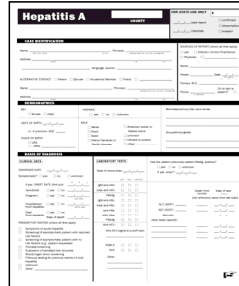


Disease Reporting



1

Objectives

- Know who is legally required to report
- List the categories of reportable diseases or conditions
- Describe LHD role once a disease is reported
- Understand why diseases are reportable



2

2

THE LEGAL BASIS FOR REPORTING



3

3

It's the (State) Law!

U.S. Constitution:

10th Amendment reserves "police power" to **States**

Oregon Revised Statute 433.004

(1) The Oregon Health Authority shall by rule:
(a) specify reportable diseases...

Oregon Administrative Rules

- **Division 17:** Disease Control (definitions and references)
- **Division 18:** Disease Reporting (responsibilities and requirements)
- **Division 19:** Investigation and Control of Diseases



4

4

Legal Basis: Who Has to Report

OAR 333-18-0000

- Each Healthcare Provider...
- Each Healthcare Facility...
- Each Licensed Laboratory...

Obligations

- ✓ Report cases and suspect cases
- ✓ Report required data elements
- ✓ Report within specified time periods
- ✓ Instruct patient in control measures
- ✓ Cooperate with public health investigation and control measures

(OAR 333-019-0002)

Oregon
Health
Authority

5

5

Legal Basis: How and Where

In general, if the patient is an Oregon resident, reports shall be made to the local public health administrator for the **patient's place of residence**.

In lieu of reporting to the local public health administrator, with the consent of the local public health administrator and the Authority, reports may be made directly to the Authority.

(OAR 333-018-0005)



Oregon
Health
Authority

6

6

Legal Basis: HIPAA

HIPAA permits disclosure of protected health information without authorization for specified public health purposes:

45 CFR 46 §1178(b)

Nothing in this part shall...limit the authority, power, or procedures established under any law providing for the reporting of disease or injury, child abuse, birth, or death, public health surveillance, or public health investigation or intervention



Oregon
Health
Authority

7

7

Legal Basis: Failure to Report

Civil Penalties for Failure to Report: OAR 333-026-0030

A civil penalty may be imposed...for a violation of any provision in OAR chapter 333, division 18 or 19, including but not limited to...

Failing to report a reportable disease in accordance with OAR chapter 333, division 18:



- 1st violation: \$100
- 2nd violation: \$200
- 3rd/subsequent violation: \$500
- Each **day** out of compliance considered a **new** violation

Oregon
Health
Authority

8

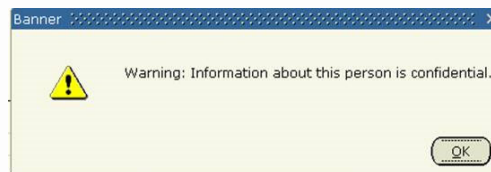
8

POLL QUESTION

9

A note about confidentiality

- You have access to confidential information
- You must first sign a confidentiality oath
- You agree to lots of things when you sign (if you don't know what you signed, then you should read it again)
- **Orpheus knows all:**
 - Will log every single record that you **enter**
 - Will report all records that you looked at when you shouldn't have



10

Reportable Diseases: Who Decides?

- Each **state** determines what is reportable in its jurisdiction
- Council of State & Territorial Epidemiologists
 - recommends reportable diseases
 - determines what’s “nationally notifiable”



11

11

REPORTABLE DISEASES



12

12

Diseases: Reportable in Oregon

OREGON PUBLIC HEALTH DIVISION REPORTING FOR CLINICIANS

WHICH DISEASES ARE REPORTABLE?

IMMEDIATELY

- Anthrax (*Bacillus anthracis*)
- Bacterial meningitis
- Botulism (*Clostridium botulinum*)
- Bruceellosis (*Bruceella*)
- Cholera (*Vibrio cholerae* O1, O139, or toxigenic)
- Diphtheria (*Corynebacterium diphtheriae*)
- Eastern equine encephalitis
- Glanders (*Burkholderia mallei*)
- Hemorrhagic fever caused by viruses of the *Flavivirus* (e.g., Ebola, Marburg) or *arenavirus* (e.g., Lassa, Machupo) families
- Influenza (novel)¹
- Marine intoxication (intoxication caused by marine microorganisms or their byproducts (e.g., paralytic shellfish poisoning, domoic acid intoxication, ciguatera, scombroid)
- Measles (rubella)
- Melanoidosis
- Meningitis (*Burkholderia pseudomallei*)
- Plague (*Yersinia pestis*)
- Poliomyelitis

WITHIN ONE LOCAL HEALTH AUTHORITY WORKING DAY

- Amebic infections² (central nervous system only)
- Anaplasmosis (*Anaplasma*)
- Animal bites (of humans)
- Arthropod vector-borne disease (e.g., California encephalitis, Colorado tick fever, dengue, Heartland virus infection, Kyasanur Forest disease, St. Louis encephalitis, Western equine encephalitis, etc.)
- Babesiosis (*Babesia*)
- Campylobacteriosis (*Campylobacter*)
- Chancroid (*Haemophilus ducreyi*)
- Chlamydia
- Chlamydia trachomatis*: lymphogranuloma venereum
- Coccidioidomycosis (*Coccidioides*)
- Creutzfeldt-Jakob disease (CJD) and other transmissible spongiform encephalopathies
- Cryptococcosis (*Cryptococcus*)
- Cryptosporidiosis (*Cryptosporidium*)
- Cyclosporiasis (*Cyclospora cayentensis*)
- Ehrlichiosis (*Ehrlichia*)
- Enterobacteriaceae family isolates that are resistant to any carbapenem antibiotic by current
- Hepatitis D (delta)
- Hepatitis E
- HIV infection (does not apply to anonymous testing) and AIDS
- Influenza (laboratory-confirmed) death of a person <18 years of age
- Lead poisoning³
- Legionellosis (*Legionella*)
- Leptospirosis (*Leptospira*)
- Listeriosis (*Listeria monocytogenes*)
- Lyme disease (*Borrelia burgdorferi*)
- Malaria (*Plasmodium*)
- Mumps
- Non-tuberculous mycobacterial infection (non-respiratory)⁴
- Pertussis (*Bordetella pertussis*)
- Pittacosis
- Relapsing fever* (*Borrelia*)
- Rocky Mountain spotted fever and other *Rickettsia* (except louse-borne typhus, which is immediately reportable)
- Salmonellosis (*Salmonella*, including typhoid)
- Shigellosis (*Shigella*)
- Syphilis (*Treponema pallidum*)

Both lab-confirmed and clinically suspected cases are reportable

OREGON PUBLIC HEALTH DIVISION REPORTING FOR LABORATORIES

WHICH DISEASES ARE REPORTABLE?

IMMEDIATELY

- Anthrax (*Bacillus anthracis*)
- Bacterial meningitis
- Botulism (*Clostridium botulinum*)
- Bruceellosis (*Bruceella*)
- Cholera (*Vibrio cholerae* O1, O139, or toxigenic)
- Diphtheria (*Corynebacterium diphtheriae*)
- Eastern equine encephalitis
- Glanders (*Burkholderia mallei*)
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- Marine intoxication (intoxication caused by marine microorganisms or their byproducts (e.g., paralytic shellfish poisoning, domoic acid intoxication, ciguatera, scombroid)
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- Shigellosis (*Shigella*)
- Syphilis (*Treponema pallidum*)

Diseases: When and What?

When

Categories of Reportable Diseases

New reportables are highlighted.

IMMEDIATELY

- Anthrax (*Bacillus anthracis*)
- Bacterial meningitis
- Botulism (*Clostridium botulinum*)
- Bruceellosis (*Bruceella*)
- Cholera (*Vibrio cholerae* O1, O139, or toxigenic)
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- Shigellosis (*Shigella*)
- Syphilis (*Treponema pallidum*)

- Vaccine-preventable
- Food- and waterborne
- Vector-borne
- Other zoonoses
- Sexually transmitted infections
- Bioterrorism threats
- Some non-infectious
- Outbreaks
- Diseases of “possible public health significance”

EXERCISE

Exercise: breakout groups

Resource: [Disease Reporting Poster for Clinicians](#)

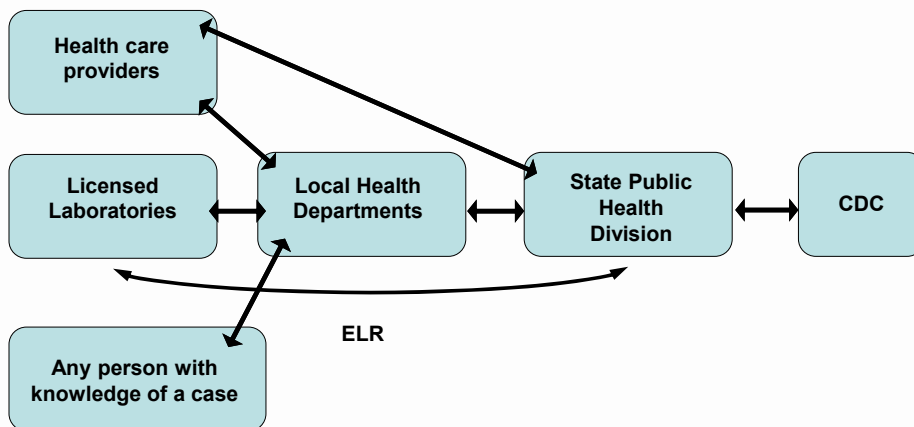
1. Is Hepatitis A reportable?
If so, when should it be reported?
2. Is a bat-to-dog bite reportable?
If so, when should it be reported?
3. Would you report an influenza death in a 65-year-old man from Curry County?
If so, when would you report this?
4. Would influenza H7N9 be reportable?
If so, when should it be reported?



LHD ROLE IN DISEASE REPORTING

18

Reporting: Pathway



19

Reporting: Orpheus

Orpheus LHD Menu
Development Version
(Full Access)
Shannon Allain - OPHD

[New Case Investigation](#)
[Reports](#)
[Exports](#)

[Cases](#)
[Cases \(identified\)](#)
[Cases \(de-identified\)](#)

[People](#)
[Contacts](#)
[Pregnancies](#)
[Transfers](#)
[Lab Reports](#)
[ELR \(CD, STD, TB\)](#)
[eCR](#)

[Providers](#)
[Orpheus Users](#)

[Go back to old menu](#)

[My Settings](#)
[D.U.D.E.](#)

[v/f](#)
[Lead](#)

[Letter Templates](#)

[Log Out](#)

[Security Policy](#)
[Release Notes 20](#)

[Cases](#)
Contacts 0
ELR 0
Transfers
To Do
Recent 8
eCR 0

Active by Epi by Disease

Days:
 County:
 Assigned to:
 Incomplete:
[List Cases](#)

All Active:
 All Counties:
 All Epis:
[Refresh](#)

Disease	Case	Patient	Age	Sex	Onset	Reported	County	Status	Active

20

All view enabled
HepB (chronic) Case Entry

Summary	515629	SUMMARY
<p>Sal E. Mander</p> <p>Disease: HepB (chronic)</p> <p>Status: Confirmed</p> <p>Onset: -8/14/2018</p> <p>Clinical: Deceased: [Not Answered]</p> <p>Reason for testing:</p> <p>Comorb:</p> <p>Treatment: DOB: 1/1/1980</p> <p>Age: 38</p> <p>Risks: Sex: F Pregnancy: Yes</p> <p>Race: Asian</p> <p>Followup: Hispanic: Yes</p> <p>Epilinks: Language: Born: Worksite: Occupation: Housing:</p> <p>Contacts: 2</p> <p>Vaccines: 0</p> <p>Docs: 888 SW Morrison Portland OR 97209 MULTNOMAH</p> <p>Letters: 0</p> <p>Log: Provider: McKenzie-Willamette Medical Center</p> <p>Keep Active: <input checked="" type="checkbox"/></p> <p>Notes: 2</p> <p>Local Epi: Matt Navarre</p> <p>Received by LHD: 8/21/18</p> <p>LHD Completion Date: </p> <p>State Completion Date: </p>	<p>SUMMARY</p> <p>NOTES:</p> <p>Thu, Sept 13, 2018, 2:05 pm • (193 days ago)</p> <p>June Banardt [OPHD] Added new fetus (i.e., is pregnant)</p> <p>Thu, Sept 13, 2018, 2:04 pm • (193 days ago)</p> <p>June Banardt [OPHD] Set the Disease from [105 HepC (chronic)] to 33 HepB (chronic)</p> <p>PREGNANCY HISTORY:</p> <p>#1) Due: 2018-09-13....Bay Area Hospital....Current</p>	

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Reporting: LHD & State Roles

LHD

- Verify diagnosis
- Determine sources of infection
- Implement control measures
- Enter data into Orpheus throughout

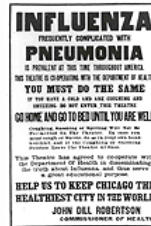
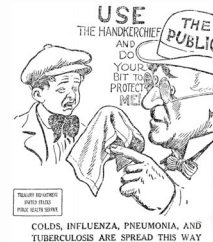
State

- Advise local health departments
- Detect, investigate, control outbreaks
- Analyze disease trends
- Conduct special studies
- Report to CDC

IMPORTANCE OF DISEASE REPORTING

Why Report?

- Protect contacts
- Identify risk factors
- Monitor epidemiologic trends
- Detect outbreaks
- Guide public health programs
- Facilitate public health research

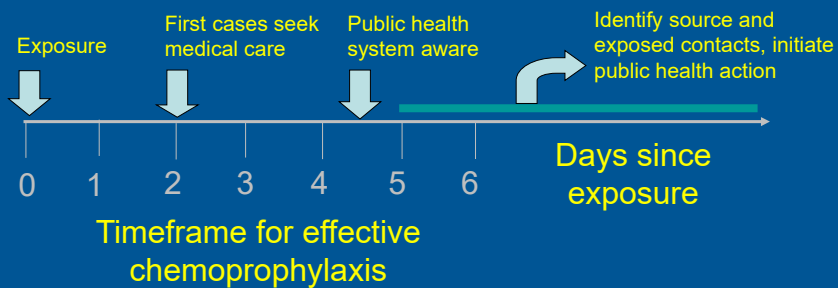


24

24

Protecting Contacts

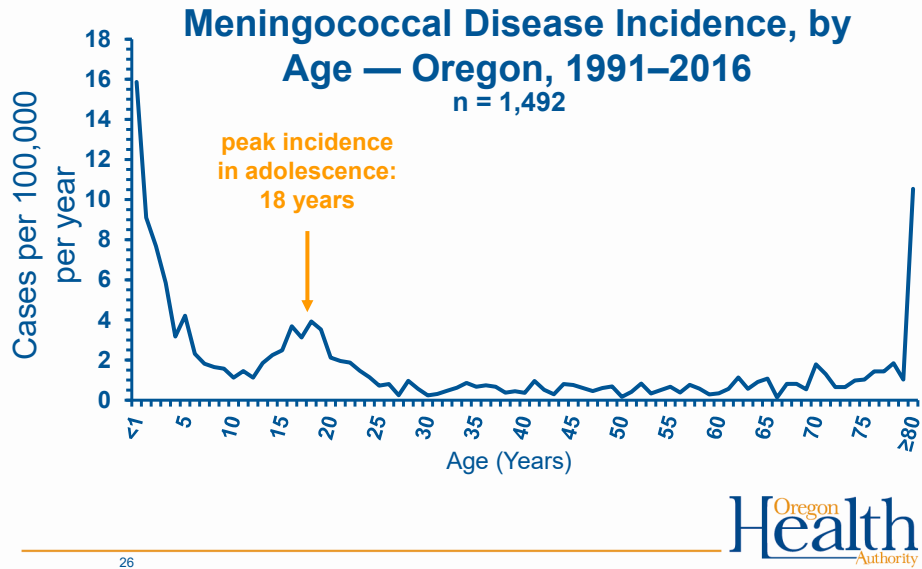
Allows faster implementation of interventions that reduce morbidity and mortality



25

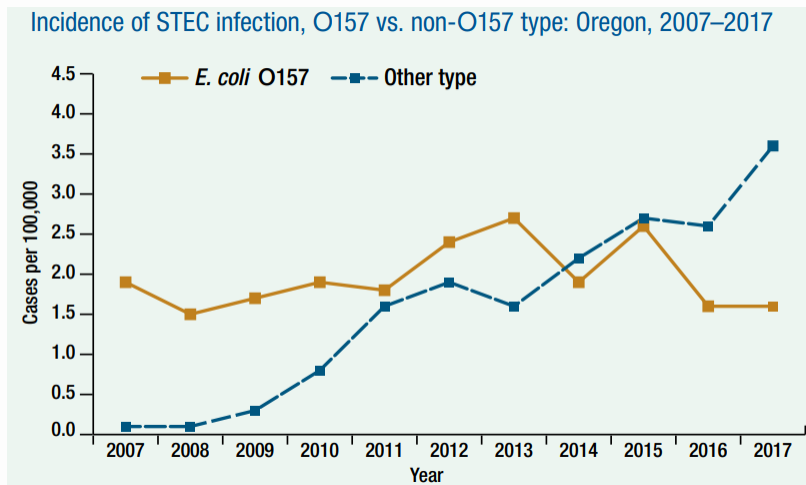
25

Identifying Risk Factors



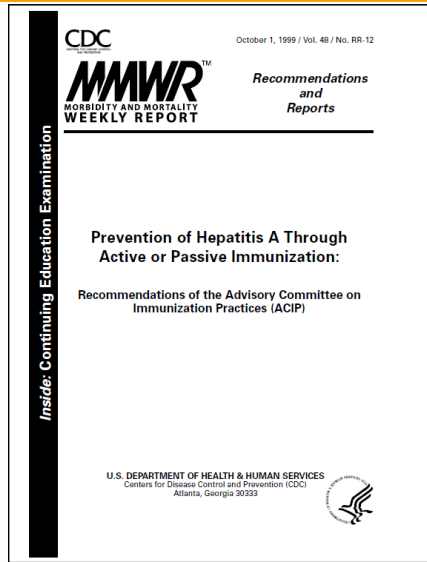
26

Monitoring Epidemiologic Trends: STEC



27

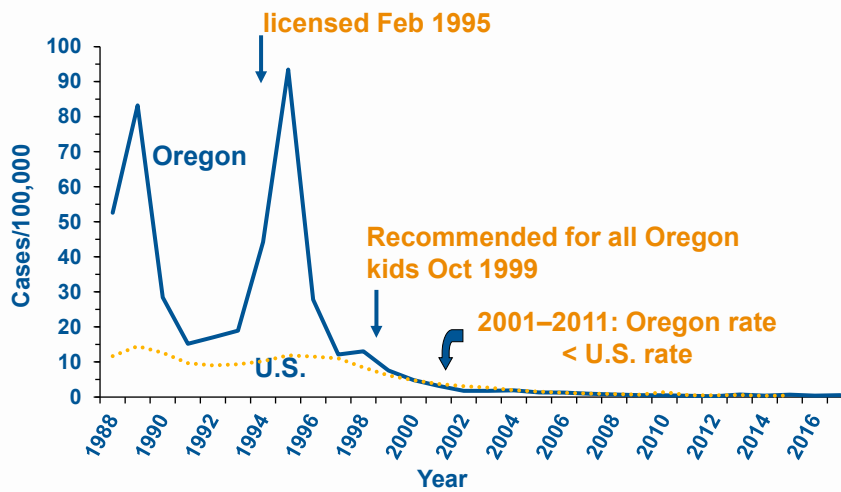
Public Health Programs



28

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Effect of Public Health Program: Hep A



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Public Health Research

SUPPLEMENT ARTICLE

SUPPLEMENT ARTICLE

Chicken Consumption Is a Newly Identified Risk Factor for Sporadic Salmonella enterica Serotype Enteritidis Infections in the United States: A Case-Control Study in FoodNet Sites

Ashli C. Elmore, Patricia Reddy, Barbara Mentes, Pan Anis D. Karamanolis, Suzanne H. Engel, Felicia N. Heuvelink, and the Emerging Infections Program FoodNet Working Group

Tobacco smoke as a risk factor for meningococcal disease

MANE FRIEDMAN, MD, RAJESWAR REDDIBAGI, MD, MUIB PAJAI, CARDSON, MD, BRIAN D. FLAKAVITIS, MD, PETER HERRICK, C. HOSKIN, MD, JEFFE, KAREN B. PENNACAF, MD, MPH, THOMAS A. WELLS, MD, MPH, DAVID W. FLUMHOFF, MD, MS, J. WENIGER, MD AND BRADLEY A. THORNSON, MD

Risk Factors for Sporadic Campylobacter Infection in the United States: A Case-Control Study in FoodNet Sites

via JG, BS, M, PHD, FA, USA

Michael Samuel, Barbara Marcus, Jeffrey Besser, David Daniel, Amy P. Dubler, C. Michael, Felicia N. Heuvelink, Michael Carter, and the Emerging Infections Program FoodNet Working Group

The source of sporadic, *Salmonella enterica* serotype Enteritidis, FoodNet Disease Active Surveillance, Network surveillance and eating undercooked eggs (OR, 1.9, 95% CI, 1.1-3.1), and eating chicken (OR, 1.3, 95% CI, 1.0-1.6). Multivariate analysis revealed that eating chicken was identified in the United States as a risk factor for SE infections, M eggs and poultry.

Salmonella serotypes infect an estimated 1.4 million people annually in the United States, resulting in more than 100,000 hospitalizations and 2000 deaths [1]. The economic impact of salmonellosis in the United States is considerable, costing \$0.2 to \$1.3 billion per year [2].

Over the past 15 years, the incidence of sporadic SE infections (SEI) has increased by 20% in FoodNet sites [3]. SEI has been associated with consumption of raw eggs [4], undercooked poultry [5], and consumption of raw milk [6].

SEI is a leading cause of bacterial meningitis in young children and adults [7]. The incidence of SEI meningitis is highest in young children and adults [8].

SEI is a leading cause of bacterial meningitis in young children and adults [7]. The incidence of SEI meningitis is highest in young children and adults [8].

Background. Since 1999 the US Pacific Northwest has experienced a substantial increase in the incidence of sporadic *S. meningitidis* disease. The current meningitis in young children is poorly immunogenic for young children and does not protect against *N. meningitidis* serogroup B. Defining alternative approaches to the prevention and control of meningococcal disease is of considerable public health importance.

Methods. We performed a case-control study comparing 100 patients in Oregon and southwest Washington with 474 age- and area-matched controls. We used conditional logistic regression analysis to determine which exposures remained associated with disease after adjusting for other risk factors and confounders and calculated the proportion of disease attributable to modifiable exposures.

Results. After adjustment for all other significant exposures identified, having a mother who smokes was the strongest independent risk factor for invasive meningococcal disease in children <16 years of age (odds ratio [OR], 2.6, 95% CI 1.8 to 3.9), with 37% (CI 27 to 48) of cases in this age group potentially attributable to maternal smoking. Adult patients were more likely than controls to have a chronic underlying illness (OR, 1.8, CI 1.2 to 2.8), passive tobacco smoke exposure (OR, 2.4, CI 0.9 to 6.3) and to smoke tobacco (OR, 2.4, CI 0.9 to 6.3). Dose-response effects were seen for passive smoke exposure and risk of disease in all age groups.

Conclusions. Tobacco smoke exposure independently increases the risk of developing meningococcal disease.

INTRODUCTION

Natural meningitis causes an estimated 2000 cases of bacterial meningitis annually in the United States, with a case-fatality rate of 10 to 15%. One-third of these cases occur in children <2 years of age, and one-half are caused by serogroup B meningococci [1]. Public health actions against meningitis disease include antimicrobial prophylaxis to control secondary cases and support immunization to control secondary preventable outbreaks. However, fewer than 3% of cases occur in secondary contacts, and the coverage of meningitis vaccine is poorly immunogenic in young children and does not protect against *N. meningitidis* serogroup B [2]. Therefore, identifying modifiable risk factors is important for the further development and targeting of strategies to prevent meningococcal disease.

Terminal complement deficiencies and splenectomy are known risk factors for invasive meningococcal infection but account for a relatively small proportion

of cases in the United States. We conducted a population-based case-control study of sporadic meningococcal infection. During a 12-month study, we identified 100 sporadic meningococcal infections from 17 sites, obtaining demographic and exposure information. We conducted a matched case-control study of patients had control subjects. In multivariate analysis of risk. The risk of meningitis was increased in patients with meningitis. The risk of meningitis was increased in patients with meningitis. The risk of meningitis was increased in patients with meningitis.

The serotypes of *Campylobacter* infections are sporadic. Epidemiological investigations to determine risk factors for sporadic *Campylobacter* infections have been conducted in the United States and in other developed nations. Although these studies differed in location, techniques, and study sites, they consistently indicated several distinct sources of infection, including contact with and consumption of poultry, transmission from contaminated drinking water [9-12], the use of raw milk [13], and consumption of raw shellfish [14]. In the United States, the incidence of sporadic meningitis was increased in patients with meningitis. The risk of meningitis was increased in patients with meningitis.

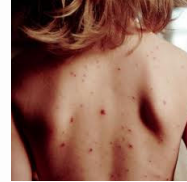
EXERCISE

31

Exercise: breakout groups

Resource: [Disease Reporting Poster for Clinicians](#) & slides

The provider at a local clinic called to report a 5-year-old child clinically diagnosed with measles.



1. Should this provider report the disease?
2. What are the LHD responsibilities for investigating the case?
3. Why is investigating this case important?

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The screenshot shows the Oregon Health Authority website page for Communicable Disease Reporting. The page has a dark blue header with the Oregon Health Authority logo and the title "Communicable Disease Reporting". Below the header is a breadcrumb trail: "Public Health Division > Diseases and Conditions > Communicable Disease > Communicable Disease Reporting". The main content area is titled "Communicable Disease Reporting" and features a sidebar on the left with a table of contents. The table of contents includes: "Communicable Disease Reporting", "Case Report Forms", "Investigative Guidelines", "What and When to Report", "How and Where to Report", and "Reporting Rules". An orange arrow points to the "What and When to Report" link. The main content area has a sub-header "Health Care Providers and Laboratorians" and a paragraph stating: "All Oregon physicians, other health care providers and laboratorians are required by law to report certain diseases and conditions to local health departments (pdf). Some cases are subject to restrictions (OAR)". To the right of the text is a thumbnail image of a poster. At the bottom of the page is a blue banner with the text "OK, BUT WHERE DO I FIND THE RULES?" and the URL "HTTP://WWW.HEALTHOREGON.ORG/DISEASEREPORTING".

Oregon Health Authority

Communicable Disease Reporting

Public Health Division > Diseases and Conditions > Communicable Disease > Communicable Disease Reporting

Communicable Disease Reporting

On this page:

- Health Care Providers and Laboratorians
- Local Health Departments
- Disease Reporting Posters
- Outbreak Summary Forms
- Surveillance Data

Communicable Disease Reporting

Case Report Forms

Investigative Guidelines

What and When to Report

How and Where to Report

Reporting Rules

Health Care Providers and Laboratorians

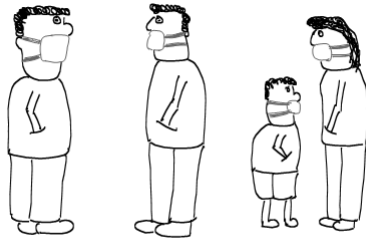
All Oregon physicians, other health care providers and laboratorians are required by law to report certain diseases and conditions to local health departments (pdf). Some cases are subject to restrictions (OAR)

OK, BUT WHERE DO I FIND THE RULES?

[HTTP://WWW.HEALTHOREGON.ORG/DISEASEREPORTING](http://www.healthoregon.org/diseasereporting)

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Public display of Infection.

QUESTIONS?