

Disease Highlight: Mumps Clusters

Tri-County Health Department has been investigating 2 separate outbreaks of mumps in the TCHD jurisdiction.

The first is among four separate households since 09/28/2018. To date, fifteen cases have been identified. All cases report recent travel or contact with someone who had recently traveled and become ill after returning from the same region in Mexico. This outbreak is occurring among a community of individuals opposed to vaccination and all but one case have been unvaccinated, school-aged children between ages 3 and 18 years. TCHD has been in close communication with impacted schools to help facilitate appropriate exclusion of ill individuals, as well as symptom monitoring and exclusion of susceptible close contacts. There has been no evidence of mumps transmission within any of the schools and no cases outside the four households have been identified.

The second outbreak is at GEO, an Immigration and Customs Enforcement (ICE) Detention Facility in Aurora. As of 3/14/19, 15 cases of mumps have been documented amongst ICE detainees since February 2019. TCHD and the Colorado Department of Public Health and Environment (CDPHE) are working closely with the ICE Detention Facility to track new cases, implement disease control measures, and provide public health recommendations. As of 3/1/19, ICE administered over 1100 doses of MMR to detainees across the facility.

Mumps is a virus transmitted through contact with an infected person's respiratory secretions (e.g., coughing and sneezing). Some people may experience prodrome symptoms, such as fever, body aches, headache, and malaise, prior to onset of parotid or other salivary gland swelling. Parotitis occurs in approximately 30-40% of cases and can be unilateral or bilateral. In rare cases, complications such as orchitis, oophoritis, encephalitis, pancreatitis, meningitis and deafness can occur. People with mumps are contagious one to two days prior to onset of salivary gland swelling through five days after swelling onset. Receipt of two doses of MMR vaccine is 88% effective at preventing illness. Vaccination with an MMR after exposure to mumps does not provide protection against that specific exposure, but will provide protection against future ones. To promote increased surveillance and monitoring of additional mumps cases within the Denver-metro area, CDPHE recently provided messaging through the [Health Alert Network](#) asking healthcare providers to consider a diagnosis of mumps in patients who present with parotid or salivary gland swelling as well as prompt testing with a buccal swab and/or mumps serology for any individual suspected of having mumps. Timely reporting of suspect mumps cases to state and local public health can help prevent further disease transmission.



Annual rabies data and NEW tracking map!

Rabies reservoir species in Colorado include bats, skunks, raccoons, foxes, and coyotes. In 2018, TCHD investigated 427 exposures involving wildlife with humans and/or domestic pets. In Colorado, 325 animals tested positive for rabies, including 9 domestic animals. This is the highest number of rabies positive specimens ever recorded in [Colorado](#). Of those, 7 bats, 4 skunks and 1 alpaca tested positive for rabies in Adams, Arapahoe and Douglas Counties. Please report any pet or human exposure to wildlife *immediately* to TCHD (see number in Contact Information Section).

Please remind others not to touch or approach wildlife. Vaccinating pets and livestock is the best protection from rabies exposures!

Did you know? TCHD now has a map of our rabies positive animals! Click [HERE](#).



Influenza Reminder

The flu season runs from October to May each year and based on virologic data from CDPHE, we are seeing more disease due to influenza type A H3N2 now as compared with earlier in the season when type H1N1 predominated. Influenza B viruses are also co-circulating. It's not too late to get vaccinated! For more information from CDC click [HERE](#) And for updated Colorado data click [HERE!](#)



Hepatitis A Outbreak Update:

El Paso, Pueblo and now Fremont Counties have reported 19 cases of hepatitis A since October 2018. The majority of cases in this outbreak report experiencing homelessness and/or using street drugs. The age range of cases is 24 years to 66 years (median 39 years); 15 (79 percent) of cases are male. Fourteen (78 percent) of cases have been hospitalized, and all cases have survived. Twelve (63 percent) of cases report experiencing homelessness, and 16 (84 percent) of cases report substance use issues, including injection and non-injection of methamphetamine and/or heroin. Due to the close proximity of the outbreak cases, TCHD has continued to work with community partners and set up clinics to vaccinate our high risk persons. Between November 26th and January 29th, TCHD provided 10 clinics and vaccinated 132 persons for hepatitis A. TCHD has not had any cases related to this outbreak. Of note, the CDC recommends persons experiencing homelessness, persons who inject drugs, and/or men who have sex with men, to receive the 2 dose hepatitis A vaccine because of the high risk for disease.

How can you support public health?

National Public Health Week (NPHW), April 1-7, 2019, is a way to support strong public health systems and raise awareness about everyone's role in creating the healthiest nation. The main focus areas this year are: **Healthy Communities, Violence Prevention, Rural Health, Technology and Public Health, Climate Change and Global Health.** More info: <http://www.nphw.org/nphw-2019>

Thank you to our community partners, including providers and laboratories, for support in the timely reporting of reportable conditions which is critical to our prompt and effective response to outbreaks to protect the communities we serve!

Contact Information:

Report infectious diseases or outbreaks to TCHD within 24 hours to help prevent further spread of illness!

Call Communicable Disease at (303) 220-9200

After hours: (720) 200-1486

[Colorado Reportable Diseases Link](#)



Adams, Arapahoe and Douglas Counties, Colorado

Eleven offices along the Colorado front range serving the residents of Adams, Arapahoe and Douglas Counties
Administration Office: 6162 S. Willow Drive, Suite 100 * Greenwood Village, CO 80111
Telephone: 303-220-9200 * Fax: 303-220-9208 *
Website: www.tchd.org

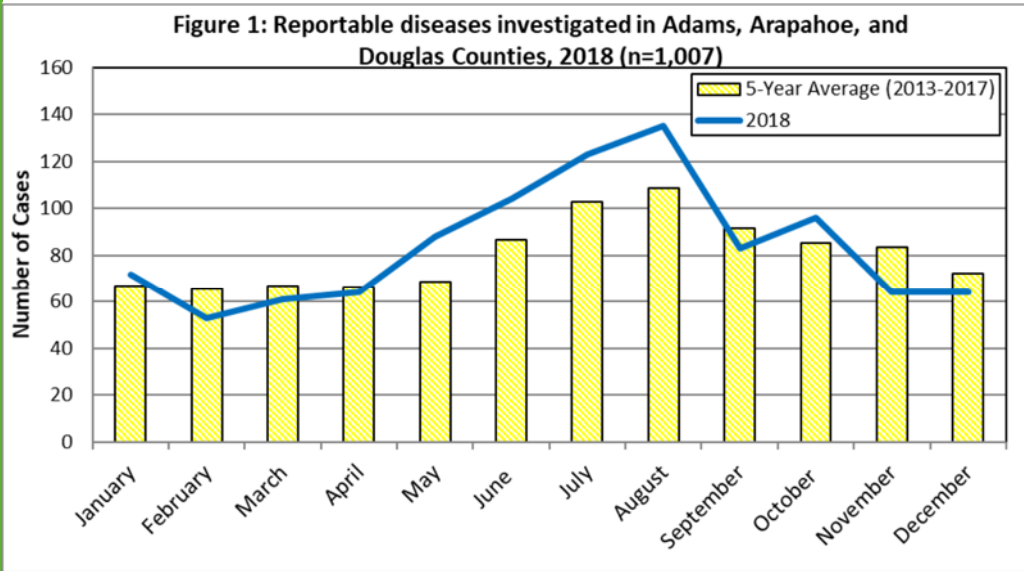
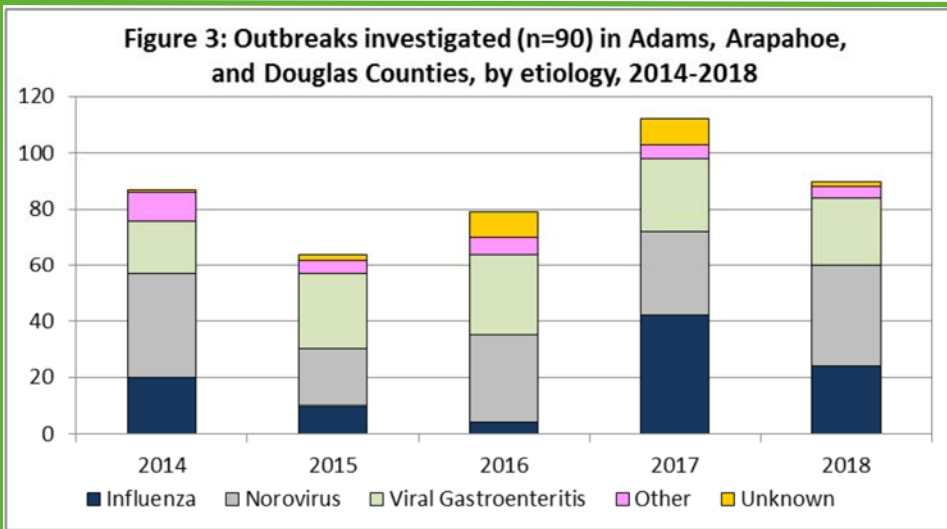
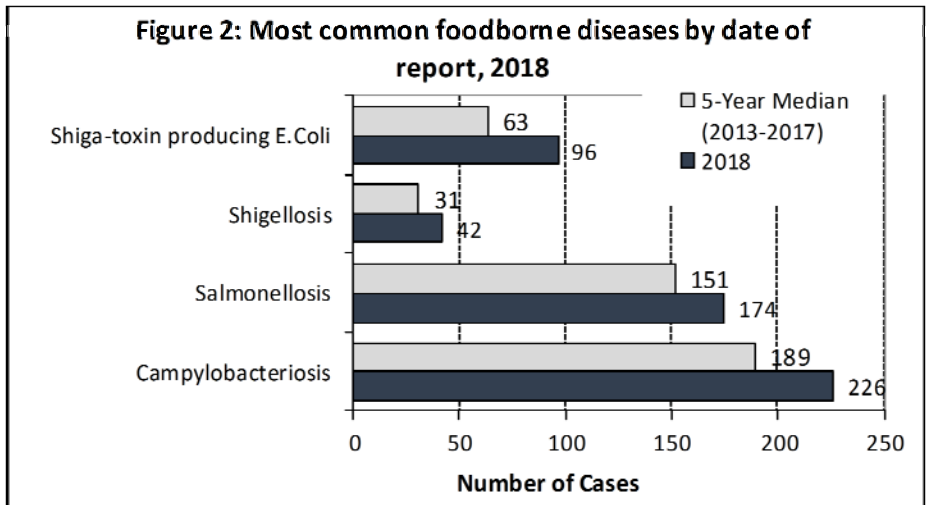


Figure 1 shows the number of cases of reportable diseases investigated in 2018 by month vs. the average number over the last five years. In 2018, not including animal bites, TCHD investigated 1,007 cases of

Figure 2 shows the number of cases of select reportable foodborne diseases investigated by TCHD in 2018 vs. the median number from the last five years. A total of 538 cases of these four diseases were investigated in 2018, representing a 24% increase over the five-year median. Of note, 18 of the *Salmonella* cases in 2018 were part of an outbreak at Arapahoe County Fair that was likely caused by contact with pigs rather than contaminated food.



In 2018, TCHD investigated a total of 90 outbreaks. This represents a 20% decrease from 2017, due largely to a less severe flu season. **Figure 3** shows the outbreaks investigated from 2014 to 2018 by etiology. Influenza and gastrointestinal illness, including norovirus, account for the majority of the outbreaks investigated across all years. Of the outbreaks caused by "other" etiologies in 2018, one was of *Salmonella*, one of *Legionella*, one of *Clostridium perfringens*, and one of multiple pathogens (*Cryptosporidium* and *Giardia*).



Communicable Reportable Conditions

Effective: July 15, 2018

Confidential Fax: 303-782-0338
STI/HIV Confidential Fax: 303-782-5393
Toll Free Fax: 1-800-811-7263

Phone: 303-692-2700
Toll Free Phone: 1-800-866-2759
Evening/weekend hours: 303-370-9395

www.colorado.gov/cdphe/report-a-disease
• Disease Report Forms • Colorado Electronic Disease Reporting
• Specimen submission guidance • System (CEDRS) application
Complete Board of Health rules can be found at:
<https://www.colorado.gov/pacific/cdphe/regulations-adopted-board-health>

Immediate reporting by phone is required of any illness that may be caused by biological, chemical or radiologic terrorism.

As indicated below, reporting by labs (diagnostic results and those highly correlated with disease) and providers (including suspected conditions) is required in accordance with Regulation 6 CCR 1009-1.

Imm = Immediately † | 1wd = 1 working day ‡
24h = 24 hours | 4d = 4 days | 30d = 30 days
L = laboratory | P = provider | L&P = both

Time	Reporter	Time	Reporter
30d	L <i>Acinetobacter baumannii</i> , carbapenem-resistant (CRAB) ⁽⁺⁺⁾ 5-county	4d	P Influenza-associated hospitalization
4d	P Acute flaccid myelitis	4d	L&P Legionellosis
24h	P Animal bites (by dogs, cats, rabies reservoir species & other wild carnivores)	4d	P Leprosy (Hansen's Disease)
4d	P Animal bites (by any other mammals)	4d	L&P Listeriosis*
Imm	L&P Anthrax*	4d	L&P Lyme disease
4d	L Arboviral Diseases (Eastern equine encephalitis, LaCrosse encephalitis virus, Japanese encephalitis virus, California encephalitis serogroup, St. Louis encephalitis virus, Western equine encephalitis virus, Powassan virus and others)	4d	L&P Lymphogranuloma venereum (LGV) ‡
Imm	L&P Botulism	4d	L&P Malaria
4d	L&P Brucellosis*	Imm	L&P Measles (rubeola)
4d	L&P Campylobacteriosis	Imm	L&P Meningococcal Disease (<i>N. meningitidis</i> or gm-neg diplococci)* (+)
Imm	L&P <i>Candida auris</i> (identified or suspected, including <i>Candida haemulonii</i>)*	4d	L&P Mumps
30d	L Candidemia ^{5-county}	Imm	L&P Outbreaks: incl foodborne, water, person-to-person, healthcare settings
4d	L&P Chancroid ‡	1wd	L&P Pertussis (whooping cough)
4d	L Chikungunya	Imm	L&P Plague*
4d	L&P Chlamydia ‡	Imm	L&P Poliomyelitis
Imm	L&P Cholera*	4d	L <i>Pseudomonas aeruginosa</i> , carbapenem-resistant
4d	P CJD & other transmissible spongiform encephalopathies (TSEs)	4d	L&P Psittacosis
30d	L <i>Clostridium difficile</i> ^{5-county}	4d	L&P Q fever (<i>Coxiella burnetii</i>)
4d	L Colorado tick fever	Imm	L&P Rabies, human (suspected)
4d	L&P Cryptosporidiosis	4d	L&P Rickettsiosis (including RMSF and typhus)
4d	L&P Cyclosporiasis	1wd	L&P Rubella (acute infection)
4d	L Dengue	4d	L&P Rubella, congenital
Imm	L&P Diphtheria*	4d	L&P Salmonellosis*
4d	P Encephalitis	Imm	L&P Severe or novel coronavirus (MERS-CoV or SARS-CoV)
4d	L Enterobacteriaceae, carbapenem-resistant (CRE)	4d	L&P Shigellosis*
4d	L Enterobacteriaceae, extended-spectrum beta-lactamase (ESBL) ^{Boulder}	Imm	L&P Smallpox (Variola virus or Orthopox virus)
4d	L&P <i>Escherichia coli</i> O157:H7 / Shiga toxin-producing <i>Escherichia coli</i> *	4d	L <i>Staphylococcus aureus</i> , Vancomycin-resistant*
4d	L&P Giardiasis	4d	P Streptococcal toxic shock syndrome**
4d	L&P Gonorrhea, any site ‡	4d	L <i>Streptococcus pneumoniae</i> ** (+)
4d	L Group A streptococci* (+) 5-county	1wd	L&P Syphilis/ <i>Treponema pallidum</i> (all reactive tests) ‡
30d	L Group B streptococci* (+) 5-county	4d	P Tetanus
1wd	L&P <i>Haemophilus influenzae</i> * (+)	4d	L&P Tick-borne relapsing fever
4d	L&P Hantavirus disease	4d	P Toxic shock syndrome (non-streptococcal)
4d	P Hemolytic uremic syndrome if < 18 years	4d	P Trichinosis
1wd	L&P Hepatitis A	1wd	L&P Tuberculosis disease (active)*
4d	L&P Hepatitis B	1wd	L&P Tularemia*
4d	L&P Hepatitis C	1wd	L&P Typhoid fever*
4d	P Hepatitis, other viral	4d	L&P Varicella (chicken pox)
4d	L&P Human immunodeficiency virus (HIV) / acquired immunodeficiency syndrome (AIDS) ‡	4d	L Vibriosis*
	• All reactive HIV tests • HIV viral load (any value)	Imm	L&P Viral hemorrhagic fever*
	• CD4 counts (any value) • HIV genotype	4d	L West Nile virus (acute infection, IgM+)
4d	P Influenza-associated death if < 18 years	4d	L Yellow fever
		4d	L Yersiniosis* 7-county
		4d	L Zika virus

Send isolates/clinical material to:
8100 Lowry Blvd
Denver, CO 80230
Phone: 303-692-3090

All reports and specimens shall be accompanied by the following information:

- Name of disease or condition
- Patient's name
- Patient's date of birth, sex, race, ethnicity
- Patient's home address and phone
- Physician's name, address and phone
- Laboratory information (test name, collection date, specimen type and accession number)

Key:

5-county = Adams, Arapahoe, Denver, Douglas and Jefferson
7-county = Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas and Jefferson
(+) = positive test from a normally sterile site / (++) = positive culture from sterile site or urine

† = "Immediate" = by phone, within 4 hours of suspected diagnosis
‡ = Unless the term "working day" is specified, "days" refers to calendar days.
* = Physicians need to report sex at birth, gender identity, and relevant treatment.
Boulder = Boulder county only

*Submission of isolate/clinical material required. Testing laboratories shall routinely submit bacterial culture isolates or patient clinical material that yields positive findings to the CDPHE Laboratory Services Division. The isolate or clinical material shall be received at the CDPHE Laboratory Services Division no later than one working day after the observation of positive findings. Clinical material is defined as: (i) A culture isolate containing the infectious organism for which submission of material is required, or (ii) If an isolate is not available, material containing the infectious organism for which submission of material is required, in the following order of preference: (A) a patient specimen; (B) nucleic acid; or (C) other laboratory material. For TB, only isolates should be submitted.

** Isolate submission for 5-county area only.



Environmental Reportable Conditions

Effective: January 14, 2018

Confidential Fax: 303-782-0338
Toll Free Fax: 1-800-811-7263

Phone: 303-692-2700
Toll Free Phone: 1-800-866-2759

Evening/weekend hours: 303-370-9395

Immediate reporting by phone is required of any illness that may be caused by biological, chemical or radiologic terrorism.

As indicated below, reporting by health care providers, laboratories, coroners, hospitals and community clinics with emergency rooms is required in accordance with Regulation 6 CCR 1009-7.

24h = 24 hours | 7d = 7 days
30d = 30 days | 90d = 90 days
L&P = Laboratory and Provider

Time	Reporter	Condition
7d	L&P	Blood Lead Levels if ≤18 years (≥5 µg/dL)
30d	L&P	Blood Lead Levels if ≤18 years (<5 µg/dL)
30d	L&P	Blood Lead Levels if >18 years (≥5 µg/dL)
30d	L&P	Mercury (Blood, > 0.5 µg/dL)
30d	L&P	Mercury (Urine, > 20 µg/L)
24h	L&P	Any other disease, syndrome or condition that is known or suspected to be related to an exposure to a toxic substance, prescription drug, over-the-counter medication or remedy, controlled substance, environmental media or contaminated product that results in hospitalization, treatment in an emergency department, or death, and is: <ol style="list-style-type: none"> Suspected of being a cluster, outbreak or epidemic, A risk to the public due to ongoing exposure, At an increased incidence beyond expectations, Due to exposure to food, environmental media (including water, air, soil or sediment), or other material, such as marijuana products, that is contaminated by a toxic substance, hazardous substance, pollutant or contaminant, A case of a newly-recognized or emerging disease or syndrome, Related to a healthcare setting or contaminated medical devices or products, such as diverted drugs, or May be caused by, or related to, a suspected intentional or unintentional release of chemical or radiological agents.

Time	Reporter	Condition
90d	L&P	Chromosomal abnormalities and neural tube defects diagnosed by prenatal testing or by genetic testing in Colorado residents through the 3 rd birthday

All reports and specimens shall be accompanied by the following information:

- Name of disease or condition
- Patient's name
- Patient's date of birth, sex, race, ethnicity
- Patient's home address and phone
- Physician's name, address and phone
- Any associated laboratory information (test name, collection date, specimen type and accession number)



DISEASE REPORT FORM
FOR PHYSICIANS AND OTHER HEALTH CARE PROVIDERS

Case information

DATE:
Reported by: Organization:
Case's Name: Parent's Name:
Age: Date of Birth: Gender:
Primary phone(s): Secondary phone(s):
Address: City: Zip:
County of Residence:
If another county, please specify: School/Employer:

Medical information

Disease: Onset date: Specimen type:
Specimen collection date: Lab tests performed:
Lab confirmed: Name of lab:
Other relevant medical/Rx/immunization info:

Health care provider information

Health care provider name: Phone:
Clinic name:
Address: City: Zip:

For your convenience, you may report diseases by phone Monday through Friday, 8:00 A.M. to 5:00 P.M. at (303) 220-9200 or you may complete this form and fax it 24 hours a day to (303) 846-6295.

For after hour and weekend emergencies:
Contact the Tri-County Health Department at (303) 461-2342 or the Colorado Department of Public Health and Environment at (303) 370-9395

For Internal Use:
Date Report Received: Received By: