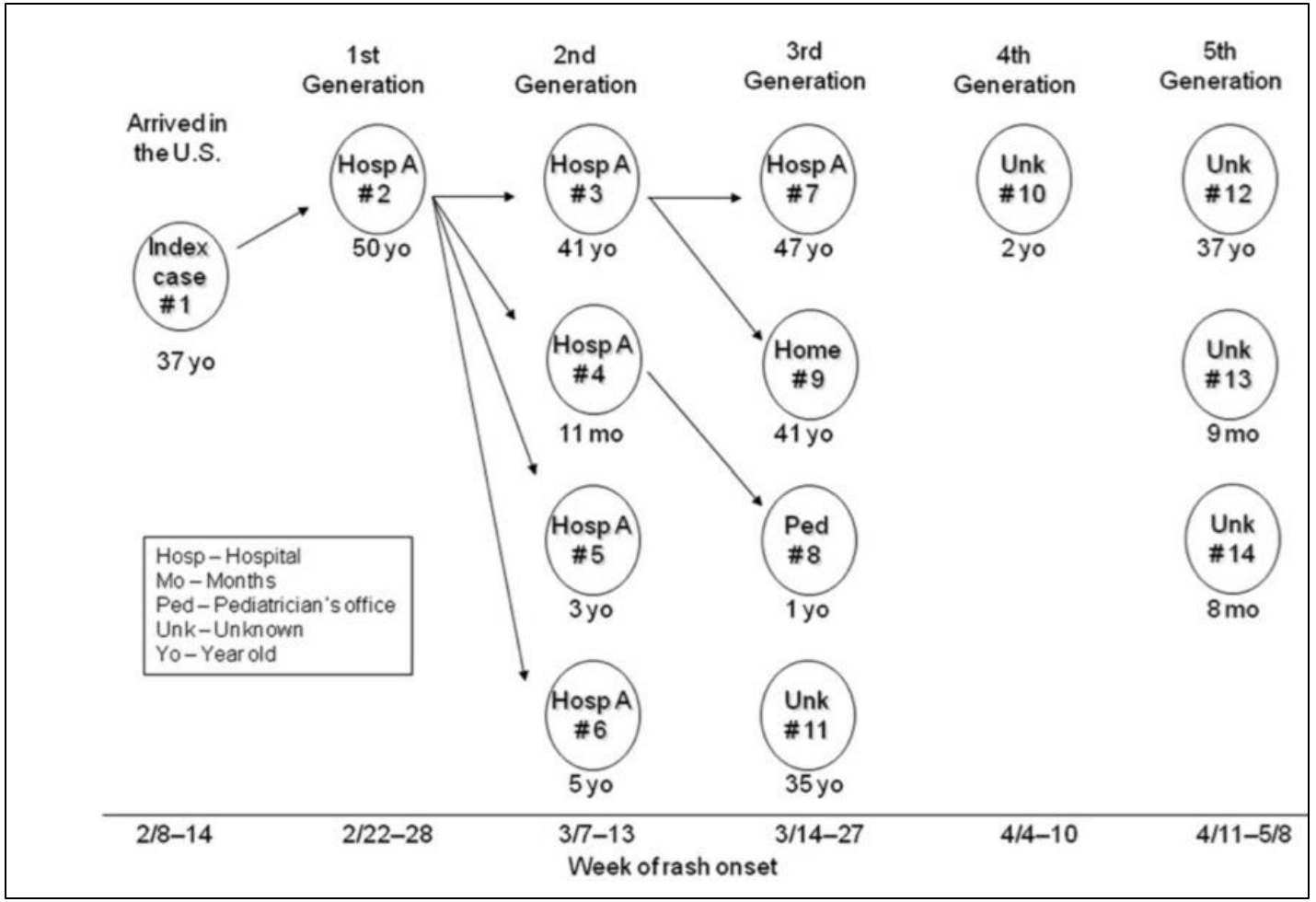
# Measles outbreak starting in an Arizona ED (2008)

- **One unvaccinated Swiss traveler with classic measles visited Emergency Dept in Arizona**
  - Two ED visits: She was not isolated either time
- **This led to 14 cases of measles… over a 3 month-long outbreak!**



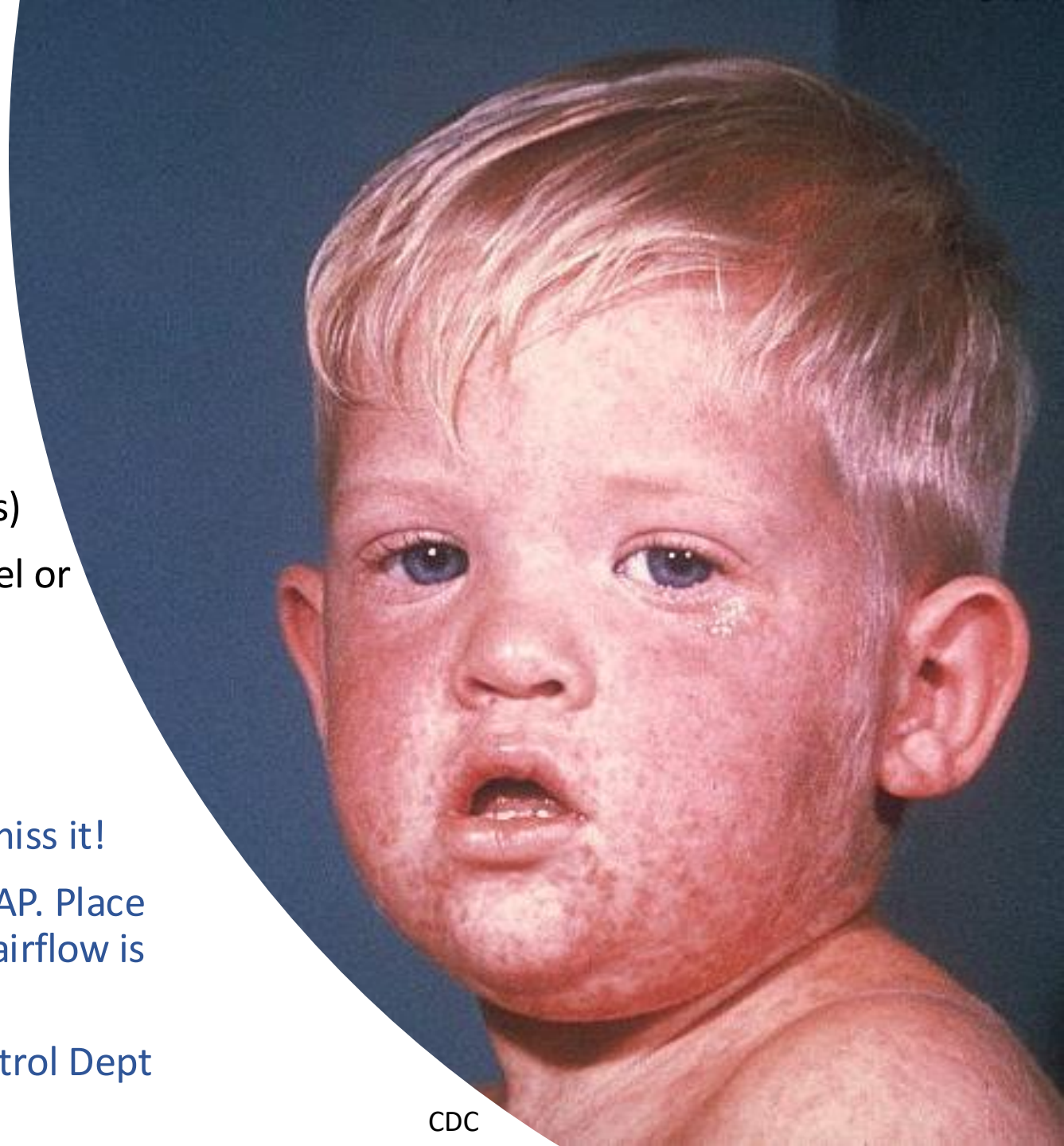

*The Journal of Infectious Diseases*, 203 (11), 2011: 1517–1525

# Measles

- Highly contagious viral infection
- Cough, coryza (runny nose), conjunctivitis (red eyes)
- Most cases are unvaccinated (MMR) and have travel or known exposure history

**INFECTION CONTROL**

- **IDENTIFY**: Be aware of these symptoms, or you'll miss it!
- **ISOLATE**: Put on a mask. Place mask on patient ASAP. Place in AIRBORNE ISOLATION…and confirm the room's airflow is negative pressure
- **INFORM:** Clinic manager, charge RN, Infection Control Dept



CDC

# Several patients were seen in ED and were not isolated!

Getty Images/iStockphoto

| | Age | Vaccination status | Measles exposure | Past medical history | Symptoms | Medical care (date) | Clinical diagnosis/laboratory testing[a] | Isolated (date) |
|---|---|---|---|---|---|---|---|---|
| 1 | 37 years | Unvaccinated | Imported | Thalassemia | Fever, cough, coryza, sore throat, myalgia | ED (12 February) | Acute bronchitis | No |
| | | | | | Fever, cough, coryza, sore throat, rash, dehydration | ED (13 February), admitted (13–18 February) | Acute viral illness, measles; positive IgM and PCR results; D5 genotype | Yes (15 February) |
| 2 | 50 years | Unknown | ED | Chronic obstructive pulmonary disease | Fever, shortness of breath, diarrhea, difficulty breathing | ED (24 February), admitted (24–26 February) | Asthma exacerbation | No |
| | | | | | Rash, conjunctivitis, cough, pneumonia | ED (28 February), admitted (28 February–3 March) | Allergic drug reaction, pneumonia, measles; positive IgM and PCR results, D5 genotype | Yes (28 February) |
| 3 | 41 years[b] | Unknown | Hospital | Asthma | Fever, cough, coryza, conjunctivitis, shortness of breath | ED (7 March) | Upper respiratory infection | No |
| | | | | | Rash, fever, cough, coryza, koplik spots, conjunctivitis | ED (9 March) | Measles; positive IgM and PCR results, D5 genotype | Yes (9 March) |
| 4 | 11 months | Unvaccinated | ED | None | Fever, cough, coryza, diarrhea | Pediatrician (7 March) | Otitis media | No |
| | | | | | Fever, cough, coryza, diarrhea | Pediatrician (10 March) | Upper respiratory infection | No |
| 6 | 5 years[c] | Unvaccinated (PBE) | Hospital | None | Fever cough, coryza, rash, koplik spots | Pediatrician (10 March) | Measles; positive IgM result, PCR not performed | No |
| 7 | 47 years | Unknown | ED | Hypertension, pyelonepritis, cholecystitis | Fever, cough, coryza, conjunctivitis, dehydration | ED (19 March) | Urinary tract infection | No |
| | | | | | Rash, diarrhea, cough, pneumonia, thrush, conjunctivitis | ED (22 March), ICU (22–25 March) | Pneumonia, measles; positive IgM and PCR results, D5 genotype | Yes (24 March) |
| 8 | 1 year[d] | Unvaccinated | Pediatrician | None | Fever, coryza, rash earache, diarrhea | No | Measles IgM testing not performed, negative PCR results | - |
| 9 | 41 years[d] | Unknown | Home | Brain cancer | Rash, fever, cough, coryza, conjunctivitis | No | Positive measles IgM result, PCR not performed | - |
| 10 | 2 years | Unvaccinated | Unknown | Unknown | Fever, seizures, rash | ED (3 April), ICU (3–8 April) | Generalized complex seizures, measles; positive IgM and PCR results | No |
| 11 | 35 years | Unknown (SR) | Unknown | Unknown | Fever, diarrhea, rash, cough, conjunctivitis | No | Positive measles IgM results, PCR not performed | … |
| 12 | 37 years | Unknown (SR) | Unknown | MDS, Down syndrome | Rash, fever, cough, coryza, dehydration conjunctivitis, photophobia, diarrhea, sore throat | Oncology (7, 11, and 15 April) | Measles; negative measles IgM and positive PCR results | … |
| 13 | 9 months | Unvaccinated | Unknown | None | Fever, coryza, rash, earache | ED (3 May) | Otitis media, measles; positive IgM results, PCR not performed | No |

*The Journal of Infectious Diseases*, 203 (11), 2011: 1517–1525

# Measles

Measles (Rubeola)

EXPLORE TOPICS

SEARCH

APRIL 18, 2025 ESPAÑOL

## Measles Cases and Outbreaks

WHAT TO KNOW

- Updated on April 18, 2025. The data on this page reflects confirmed measles cases reported to CDC as of noon on Thursdays.
- Starting 2/21/25, CDC will update this page every Friday.

## Measles cases in 2025

**For Healthcare Providers**

Learn what to do if you suspect your patient has measles or was exposed to measles.
Healthcare Providers: Stay Alert for Measles Cases

As of April 17, 2025, a total of 800 confirmed* measles cases were reported by 25 jurisdictions: Alaska, Arkansas, California, Colorado, Florida, Georgia, Hawaii, Indiana, Kansas, Kentucky, Maryland, Michigan, Minnesota, New Jersey, New Mexico, New York City, New York State, Ohio, Oklahoma, Pennsylvania, Rhode Island, Tennessee, Texas, Vermont, and Washington.

ON THIS PAGE



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# Pertussis


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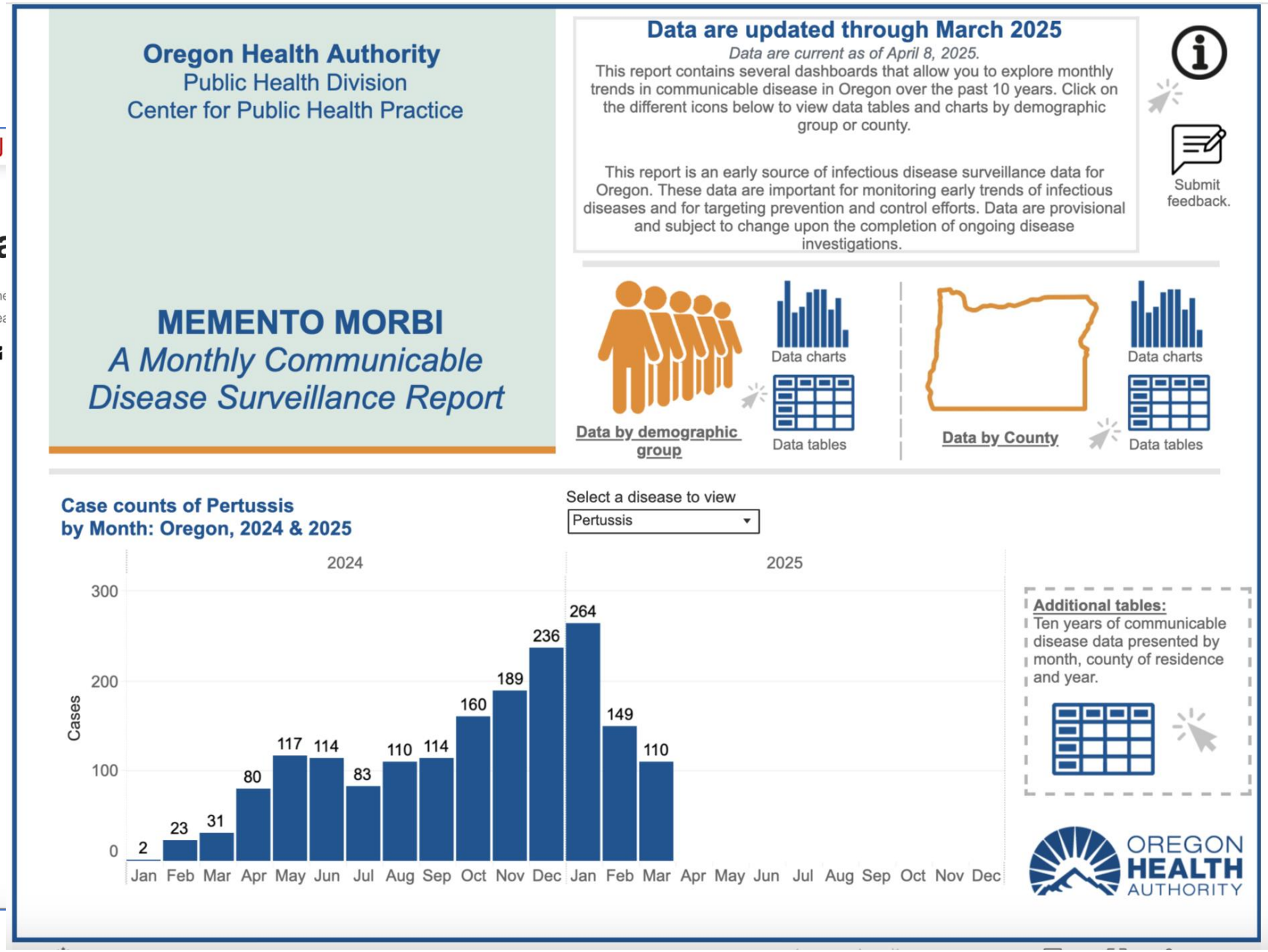
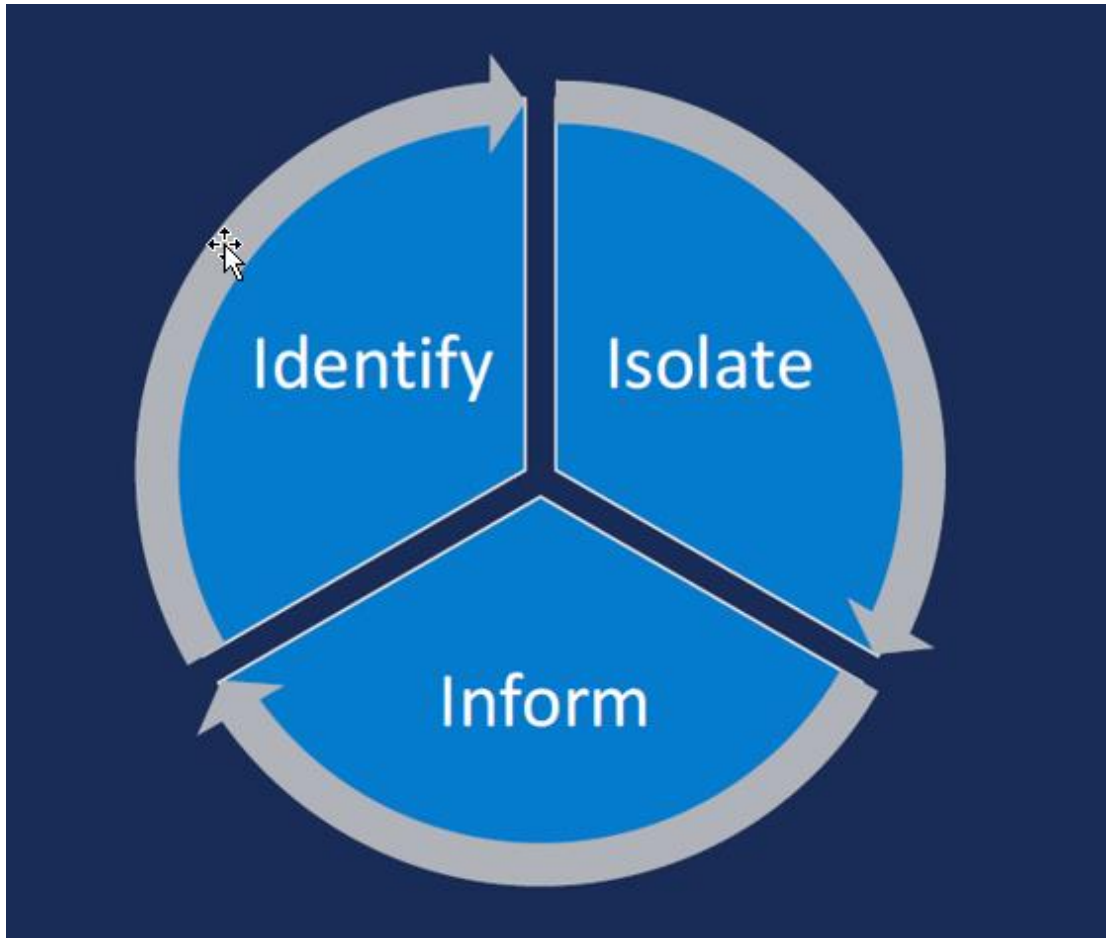

Oregon Health Authority
Public Health Division
Center for Public Health Practice
MEMENTO MORBI
A Monthly Communicable Disease Surveillance Report
Data are updated through March 2025
Data are current as of April 8, 2025.
This report contains several dashboards that allow you to explore monthly trends in communicable disease in Oregon over the past 10 years. Click on the different icons below to view data tables and charts by demographic group or county.
This report is an early source of infectious disease surveillance data for Oregon. These data are important for monitoring early trends of infectious diseases and for targeting prevention and control efforts. Data are provisional and subject to change upon the completion of ongoing disease investigations.
Submit feedback.
Data charts
Data tables
Data by demographic group
Data charts
Data tables
Data by County
Case counts of Pertussis by Month: Oregon, 2024 & 2025
Select a disease to view
Pertussis
2024
2025
Cases
300
200
100
0
2
23
31
80
117
114
83
110
114
160
189
236
264
149
110
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Additional tables:
Ten years of communicable disease data presented by month, county of residence and year.
OREGON HEALTH AUTHORITY

# Identify, Isolate and Inform: Applies to "An All-Hazards" Approach

**1. IDENTIFY** the contagious patient *as quickly as possible*!

Getty Images/iStockphoto




**2. ISOLATE** the patient, to minimize spread to other people

**3. INFORM** the appropriate team members, so that the patient receives the best care, and the patient is isolated appropriately!

# #1 IDENTIFY….how?


- **Evaluate each patient for signs and symptoms** of contagious diseases….for example, if pt has respiratory illness, give patient a mask! And put on a mask!
  - > **If YES: Ask if patient has been exposed** to anyone who has a known contagious disease. This can give you clues about additional isolation needs
- **Ask for travel history** to geographic areas where contagious diseases are common, or where an outbreak is occurring. This helps to identify **high-risk** diseases (TB, measles, chickenpox)!

**Patient Arrives at Check-In Desk or Triage.**

Getty Images/iStockphoto

**1. Ask about Symptoms:** Have you had a fever? Have you had respiratory illness, severe headache, rash, vomiting, or diarrhea?

***If yes, ask:***

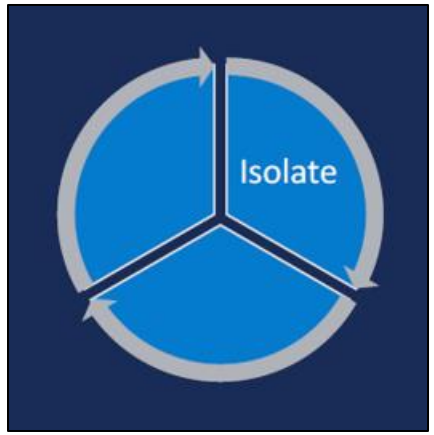
- Have you been in close contact with someone who recently traveled outside the US or Oregon and became sick, or has a contagious disease?

**2. Ask About Travel:**

- Have you traveled outside of the United States or Oregon in the last 30 days?
- Have you been in close contact with someone who became sick after travel outside the US or Oregon?

# #2 ISOLATE….how?


- **Administrative Controls:**
  - > Isolation precautions signs
  - > Know your facility's infection control policies!
- **Environmental Controls:**
  - > Airborne isolation (negative pressure) rooms
  - > Make sure the airflow is truly negative pressure!
- **Physical Controls (Standard Precautions):**
  - > Hand hygiene
  - > Cleaning and disinfection of environment and equipment
  - > Personal protective equipment (PPE)





CDC/ Kimberly Smith, Christine Ford

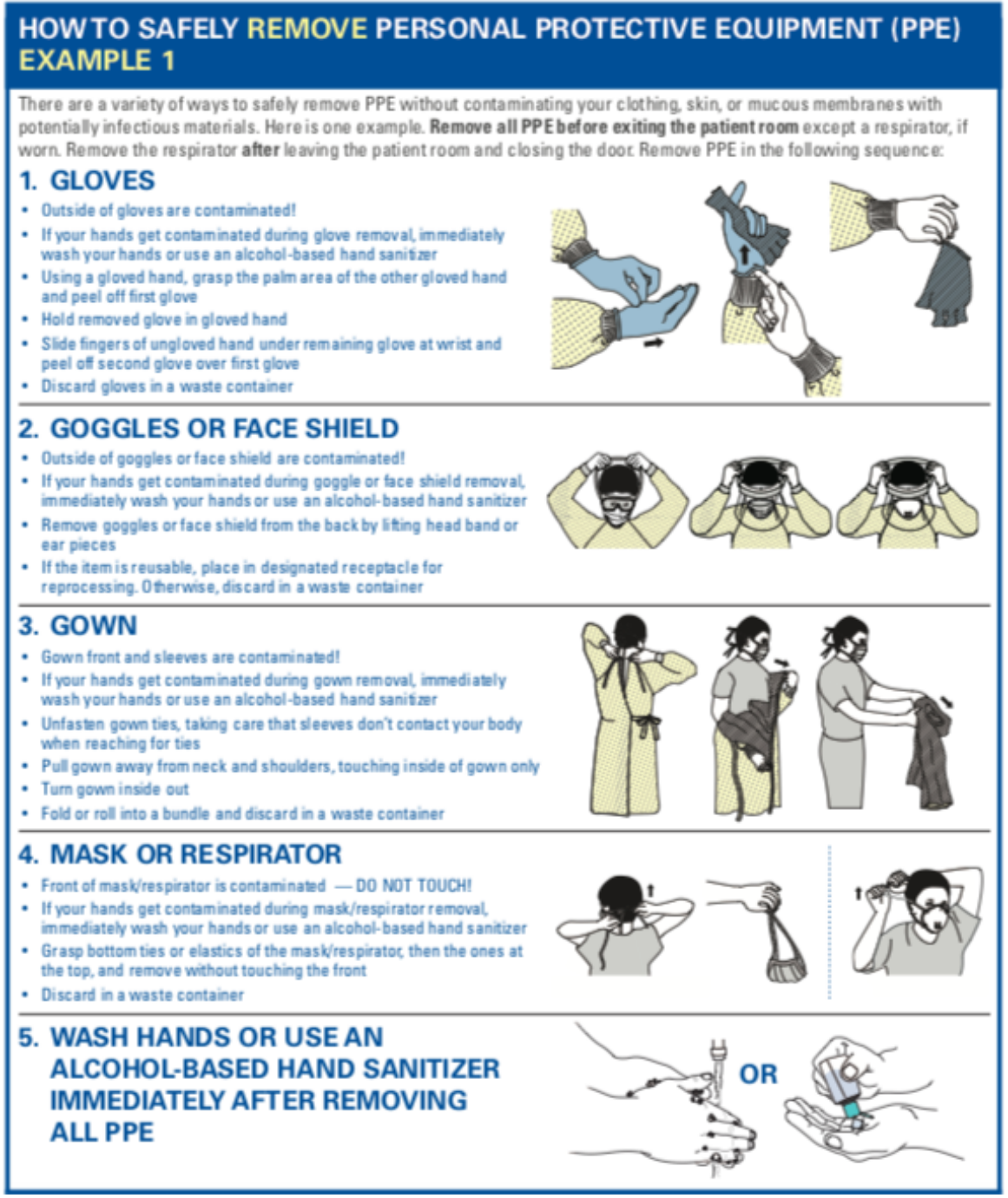
# Personal Protective Equipment (PPE)

## PPE Goals:

1. Protect healthcare personnel from exposure
2. Limit spread of contamination

## How it Works:

1. Think about the exposure risks *before* you start a task
2. Choose and put on your PPE components
3. Do your task…you are protected from exposure!
4. Remove PPE without contaminating yourself
5. Clean your hands



HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE)
EXAMPLE 1

There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Here is one example. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

**1. GLOVES**

- Outside of gloves are contaminated!
- If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove
- Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove
- Discard gloves in a waste container

**2. GOGGLES OR FACE SHIELD**

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band or ear pieces
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

**3. GOWN**

- Gown front and sleeves are contaminated!
- If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties
- Pull gown away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle and discard in a waste container

**4. MASK OR RESPIRATOR**

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container

**5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE**

OR

www.cdc.gov/hai

# Specific Isolation Precaution Categories


| Category | PPE Components | Examples |
|---|---|---|
| CONTACT precautions | Disposable gloves and gown | C difficile diarrhea |

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| AIRBORNE precautions | N-95 or powered air-purifying respirator (PAPR) | Pulmonary tuberculosis, measles |

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| COMBO (e.g. Contact + Droplet) | Disposable gloves + gown + mask | Infant bronchiolitis |

# “Standard Precautions”
# A 3 Step Decision-Making Process

| #1 What does the patient have, and What is my exposure risk? | #2 What is your planned task? | #3 How do you protect yourself? |
| --- | --- | --- |

# ”Standard Precautions”
# A 3 Step Decision-Making Process

**#1: What does the patient have, and What is my exposure risk?**

**Patient:** A large, open, infected wound with purulent drainage

**Risk:** The drainage could be loaded with bacteria (e.g., Staph aureus)

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| **Patient:** Cough, sneezing, fever<br><br>**Risk:** I could get coughed on. This could be influenza or another respiratory virus! | Check the patients blood pressure | |

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| **Patient:** Cough, sneezing, fever<br><br>**Risk:** I could get coughed on. This could be influenza or another respiratory virus! | Check the patients blood pressure | • Disposable facemask<br>• Clean your hands before and after patient contact<br>• Wipe down the cuff, if re-usable<br>• Follow **Droplet Precautions** |

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| **Patient:** Cough with any of the following: hemoptysis, weight loss, night sweats, and born/traveled to TB-endemic areas<br><br>**Risk**: This could be TB. The cough makes it highly contagious | | |

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| **Patient:** A large, open, infected wound with purulent drainage<br><br>**Risk:** The drainage could be loaded with bacteria (e.g., Staph aureus) | Clean the wound, then cover it with a new dressing | • Disposable gloves<br>• Clean your hands before and after wearing gloves!<br>• Isolation gown<br>• **Follow Contact Precautions** |
| **Patient:** Cough, sneezing, fever<br><br>**Risk:** I could get coughed on. This could be influenza or another respiratory virus! | Check the patients blood pressure | • Disposable facemask<br>• Clean your hands before and after patient contact<br>• Wipe down the cuff, if re-usable<br>• **Follow Droplet Precautions** |
| **Patient:** Cough with any of the following: hemoptysis, weight loss, night sweats, and born/traveled to TB-endemic areas<br><br>**Risk**: This could be TB. The cough makes it highly contagious | Perform an initial triage evaluation | • Patient: facemask ASAP<br>• You: N-95 respirator or PAPR (regular facemask is better than none)<br>• Place patient in private room, move to Airborne Isolation room ASAP<br>• **Follow Airborne Precautions** |

# #2 ISOLATE…which isolation category?

## More Patient Examples

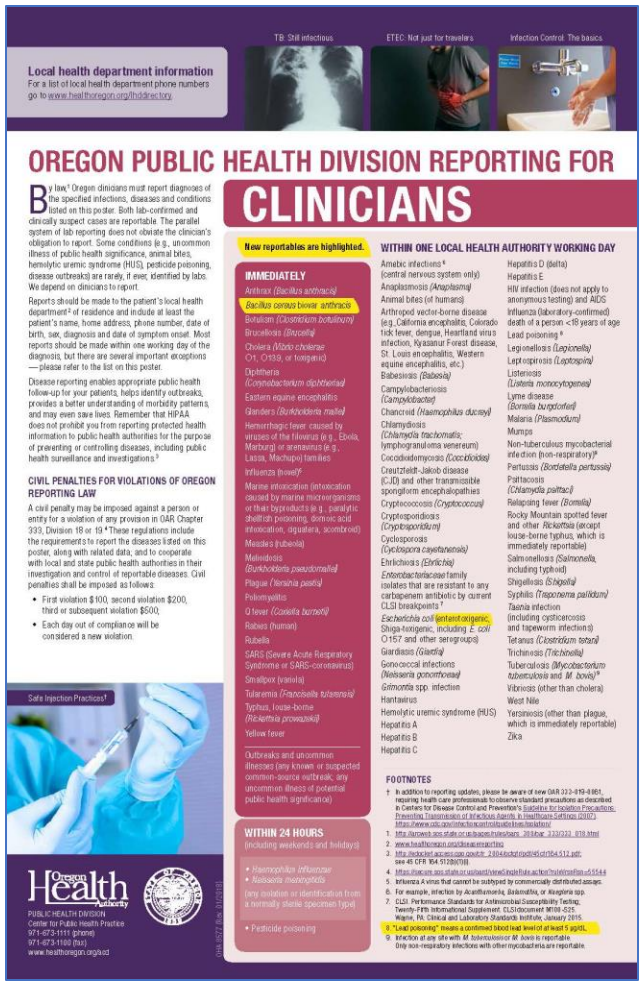
- If a patient with a left-sided rash has vesicles that are blisters or draining and/or a rash involving one dermatome on his body or face:
  - > Contact Precautions
- If an unvaccinated child with a rash has fluid-filled vesicles and her school is in midst of a chickenpox outbreak:
  - > Contact + Airborne Precautions
- If a patient has had three or more watery stools in the last 24 hours, or acute onset of vomiting and/or diarrhea:
  - > Contact Precautions

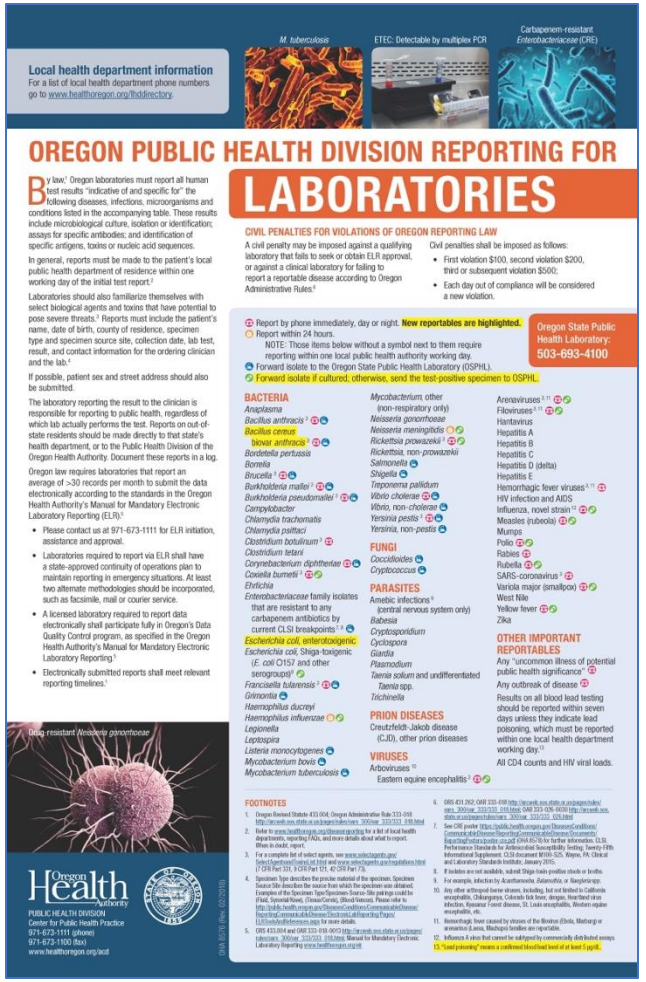
# #3 INFORM….who?


- **Who should be informed of suspected/confirmed infection?**
  - **Inpatient:** Any units receiving the patient from the ED (e.g., radiology, inpt unit)

    **Outpatient:** Clinic managers for high-risk infections (e.g., poss measles)
  - **If you are transferring pt to another facility:** Inform them of infection, even if not yet confirmed!
  - **ED:** Charge Nurse for high-risk infections (e.g., possible measles, Ebola, TB)
- **Who is responsible for informing these individuals?**
  - Be sure you know the Chain of Command for relaying information.
  - Keep your hospital colleagues, visitors, patients, and other facilities safe. They cannot isolate the patient if they don't know the risk.
- **Who else must be informed?**
  - **Infection Prevention & Control** will help to ensure correct isolation and decrease transmission risks
  - **Infectious Diseases** is the clinical team to ensure the patient receives the correct infection treatment
  - **Local Public Health Department** if a reportable disease or concern for outbreak

# Select Diseases Must Be Reported to Public Health




**“Lab-confirmed” cases and “clinically-suspected” cases are reportable**

**These helpful reference posters are free from OHA**

https://www.oregon.gov/oha

# Identify, Isolate and Inform:

## *Rapid assessment should happen with every patient you see in triage!*

**1. IDENTIFY** the contagious patient *as quickly as possible*!

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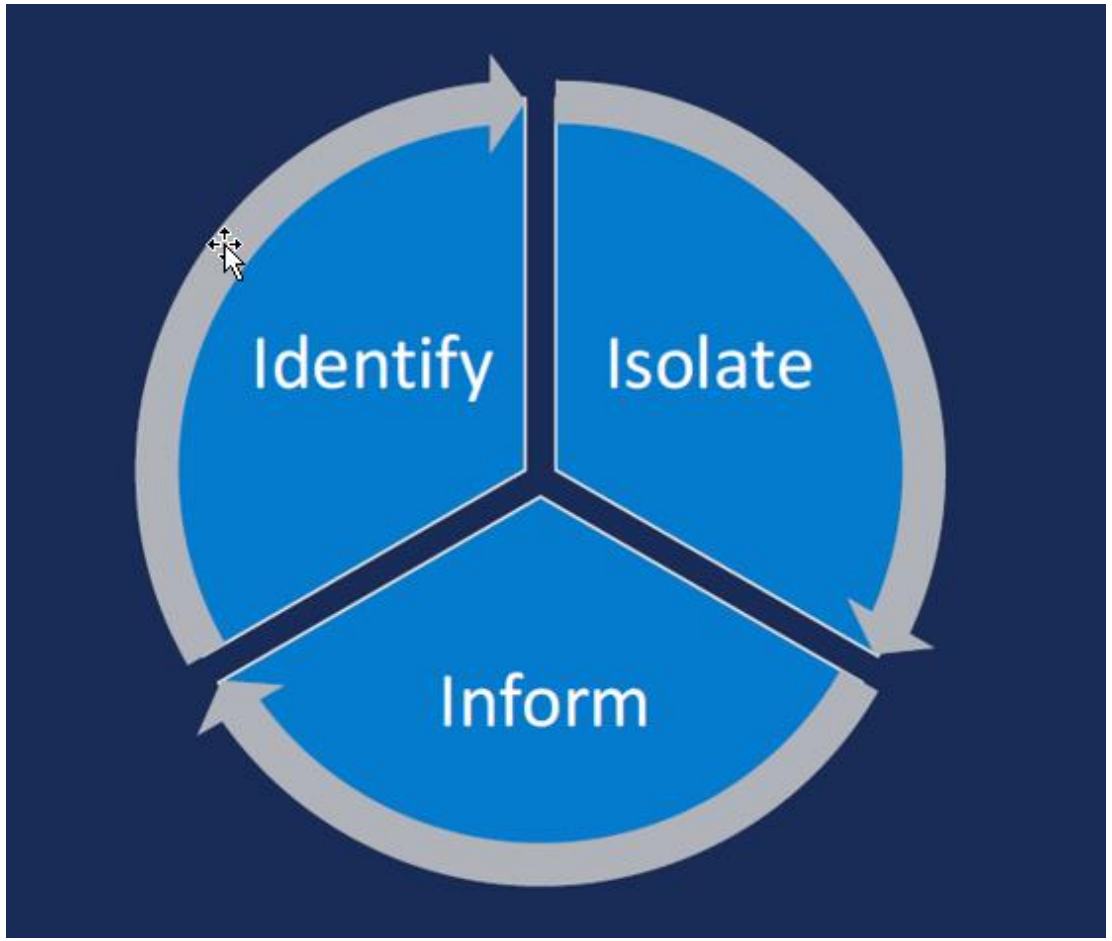



**2. ISOLATE** the patient, to minimize spread to other people

**3. INFORM** the appropriate team members, so that the patient receives the best care, and the patient is isolated appropriately!

# Identifying measles

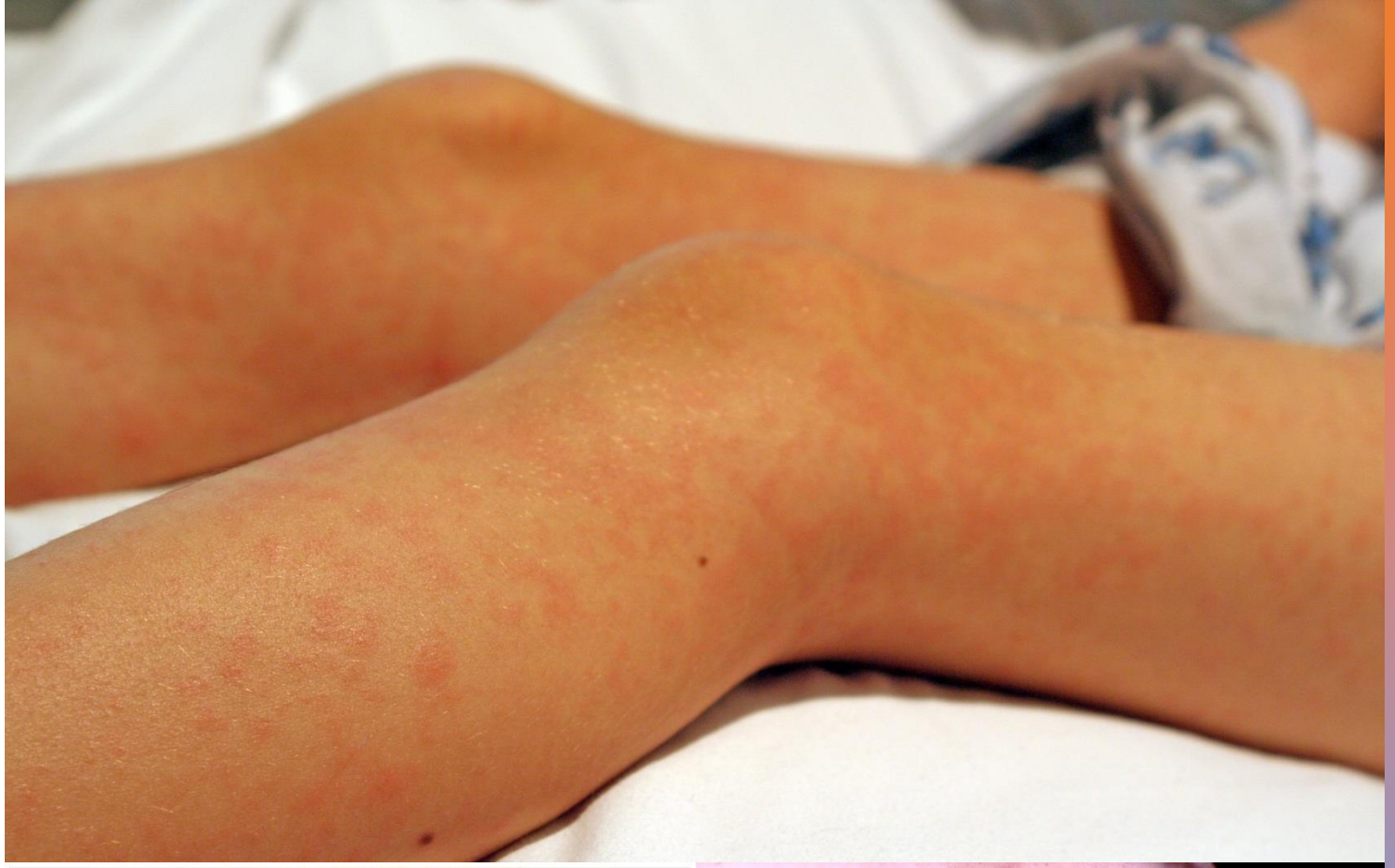
A prodrome of fever (as high as 105°F), malaise, and cough, coryza, and conjunctivitis (three "C"s)

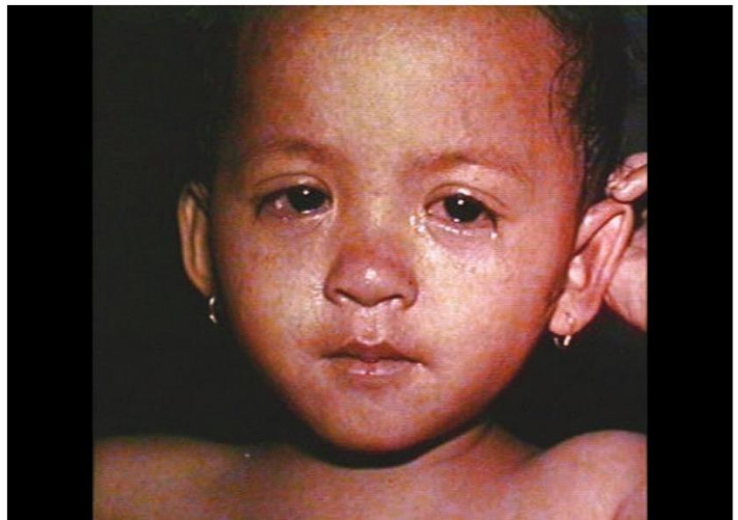
A pathognomonic enanthema (Koplik spots)

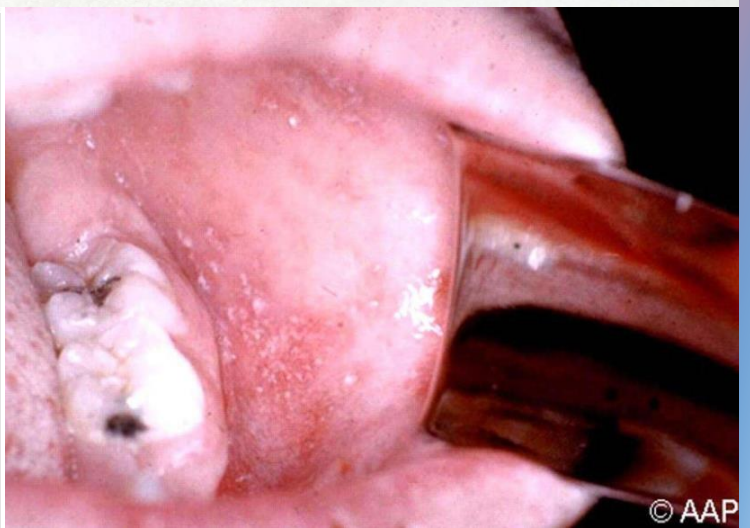
Followed by a maculopapular rash

The rash usually appears about 14 days after a person is exposed. The rash spreads **from the head to the trunk to the lower extremities**

Patients are considered to be contagious from 4 days before to 4 days after the rash appears







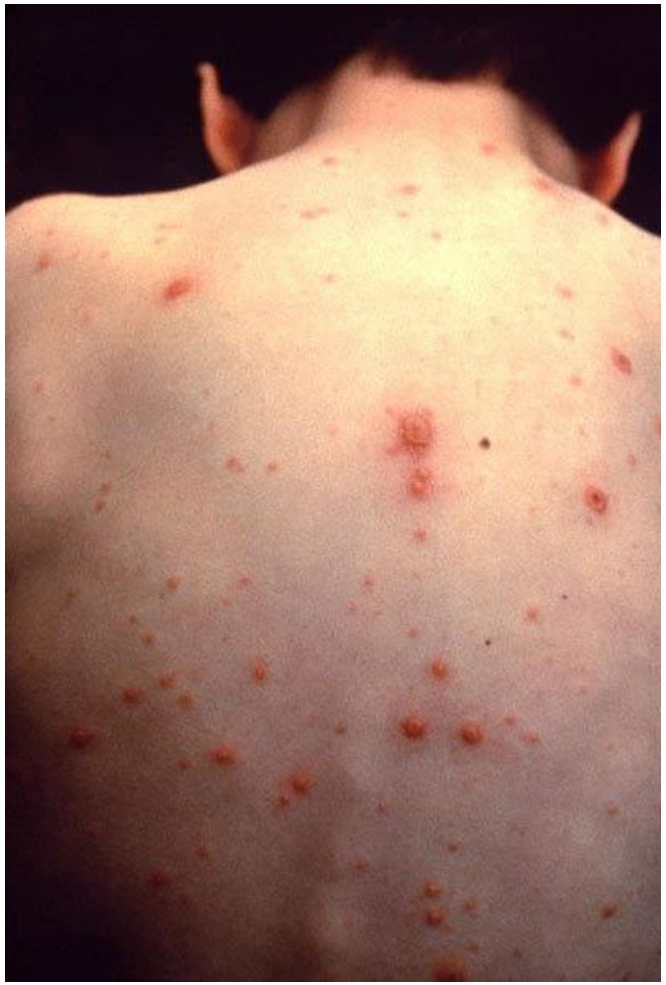
# Identifying chickenpox

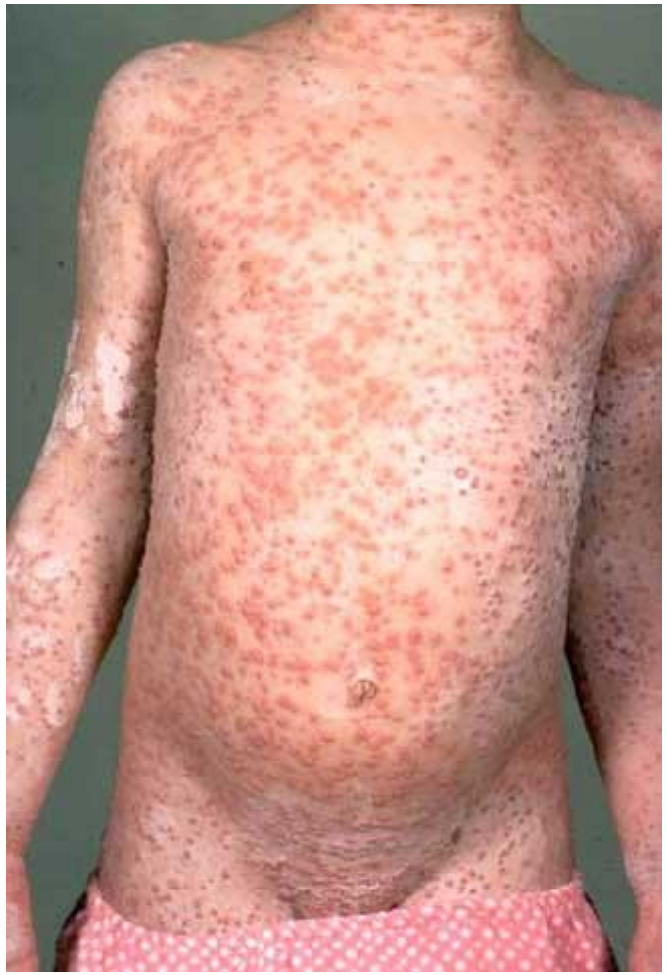
The classic sign of chickenpox is a rash that turns into itchy, fluid-filled blisters which eventually become scabs

The rash may first appear on the chest, back, and face. The rash can then spread over the entire body, including inside the mouth, eyelids, or genital area

About 1-2 days before the rash, people will have fever, tiredness, poor appetite, and fatigue

Patients are considered to be contagious from 1-2 days before rash onset until all lesions have dried & crusted





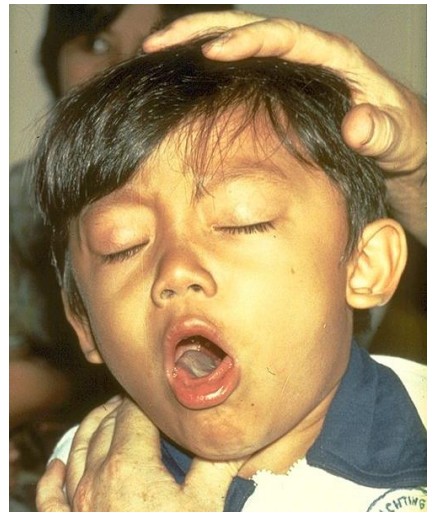
# Identifying pertussis (whooping cough)

- Incubation period: 7-10 days (range 4-21)
- Three clinical stages

1. **Catarrhal**: Rhinorrhea, sneezing, low-grade fever, mild cough

   This is the most contagious period!

2. **Paroxysmal:** severe spasms of cough, thick mucous, classic “whoop,” vomiting, exhaustion
3. **Convalescent:** gradual slow recovery with less frequent & less severe coughing…it’s called “the 100-day cough”



# Stay Alert! Protect Yourself & Others!

**TRAVEL HISTORY**

MAY BE THE ONLY DISTINGUISHER BETWEEN MEASLES, EBOLA AND EVERYTHING ELSE SEEN EVERY DAY!

**WHEN IN DOUBT, ADD PRECAUTIONS. YOU CAN ALWAYS DISCONTINUE THEM LATER.**

YOU ARE RESPONSIBLE FOR THE SAFETY OF YOUR COWORKERS, TOO!

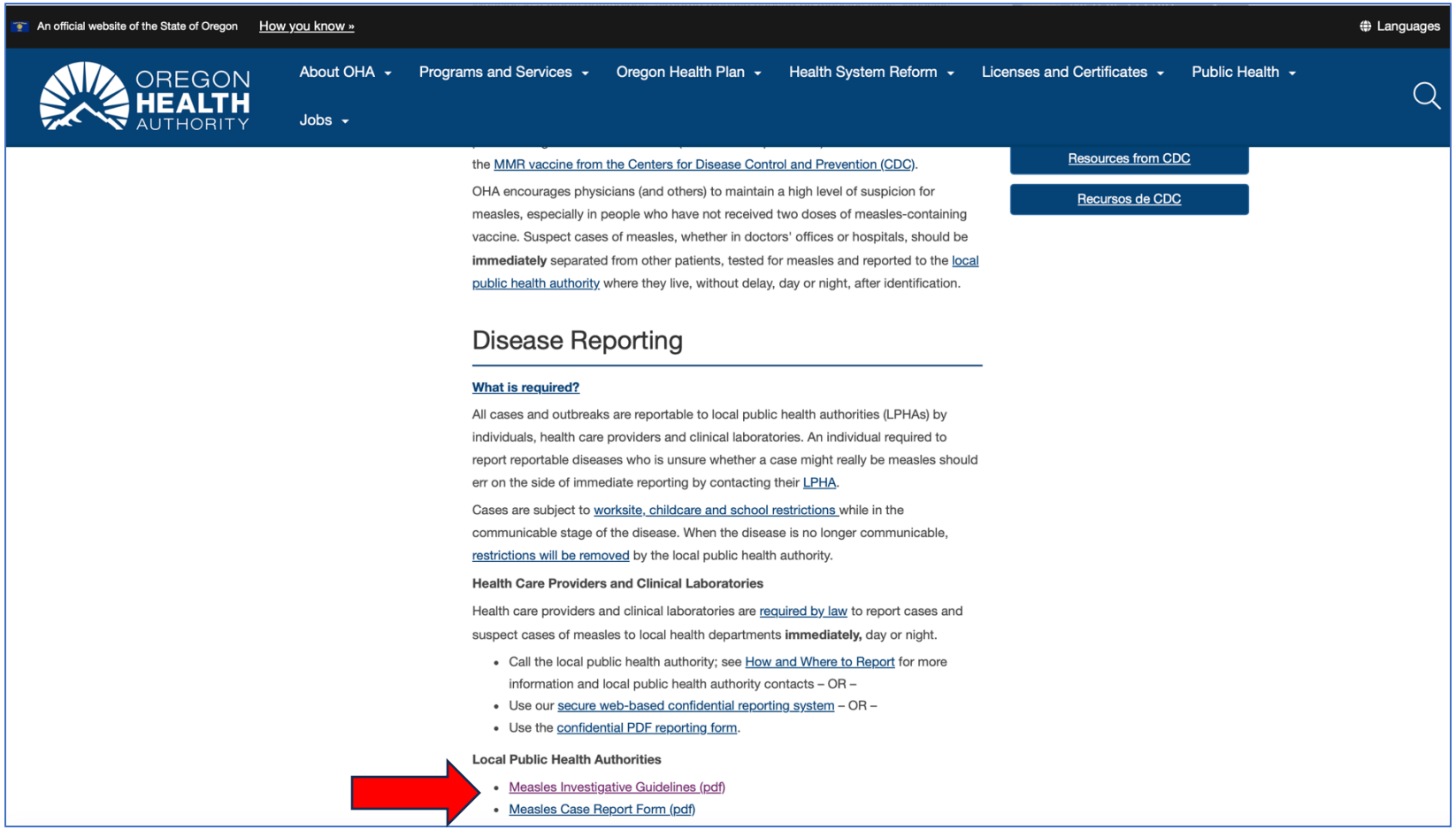
**ROUTINE INFECTION PREVENTION PRACTICES**

CAN STOP THE SPREAD OF INFECTIONS FROM THE PATIENT TO OTHER PATIENTS, YOU, AND YOUR FAMILY.

Getty Images/iStockphoto

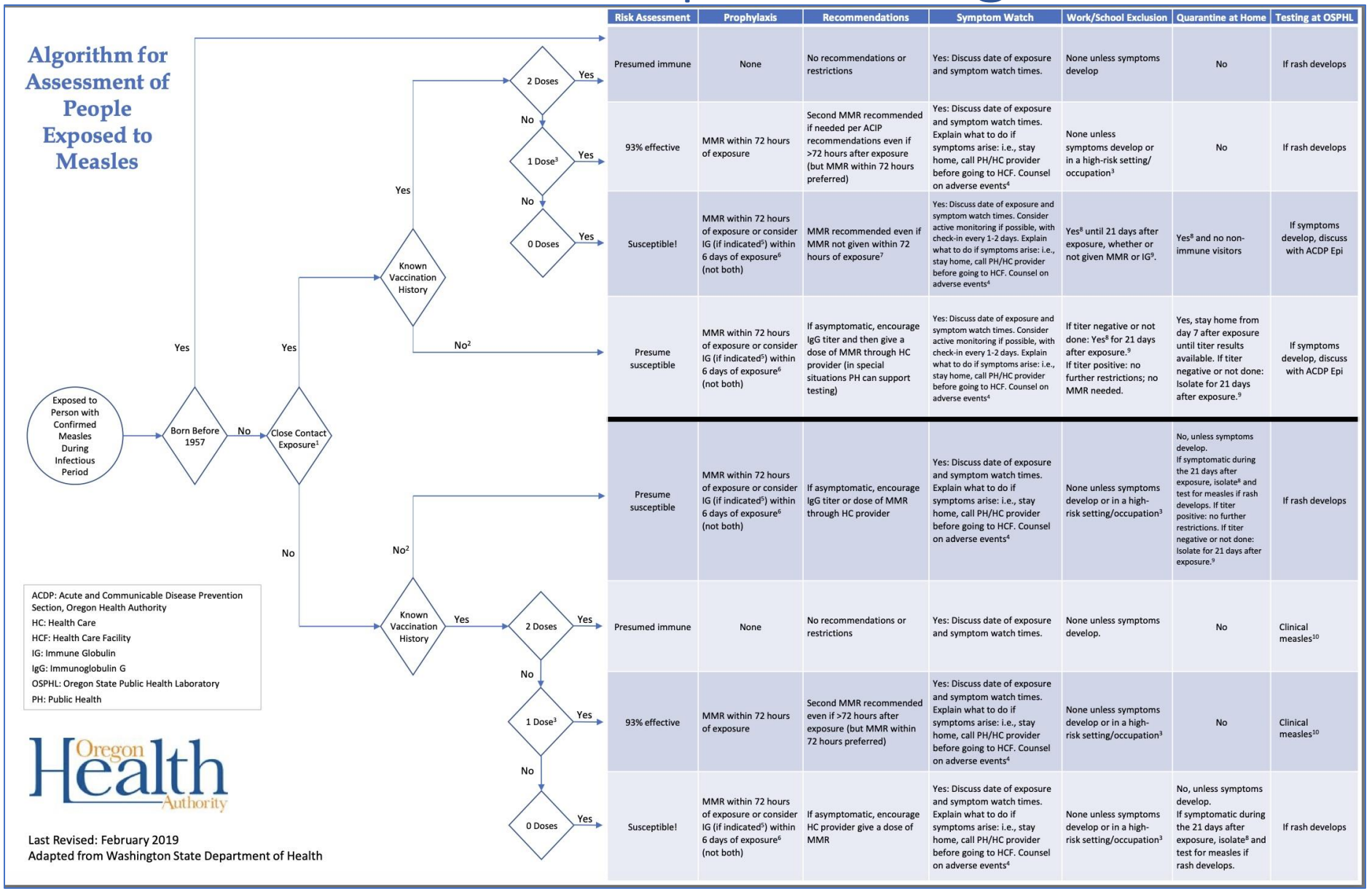
# Suggested Resources

# Measles Resources: OHA




https://www.oregon.gov/oha/ph/diseasesconditions/diseasesaz/pages/measles.aspx

# OHA Measles Exposure Algorithm




| Risk Assessment | Prophylaxis | Recommendations | Symptom Watch | Work/School Exclusion | Quarantine at Home | Testing at OSPHL |
|---|---|---|---|---|---|---|
| Presumed immune | None | No recommendations or restrictions | Yes: Discuss date of exposure and symptom watch times. | None unless symptoms develop | No | If rash develops |
| 93% effective | MMR within 72 hours of exposure | Second MMR recommended if needed per ACIP recommendations even if >72 hours after exposure (but MMR within 72 hours preferred) | Yes: Discuss date of exposure and symptom watch times. Explain what to do if symptoms arise: i.e., stay home, call PH/HC provider before going to HCF. Counsel on adverse events[4] | None unless symptoms develop or in a high-risk setting/ occupation[3] | No | If rash develops |
| Susceptible! | MMR within 72 hours of exposure or consider IG (if indicated[5]) within 6 days of exposure[6] (not both) | MMR recommended even if MMR not given within 72 hours of exposure[7] | Yes: Discuss date of exposure and symptom watch times. Consider active monitoring if possible, with check-in every 1-2 days. Explain what to do if symptoms arise: i.e., stay home, call PH/HC provider before going to HCF. Counsel on adverse events[4] | Yes[8] until 21 days after exposure, whether or not given MMR or IG[9]. | Yes[8] and no non-immune visitors | If symptoms develop, discuss with ACDP Epi |
| Presume susceptible | MMR within 72 hours of exposure or consider IG (if indicated[5]) within 6 days of exposure[6] (not both) | If asymptomatic, encourage IgG titer and then give a dose of MMR through HC provider (in special situations PH can support testing) | Yes: Discuss date of exposure and symptom watch times. Consider active monitoring if possible, with check-in every 1-2 days. Explain what to do if symptoms arise: i.e., stay home, call PH/HC provider before going to HCF. Counsel on adverse events[4] | If titer negative or not done: Yes[8] for 21 days after exposure.[9] If titer positive: no further restrictions; no MMR needed. | Yes, stay home from day 7 after exposure until titer results available. If titer negative or not done: Isolate for 21 days after exposure.[9] | If symptoms develop, discuss with ACDP Epi |
| Presume susceptible | MMR within 72 hours of exposure or consider IG (if indicated[5]) within 6 days of exposure[6] (not both) | If asymptomatic, encourage IgG titer or dose of MMR through HC provider | Yes: Discuss date of exposure and symptom watch times. Explain what to do if symptoms arise: i.e., stay home, call PH/HC provider before going to HCF. Counsel on adverse events[4] | None unless symptoms develop or in a high-risk setting/occupation[3] | No, unless symptoms develop. If symptomatic during the 21 days after exposure, isolate[8] and test for measles if rash develops. If titer positive: no further restrictions. If titer negative or not done: Isolate for 21 days after exposure.[9] | If rash develops |
| Presumed immune | None | No recommendations or restrictions | Yes: Discuss date of exposure and symptom watch times. | None unless symptoms develop. | No | Clinical measles[10] |
| 93% effective | MMR within 72 hours of exposure | Second MMR recommended even if >72 hours after exposure (but MMR within 72 hours preferred) | Yes: Discuss date of exposure and symptom watch times. Explain what to do if symptoms arise: i.e., stay home, call PH/HC provider before going to HCF. Counsel on adverse events[4] | None unless symptoms develop or in a high-risk setting/occupation[3] | No | Clinical measles[10] |
| Susceptible! | MMR within 72 hours of exposure or consider IG (if indicated[5]) within 6 days of exposure[6] (not both) | If asymptomatic, encourage HC provider give a dose of MMR | Yes: Discuss date of exposure and symptom watch times. Explain what to do if symptoms arise: i.e., stay home, call PH/HC provider before going to HCF. Counsel on adverse events[4] | None unless symptoms develop or in a high-risk setting/occupation[3] | No, unless symptoms develop. If symptomatic during the 21 days after exposure, isolate[8] and test for measles if rash develops. | If rash develops |

https://www.oregon.gov/oha/PH/DISEASESCONDITIONS/DISEASESAZ/Measles1/2019-measles-algorithm-people-exposed.pdf

1. DISEASE REPOR

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### 6.2 Case in a Medical Setting

Control efforts in medical settings should focus on reviewing existing immunization policies, employee immunization records, and patient isolation practices.

Healthcare workers (volunteers, trainees, nurses, physicians, technicians, receptionists and other clinical support staff) should be immunized before exposure. Documentation of immunity should be easily and readily available.

When a person suspected of measles visits a healthcare facility, airborne isolation precautions should be followed stringently. The patient should wear a mask (procedure or surgical mask) until isolated in a negative air pressure isolation room, also known as airborne infection isolation (AII) or airborne





infection isolation room (AIIR). If an AIIR is not available, the patient should be placed in a private room with the door closed and be asked to wear a surgical or procedure mask. Only staff with presumptive evidence of immunity should enter the room of a person with suspect or confirmed measles. Ideally, for individuals for whom measles is a distinct possibility, the LHD will facilitate a plan for entry into the evaluating health care facility in a way that minimizes the likelihood of exposing others.

If a case with measles in any stage of communicability was treated at a healthcare facility, identify potentially exposed healthcare workers (see §4.2

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# Acquiring state-supplied immune globulin, vaccine, and other medications

## Investigative Guidelines
## June 2024

### 1. PURPOSE

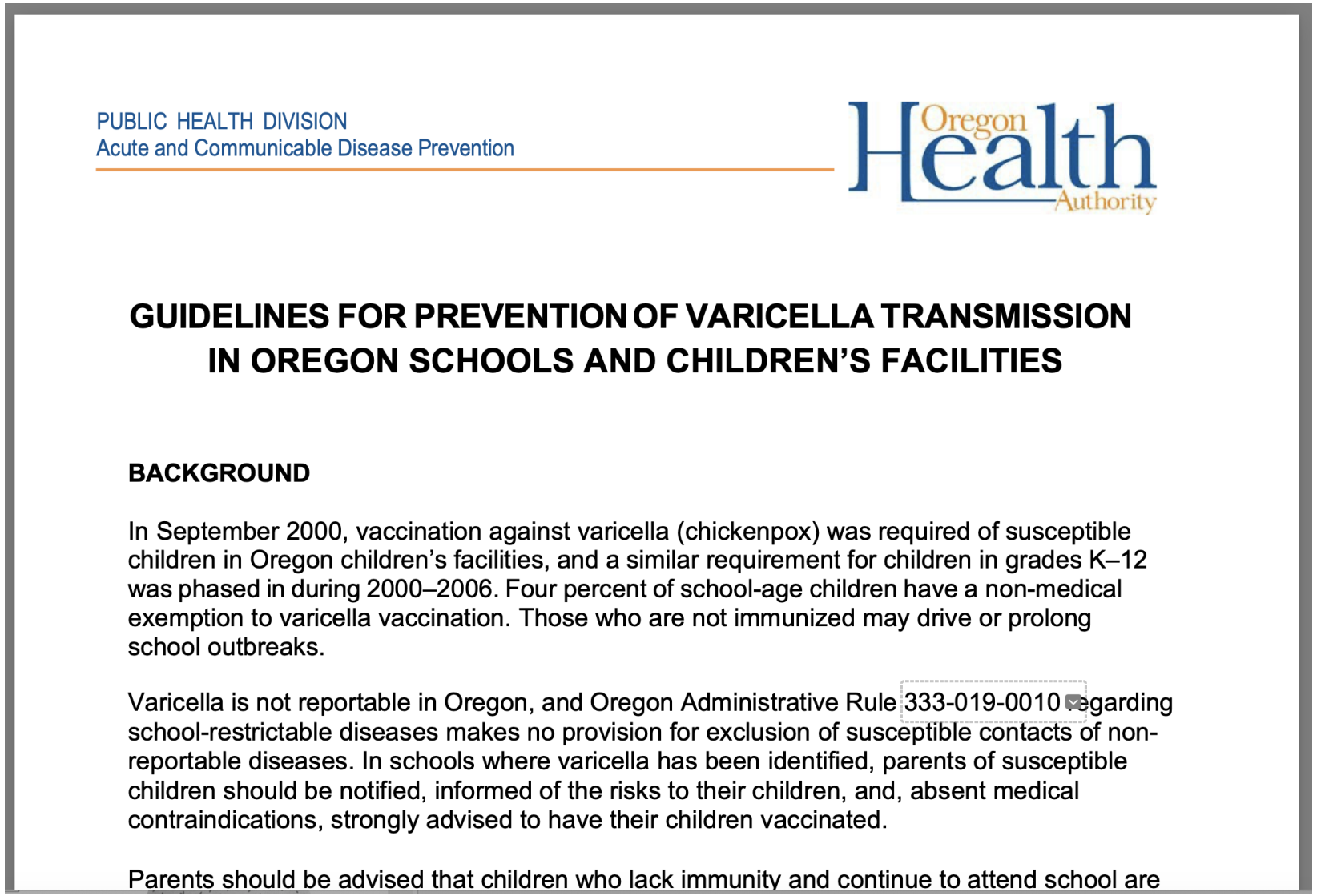
The purpose of this guidance is to advise public health staff on the process of acquiring immune globulin and vaccine from the Oregon Immunization Program (OIP) during an outbreak, acute event, or in situations where the needed prophylaxis is not otherwise available to the Local Public Health Authority (LPHA). This document is not intended to replace the guidance on general prophylaxis of contacts outlined in the Investigative Guidelines for those conditions that require postexposure prophylaxis (PEP) of contacts. Immune globulin products available through OIP's Vaccine Supply & Access Team (VSAT) include IG (for hepatitis A and measles prophylaxis) and HBIG (for hepatitis B prophylaxis).

### 2. CONTACTING ACUTE AND COMMUNICABLE DISEASE PREVENTION

When contacts are identified that may need immune globulin or vaccine that is not currently accessible by LPHAs, the LPHA should contact the Acute and Communicable Disease Prevention section (ACDP) on-call epidemiologist at 971-673-1111. The on-call epidemiologist and the LPHA will review the contact history and determine whether immune globulin or vaccine is indicated for each contact. After this determination, the on-call epidemiologist will contact OIP with the relevant information. OIP will then coordinate obtaining the indicated immune globulin or vaccine with the LPHA (detailed below). OIP cannot release immune globulin, or vaccine until ACDP has approved the request. The LPHA must provide OIP with the quantity of product requested and delivery instructions. All other OIP rules and regulations regarding vaccine management and accountability apply.

### 3. PROPHYLAXIS RECOMMENDATIONS

# Varicella Resources: OHA



PUBLIC HEALTH DIVISION
Acute and Communicable Disease Prevention

Oregon Health Authority

**GUIDELINES FOR PREVENTION OF VARICELLA TRANSMISSION IN OREGON SCHOOLS AND CHILDREN'S FACILITIES**

**BACKGROUND**

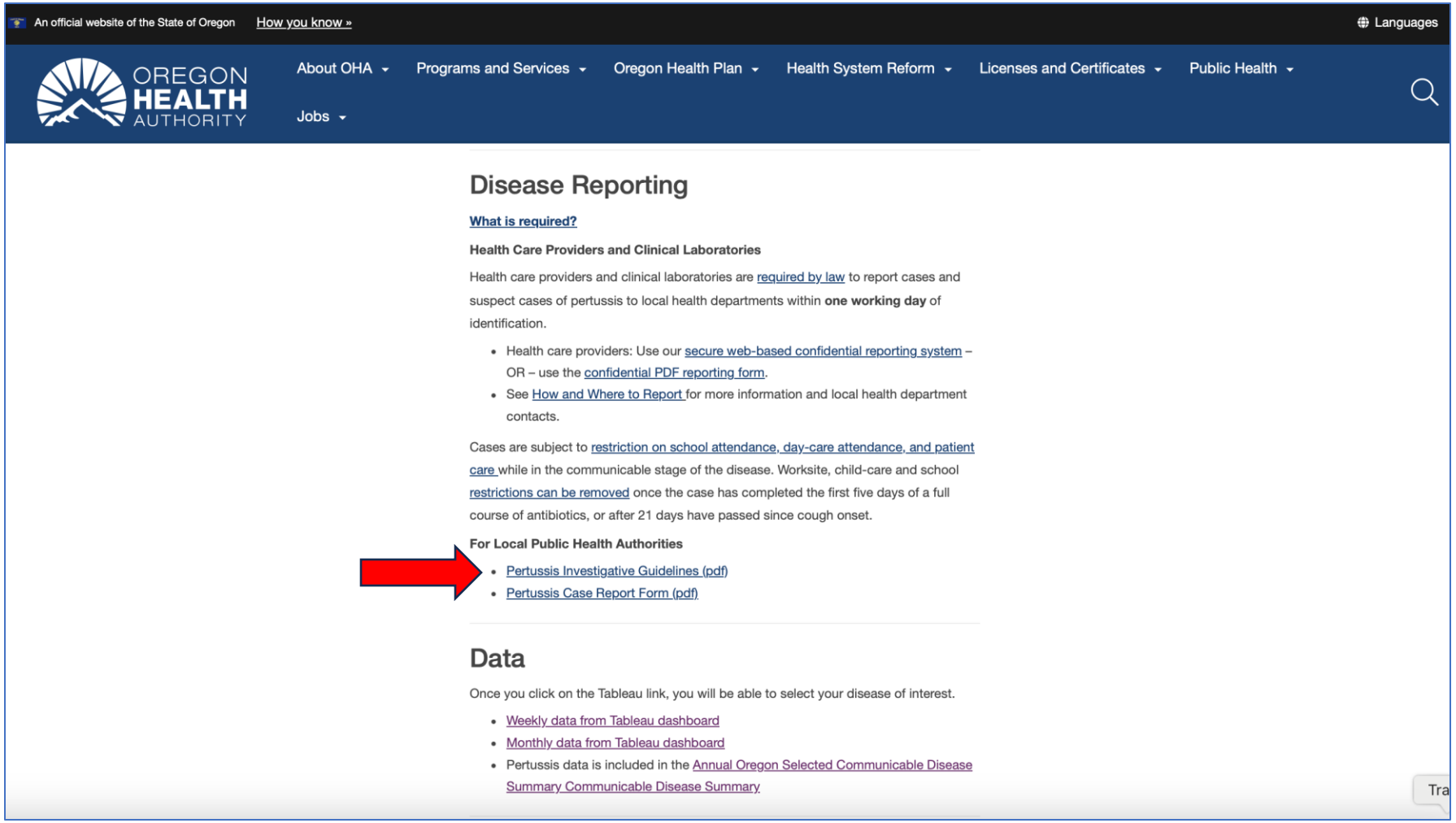
In September 2000, vaccination against varicella (chickenpox) was required of susceptible children in Oregon children's facilities, and a similar requirement for children in grades K–12 was phased in during 2000–2006. Four percent of school-age children have a non-medical exemption to varicella vaccination. Those who are not immunized may drive or prolong school outbreaks.

Varicella is not reportable in Oregon, and Oregon Administrative Rule 333-019-0010 regarding school-restrictable diseases makes no provision for exclusion of susceptible contacts of non-reportable diseases. In schools where varicella has been identified, parents of susceptible children should be notified, informed of the risks to their children, and, absent medical contraindications, strongly advised to have their children vaccinated.

Parents should be advised that children who lack immunity and continue to attend school are

https://www.oregon.gov/oha/PH/DISEASESCONDITIONS/COMMUNICABLEDISEASE/REPORTINGCOMMUNICABLEDISEASE/REPORTINGGUIDELINES/Documents/varicella-exclusion.pdf

# Pertussis Resources: OHA




https://www.oregon.gov/oha/ph/diseasesconditions/diseasesaz/pages/pertussis.aspx

# Pertussis

## Investigative Guidelines

**March 2025**

## 1. DISEASE REPORTING

### 1.1 Purpose of Reporting and Surveillance

1. To prevent illness and death among exposed, high-risk persons.
2. To vaccinate exposed, under-immunized children.
3. To educate exposed persons about the signs and symptoms of pertussis in order to facilitate prompt diagnosis and treatment and prevent further spread.
4. To monitor the epidemiology of pertussis in Oregon.

### 1.2 Laboratory and Physician Reporting Requirements

Physicians are required to report cases (including suspect cases) within one working day (OAR 333-018- 0015). Clinical labs must similarly report within one working day of identification or initial positive test report to the requesting physician (OAR 333-018-0015).

### 1.3 Local Public Health Authority Reporting and Follow-Up Responsibilities

1. Begin routine case investigation within one working day.
2. Identify and evaluate contacts; educate and recommend measures to prevent further spread.
3. Report all confirmed and presumptive (but not suspect) cases to the Acute and Communicable Disease Prevention section (ACDP) as soon as possible, but no later than the end of the calendar week of the initial physician or laboratory report. Submit all case data electronically.

## 2. THE DISEASE AND ITS EPIDEMIOLOGY

### 2.1 Etiologic Agent

*Bordetella pertussis*, a fastidious pleomorphic Gram-negative bacillus.

### 2.2 Description of Illness

Classic pertussis, whooping cough, is characterized by spasms of severe

## 3. CASE DEFINITIONS, DIAGNOSIS AND LABORATORY SERVICES

### 3.1 Close Contacts

Close contacts are defined to include immediate family members (those who spend many hours together or sleep under the same roof) and anyone who had direct contact with respiratory secretions. Although obviously these are somewhat arbitrary distinctions, "close contacts" should also include those who shared confined space (within ~6 feet) for >1 hour during the communicable period. These might include, for example, close friends and other social contacts in childcare, school, or work settings; co-participants in certain extra- curricular activities or outings; and healthcare workers caring for a case without wearing a mask. Schoolchildren sitting within ~3 feet of a case (i.e., adjacent seating) can also be included.

High-risk close contacts comprise infants (<1-year-old) and pregnant women in the third trimester.

### 3.2 Confirmed Case Definition

- Acute cough illness of any duration, with





  - Isolation of *B. pertussis* from a clinical specimen
    OR
  - Polymerase chain reaction (PCR) test positive for *B. pertussis*

  Note that a positive test result in the absence of cough (ouch!) is not considered confirmatory.

### 3.3 Presumptive Case Definition

- In the absence of a more likely diagnosis, a cough illness lasting at least 14 days with any of the following: paroxysms of coughing, inspiratory "whoop," post-tussive vomiting or apnea (with or without cyanosis).

OR

- Illness with cough of any duration, with
  - At least one of the following signs or symptoms:
    - Paroxysms of coughing;
    - Inspiratory whoop;
    - Post-tussive vomiting; *or*
    - Apnea (with or without cyanosis)

  AND
  - Contact with a laboratory-confirmed case (epidemiologic linkage)

Consider getting specimens for confirmation of presumptive cases; the results will affect the classification of their symptomatic contacts.



### 3.4 Suspect Case Definition

## 5.2 Protection of Contacts

### Active Immunization

Exposed children who received their third dose of DTaP 6 months or more before exposure to pertussis should be given a 4th dose at this time. Children who received all four primary doses before their fourth birthday should receive a fifth (booster) dose of DTaP before entering school. Persons 7–9 years of age who have not been fully immunized against pertussis should receive Tdap now. Those ≥10 (including persons ≥65) years of age who have not received Tdap or who received it as part of the primary series catch-up schedule should get it at this time. There is no need to observe any minimum interval between doses of Td and Tdap. A dose of Tdap vaccine should be administered during each pregnancy irrespective of the patient's prior history of receiving Tdap. Optimal timing for Tdap administration in pregnant women is at 27–36 weeks' gestation. If Tdap is not administered during pregnancy, Tdap should be administered immediately post-partum. The postpartum dose is only recommended for women who have not previously received Tdap.

### Chemoprophylaxis

Most pertussis in adults and adolescents is neither diagnosed nor reported and antibiotic prophylaxis does not control the transmission of pertussis when it is widespread in the community. The effort to provide antibiotic prophylaxis for pertussis must focus on infants <1 year of age since serious complications and death are limited to this group. Recommend prompt antibiotic prophylaxis within 21 days of exposure for close contacts of confirmed, presumptive, and suspect cases who are:

- Infants;
- Pregnant women in the 3rd trimester (since they will soon have contact with an infant);
- All household contacts of a case if there is an infant or a pregnant woman in the 3rd trimester in the household, even if the infant in the household is the case;
- All those attending or working in a childcare setting (i.e., same room) of a case if there is an infant or one of those same third trimester women in the setting;
- Other contacts at the discretion of the local health department (e.g. pediatric healthcare workers, unimmunized contacts, other pregnant women, high-risk contacts of suspect cases).

# Acknowledgements

Oregon Health Authority HAI Program

*Questions?*

# Thank you!

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