
Zoonotic Disease Investigations Acute and Communicable Disease

March 16, 2021

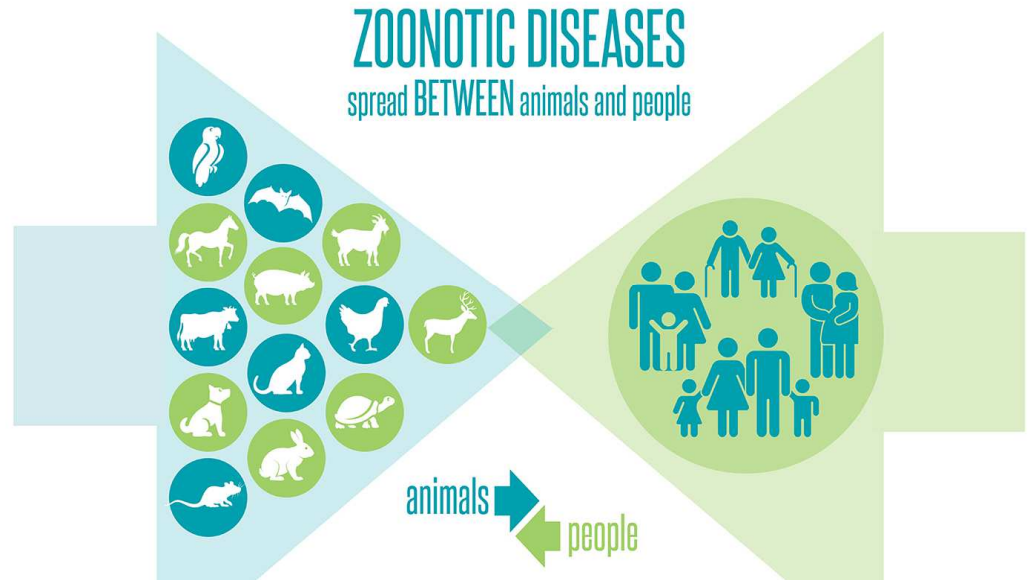
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The logo for the Oregon Health Authority. It features the word "Oregon" in a smaller, orange, serif font positioned above the word "Health". "Health" is written in a large, dark blue, serif font. Below "Health", the word "Authority" is written in a smaller, orange, serif font. A thin blue horizontal line is positioned just above the "Authority" text, extending from the left side of the "H" in "Health" to the right edge of the "Authority" text.

Oregon
Health
Authority

Seventy-five percent of all new infectious diseases originate from nonhuman animals.

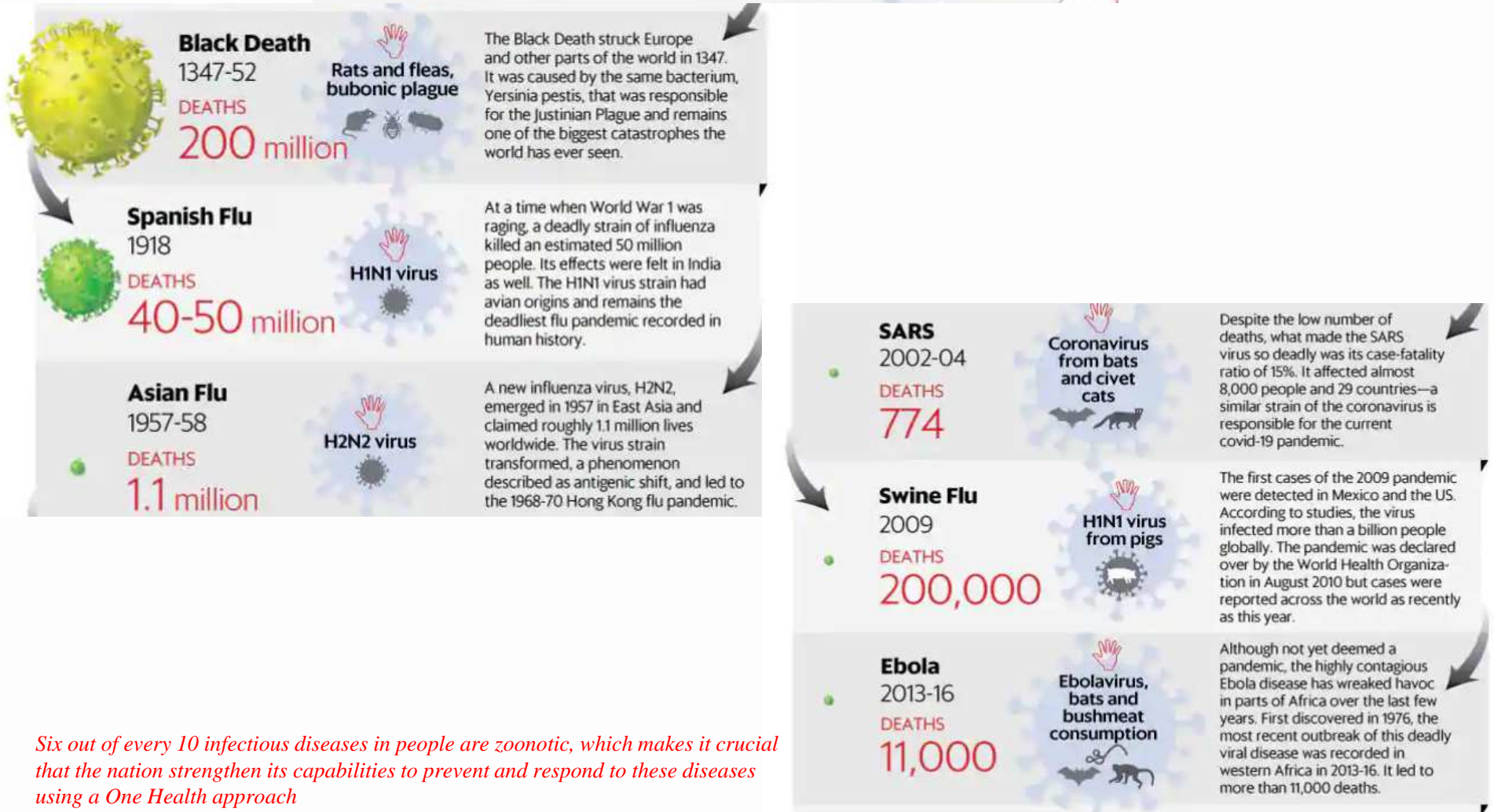
Zoonotic Disease Transmission



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A BRIEF HISTORY OF OUTBREAKS

Covid-19 is not the first pandemic to hit the world. Here's a look at the complex relationship humans have had with deadly viruses and infectious diseases.



Six out of every 10 infectious diseases in people are zoonotic, which makes it crucial that the nation strengthen its capabilities to prevent and respond to these diseases using a One Health approach

What do we track

- We have rules that require the report of different conditions
- Such as but not limited to
- Anthrax
- Rabies
- Plague
- Avian flu and other infectious conditions

IN PUBLIC HEALTH DIVISION REPORT PUBLIC HEALTH DIVISION REPORTING FOR CLINICIANS

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rts shall meet relevant



LABORATORIA

CIVIL PENALTIES FOR VIOLATIONS OF OREGON REPORTING LAW

A civil penalty may be imposed against a qualifying laboratory that fails to seek or obtain ELR approval, or against a clinical laboratory for failing to report a reportable disease according to Oregon Administrative Rules.⁵

- Civil penalties shall be imposed
- First violation \$100, second third or subsequent violation \$
 - Each day out of compliance wi a new violation.

- ☎ Report by phone immediately, day or night. **New reportables are highlighted.**
- 📄 Report within 24 hours.
- 📄 Forward isolate to the Oregon State Public Health Laboratory (OSPHL).
- 📄 Forward isolate if cultured; otherwise, send the test-positive specimen to OSPHL.

BACTERIA

- Anaplasma
- Bacillus anthracis¹ 📄📄
- Bacillus cereus
- biovar anthracis¹ 📄📄
- Bordetella pertussis
- Borrelia
- Brucella² 📄📄
- Burkholderia mallei³ 📄📄
- Burkholderia pseudomallei³ 📄📄
- Campylobacter
- Chlamydia trachomatis
- Chlamydia psittaci
- Clostridium botulinum³ 📄
- Clostridium tetani
- Corynebacterium diphtheriae 📄📄
- Coxiella burnetii² 📄📄
- Ehrlichia
- Eritrobacteriaceae family isolates that are resistant to any carbapenem antibiotics by current CLSI breakpoints^{7,8} 📄
- Escherichia coli, enterotoxigenic (E. coli O157 and other serogroups)⁸ 📄
- Francisella tularensis² 📄📄
- Grimontia 📄
- Haemophilus ducreyi
- Haemophilus influenzae 📄📄
- Legionella
- Leptospira
- Listeria monocytogenes 📄
- Mycobacterium bovis 📄
- Mycobacterium tuberculosis 📄

- Mycobacterium, other (non-respiratory only)
- Neisseria gonorrhoeae
- Neisseria meningitidis 📄📄
- Rickettsia prowazekii³ 📄📄
- Rickettsia, non-prowazekii
- Salmonella 📄
- Shigella 📄
- Treponema pallidum
- Vibrio cholerae 📄📄
- Vibrio, non-cholerae 📄
- Yersinia pestis² 📄📄
- Yersinia, non-pestis 📄

FUNGI

- Coccidioides 📄
- Cryptococcus 📄

PARASITES

- Amebic infections⁹ (central nervous system only)
- Babesia
- Cryptosporidium
- Cyclospora
- Giardia
- Plasmodium
- Taenia solium and undifferentiated Taenia spp.
- Trichinella

PRION DISEASES

- Creutzfeldt-Jakob disease (CJD), other prion diseases

VIRUSES

- Arboviruses¹⁰

atories must report diagnoses of diseases and conditions lab-confirmed and vtable. The parallel obviate the clinician's vis (e.g., uncommon animal bites, pesticide poisoning, identified by labs.

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CLINICIANS

New reportables are highlighted.

IMMEDIATELY

- Anthrax (*Bacillus anthracis*)
- Bacillus cereus biovar anthracis
- Botulism (*Clostridium botulinum*)
- Brucellosis (*Brucella*)
- 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)¹¹
- Marine intoxication (intoxication caused by marine microorganisms or their byproducts (e.g., paralytic shellfish poisoning, domoic acid intoxication, ciguatera, scombroid)
- Measles (rubeola)
- Meloidosis (*Burkholderia pseudomallei*)
- Plague (*Yersinia pestis*)
- Poliomyelitis
- Q fever (*Coxiella burnetii*)
- Rabies (human)
- Rubella
- SARS Severe Acute Respiratory Syndrome or SARS-coronavirus
- Smallpox (variola)
- Tularemia (*Francisella tularensis*)
- Typhus, louse-borne (*Rickettsia prowazekii*)
- Yellow fever

Outbreaks and uncommon illnesses (any known or suspected common-source outbreak; any uncommon illness of potential public health significance)

WITHIN ONE LOCAL HEALTH AUTHORITY WORKING

- Amebic infections⁹ (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 CLSI breakpoints⁷
- Escherichia coli (enterotoxigenic, Shiga toxinigenic, including E. coli O157 and other serogroups)
- Giardiasis (*Giardia*)
- Gonococcal infections (*Neisseria gonorrhoeae*)
- Grimontia spp. infection
- Haemophilus
- Hemolytic uremic syndrome (HUS)
- Hepatitis A
- Hepatitis B
- Hepatitis C
- Hepatitis D (delta)
- Hepatitis E
- HIV infection (does not apply to anonymous testing) and A
- Influenza (laboratory-confirmed death of a person <18 year old)
- Legionellosis (*Legionella*)
- Leptospirosis (*Leptospira*)
- Listeriosis (*Listeria monocytogenes*)
- Lyme disease (*Borrelia burgdorferi*)
- Malaria (*Plasmodium*)
- Mumps
- Non-tuberculous mycobacter infection (non-respiratory)
- Pertussis (*Bordetella pertussis*)
- Psittacosis (*Chlamydia psittaci*)
- Relapsing fever (*Borrelia*)
- Rocky Mountain spotted fever and other Rickettsiae (except louse-borne typhus, which immediately reportable)
- Salmonellosis (*Salmonella* including typhoid)
- Shigellosis (*Shigella*)
- Syphilis (*Treponema pallidum*)
- Taenia infection (including cysticercosis and tapeworm infections)
- Tetanus (*Clostridium tetani*)
- Trichinosis (*Trichinella*)
- Tuberculosis (*Mycobacter tuberculosis* and *M. bovis*)
- West Nile
- West Nile
- Yersiniosis (other than plague which is immediately reportable)
- Zika

FOOTNOTES

1 In addition to reporting updates, please be aware of new OAR 333-019-01 requiring health care professionals to observe standard precautions as described in Centers for Disease Control and Prevention's Guidelines for Infection Prevention, Transmission of Infections, Rights in Healthcare Settings (2002) <https://www.cdc.gov/infectioncontrol/guidelines/isolation/>


The zoonotic diseases of most concern in the U.S.

- Zoonotic influenza
- Salmonellosis
- West Nile virus
- Plague
- Emerging coronaviruses (e.g., severe acute respiratory syndrome and Middle East respiratory syndrome)
- Rabies
- Brucellosis
- Lyme disease




Exotic Emerging Zoonoses

- Ebola – primates, reservoir unknown
- Nipah – bats
- West Nile – birds, mosquitoes
- SARS – masked palm civets, bats
- Avian Influenza – poultry, wild birds
- Monkeypox – rodents, primates



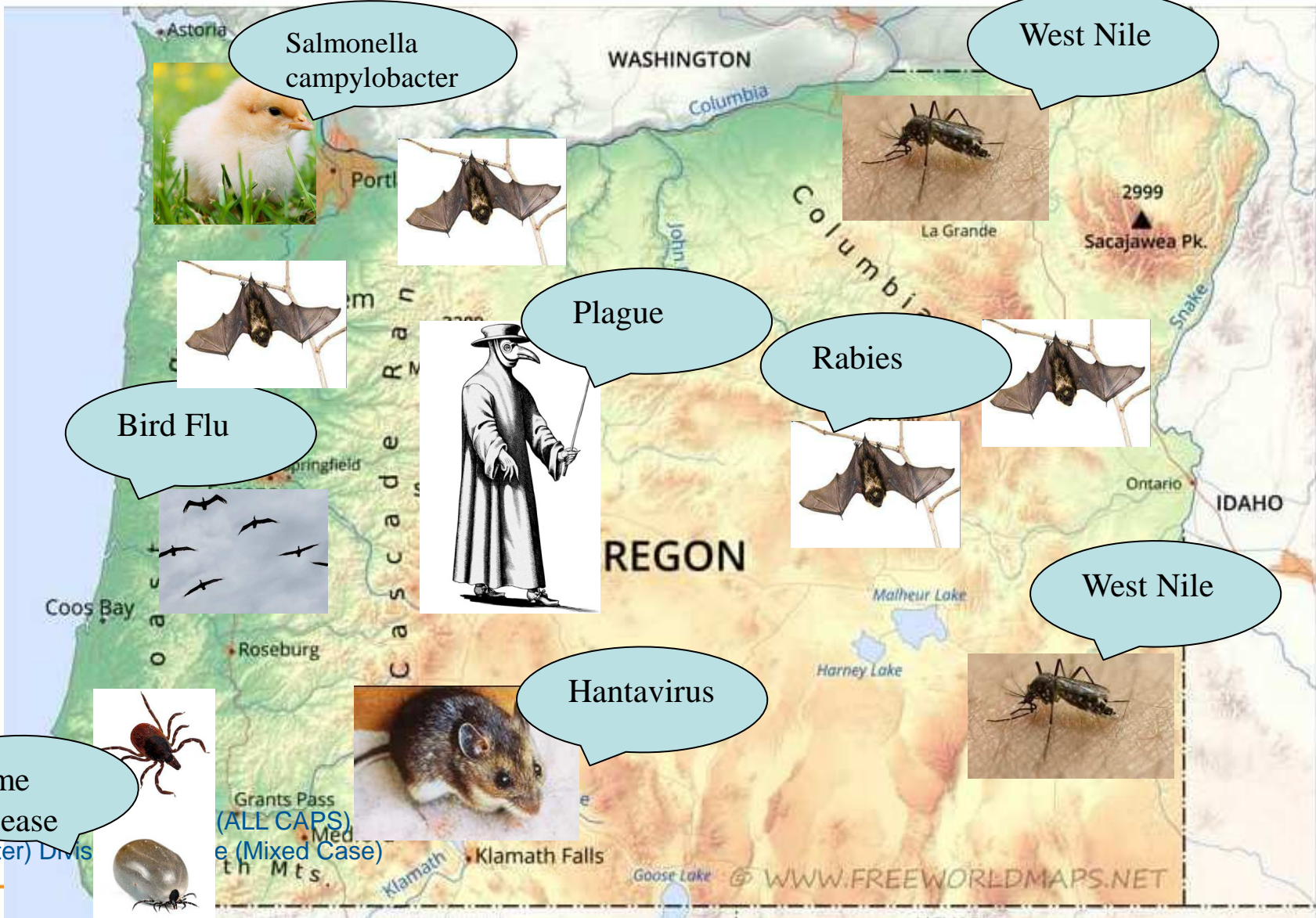
2001, Pam & Brett Whitsett



EM, Marburg virus, CDC gallery

Download





With animal importation other animals, such as ticks, may also come along.

What do Asian longhorned ticks look like?



Nymph and adult female, top view.



Nymph and adult female, underside.

What we know about Asian longhorned ticks

- Not normally found in the Western Hemisphere, these ticks were reported for the first time in the United States in 2017.
- Asian longhorned ticks have been found on pets, livestock, wildlife, and people.

Protect yourself, your pets, and your livestock

- Use Environmental Protection Agency (EPA)-registered insect repellents containing DEET, picaridin, IR3535, oil of lemon eucalyptus, para-menthane-diol, or 2-undecanone. Always follow product instructions.
- Wear permethrin-treated clothing.

What to do if you think you have found an Asian longhorned tick

- Remove ticks from people and animals as quickly as possible.
- Save the ticks in rubbing alcohol in a jar or a ziplock bag, then:
 - Contact your health department about steps you can take to