

Diphtheria

Disease Category: Vaccine Preventable Diseases

Timeframe to follow-up: Immediately for respiratory; within one day for other

See the link to the [Disease Investigation Process document](#)

Signs and Symptoms¹

- Weakness
- Sore Throat
- Mild Fever
- Swollen glands in the neck
- Open Sores
- Ulcers
- Rash with scales or peeling skin

Incubation²

Usually 2 to 5 days; range 1-10 days.

Case Classification

Clinical criteria: Upper respiratory tract illness with an adherent membrane of the nose, pharynx, tonsils, or larynx or Infection of a non-respiratory anatomical site (e.g., skin, wound, conjunctiva, ear, genital mucosa).

Confirmed: Isolation of *C. diphtheriae* from any site AND confirmation of toxin-production by Elek test or by another validated test.

Probable: A clinically compatible case that is not laboratory confirmed and has no known epidemiology link to a laboratory-confirmed case.

Differential Diagnosis³

Respiratory diphtheria is uncommon in the United States. Infection with other pathogens could result in a similar clinical presentation as diphtheria; testing for other pathogens should be considered. Pathogens include group A beta-hemolytic *Streptococcus*, *Staphylococcus aureus*, *Candida albicans*, and viruses such as Epstein-Barr, cytomegalovirus, adenovirus, and herpes.

Treatment⁴

Patients with respiratory diphtheria require hospitalization to monitor response to treatment and manage complications.

- Equine diphtheria antitoxin (DAT) is the mainstay of treatment and can be administered without waiting for laboratory confirmation. In the United States, DAT is available to physicians under an investigational new drug protocol by contacting their state health department, followed by the Centers for Disease Control and Prevention (CDC) Emergency Operations Center at 770-488-7100.
- In addition to DAT, treating physicians should prescribe an antibiotic (erythromycin or penicillin) to eliminate the causative organisms, stop toxin production, and reduce communicability. Patients will require supportive care, including airway and cardiac monitoring. In addition,

	close contacts of patients should receive antimicrobial prophylaxis with erythromycin or penicillin.
Duration ⁵	Symptoms usually persist for two to three weeks; any skin ulcers could take two to three months to fully heal, though scarring may be permanent.
<u>Exposure⁶</u>	Diphtheria bacteria spreads from person to person, through respiratory droplets from coughing and sneezing.
<u>Laboratory Testing⁷</u>	Local Health Authority can arrange testing if an outbreak is suspected OR for contacts: • Culture, Corynebacterium diphtheria
<u>Control of Contacts⁸</u>	Management of exposed people is based on individual circumstances, including immunization status and likelihood of adherence to follow-up and prophylaxis. Close contacts of a person with infection caused by toxigenic diphtheria should be identified and the following are recommended: • Conduct contact tracing. • Take steps for close contacts, regardless of immunization status • Contacts who cannot be kept under surveillance should receive antibiotic treatment and if not fully vaccinated, be immunized appropriate to age.
Key areas of focus during investigation	Dependent on type of disease (i.e., travel history, food history, recent hospitalizations, water exposure).
Public Health Actions	Reports of Diphtheria cases must be made to the Local Health Authority during the regular business hours of the health authority on the first working day following the identification of the case. Local Health Authority to notify Office of State Epidemiology (OSE) (dpbhepi@health.nv.gov) or call 775-684-5911/775-400-0333 (after hours) if outbreak suspected. For individual confirmed or probable cases: • Confirm diagnosis, if possible • Identify potential exposures • Prepare a case report and submit to the Chief Medical Officer (through OSE) within 7 days after completing the case investigation • Identify potential outbreaks from common sources • Provide education about how to prevent transmission To the best of the local health authority's ability, each step of the investigation should be completed within one working day or in alignment with NAC 441A.
<u>Key Partner Agencies</u>	• Carson City Health and Human Services (CCHHS) • Central Nevada Health District (CNHD) • Northern Nevada Public Health (NNPH) • Southern Nevada Health District (SNHD) • Nevada Department of Agriculture (NDA)

TABLE OF CONTENTS

TABLE OF CONTENTS	3
I. DISEASE REPORTING	4
A. Legal Reporting Requirements	4
1. Health Care Providers and Health Care Facilities	4
2. Laboratories	4
3. Local Health Authority (LHA)	4
II. THE DISEASE AND ITS EPIDEMIOLOGY	4
A. Background ¹⁴	4
B. Etiologic Agent ²	4
C. Description of Illness ¹⁵	5
D. Disease Burden in Nevada ¹⁶	5
E. Reservoirs ²	5
F. Modes of Transmission ²	5
G. Incubation Period ²	5
H. Period of Communicability ²	5
I. Testing ¹⁷	6
J. Treatment	6
III. EPIDEMIOLOGIC CASE INVESTIGATION	6
A. Step 1: Review relevant information about the disease	6
1. Review scientific information in Control of Communicable Diseases Manual, most recent edition	6
2. Review Diphtheria most recent Case Definition (2019 CDC)	6
B. Step 2: Begin investigating the case	6
1. Contact Reporting Source and/or Reported Case	6
C. Step 3: Identify potential sources of infection ¹⁸	7
D. Step 4: Initiate control measures for case and/or for contacts (see Section IV – Section VI below)	7
E. Step 5: Provide Education and Prevention messaging to the case and/or contacts (see Section IX below)	7
IV. CONTROL OF CASE	7
1. Management/Exclusions for Specific Groups or Settings	7
2. Exclusion Notifications	9
V. CONTROL OF CONTACTS (if applicable)	9
1. Management/Exclusions for Specific Groups or Settings	9
2. Exclusion Notifications	11
VI. CONTROL OF CARRIERS (if applicable)	12
1. Carrier Management/Exclusions	12
2. Carrier Notifications	12
VII. MANAGEMENT OF SPECIAL SITUATIONS/OUTBREAK CONTROL	12
VIII. PREVENTION	13
IX. REFERENCES	14
X. ACKNOWLEDGEMENTS	15
XI. UPDATE LOG	15

DIPHTHERIA

I. DISEASE REPORTING

A. Legal Reporting Requirements

A report to the health authority may be made by telephone; telecopy (in the form prescribed by the health authority); or any form of electronic communication identified by the health authority, following the specified format and [procedure](#).⁹

1. *Health Care Providers and Health Care Facilities*

Health providers and [facilities](#) must notify the health authority where [provider](#) is located within the first working day after identifying the case.^{9,10,11}

2. *Laboratories*

[Laboratories](#) must notify the health authority within the first working day after identifying the case. (1) If the lab is located outside of Nevada, notify the Nevada Chief Medical Officer through the Office of State Epidemiology (OSE) within the same timeframe.^{9,12}

3. *Local Health Authority (LHA)*

[LHA's](#) must notify the Office of State Epidemiology (OSE) within 7 days after completing the case investigation.¹³

II. THE DISEASE AND ITS EPIDEMIOLOGY

A. Background¹⁴

Diphtheria is the name for any illness caused by toxin produced by some strains of *C. diphtheria*. Diphtheria toxin, rather than *C. diphtheriae*, is responsible for the serious effects of diphtheria. The toxin kills healthy tissues and can cause many serious health problems. Diphtheria is primarily endemic in developing countries, particularly in regions with low vaccination coverage and extremely rare in the United States. Risk factors generally include close contact with someone with diphtheria increases the risk of getting infected which includes:

- Living with them
- Being close together often
- Sharing respiratory secretions (saliva, spit)
- Being exposed to wound secretions (open sores or ulcers)

The overall case-fatality rate for diphtheria is 5-10% and people younger than 5 years and older than 40 years of age experience higher death rates (up to 20%).¹⁵

B. Etiologic Agent²

C. diphtheriae is an aerobic, gram-positive bacillus. Toxin production (toxigenicity) occurs only when the bacillus is itself infected (lysogenized) by specific viruses

(corynebacteriophages) carrying the genetic information for the toxin (*tox* gene). Diphtheria toxin causes the local and systemic manifestations of diphtheria.

C. diphtheriae has four biotypes: *gravis*, *intermedius*, *mitis*, and *belfanti*. All biotypes can become toxigenic and cause severe disease. All isolates of *C. diphtheriae* should be tested for toxigenicity.

C. Description of Illness¹⁵

Diphtheria can involve almost any mucous membrane and clinically can be classified by the type of manifestation, depending on the disease site. Respiratory sites commonly include pharyngeal and tonsillar diphtheria, laryngeal diphtheria, nasal diphtheria, and cutaneous infections can also occur.

Respiratory diphtheria has a gradual onset and is characterized by mild fever, sore throat, difficulty swallowing, malaise, loss of appetite, and hoarseness. The hallmark of respiratory diphtheria is pseudomembrane that appears within 2-3 days of illness. Another form is cutaneous diphtheria may present as a scaling rash or ulcers with clearly demarcated edges and membrane where the skin infections are slow to heal.

D. Disease Burden in Nevada¹⁶

Diphtheria is not endemic to Nevada, nor has there been any cases of diphtheria reported in Washoe County in at least the last 25 years. This makes cases of diphtheria rare in many areas of the world but still a serious illness. Respiratory diphtheria remains the best-known form and cutaneous diphtheria is an emerging issue in the United States and globally.

E. Reservoirs²

Humans are the reservoir for *C. diphtheriae*.

F. Modes of Transmission²

Transmission is most often person-to-person through respiratory droplets. Transmission may also occur from exposure to infected skin lesions or articles soiled with discharges from these lesions.

G. Incubation Period²

The incubation period for diphtheria is 2 to 5 days, with a range of 1 to 10 days. Disease can involve almost any mucous membrane. In untreated people, organisms can be present in discharges and lesions 2 to 6 weeks after infection. For clinical purposes, it is convenient to classify diphtheria by anatomic site: respiratory (pharyngeal, tonsillar, laryngeal, nasal) and non-respiratory (cutaneous and other mucus membranes) disease.

H. Period of Communicability²

Transmission may occur if virulent bacilli are present in discharges and lesions. Effective antibiotic therapy promptly terminates shedding.

I. Testing¹⁷

Many clinical laboratories throughout the United States can conduct tests to isolate and identify *C. diphtheriae*. Bacterial culture is used to help isolate and identify the bacteria. Colonies of gram-positive bacilli isolated on culture can be further identified by additional tests such as:

- Biochemical assay's
- Matrix-assisted laser desorption/ionization-time of flight mass spectrometry (MALDI-TOF)
- Polymerase chain reaction (PCR)

The next step would be to assess whether the bacteria possess the *tox* gene. Some state public health laboratories can conduct PCR testing for detection of the gene; however, in most parts of the U.S., isolates must be sent to CDC for this testing. To send samples to CDC for *tox* testing, follow the instructions listed here: [Test Order](#).

More information can also be found on the Nevada State Public Health Laboratory website regarding specimens for diphtheria: <https://www.unr.edu/nevada-state-public-health-laboratory/directory-services/culture-corynebacterium-diphtheria>

J. Treatment

Treatment for diphtheria usually involves antitoxin and antimicrobial therapy. For skin infections generally only antibiotics are used. Generally, people with diphtheria can't infect others 48 hours after starting antibiotics so it is advised to finish taking all prescribed antibiotics to ensure that the bacteria is completely gone. It is also advised for children to receive the DTaP vaccine which is part of a 3-dose primary series at age 2, 4, and 6 months. The next dose is at age 11 through 18 for adolescents who have completed the DTaP series.

Provide most current treatment guidelines from [Red Book](#) to the healthcare provider or refer case to physician for proper treatment for Diphtheria.

III. EPIDEMIOLOGIC CASE INVESTIGATION

The public health authority should begin investigating the case of Diphtheria, step by step, within one working day of notification or in alignment with [NAC 441A](#).

A. Step 1: Review relevant information about the disease.

1. *Review scientific information in [Control of Communicable Diseases Manual](#), most recent edition.*
2. *Review Diphtheria most recent [Case Definition](#) (2019 CDC).*

B. Step 2: Begin investigating the case.

1. *Contact Reporting Source and/or Reported Case*

Upon receiving an initial case report, review lab test results and available clinical details and epidemiologic factors. Please make three attempts to contact the case (text and phone calls) on separate days, at different times of the day (morning, afternoon, late afternoon).

Document all attempts to contact a reporting source and/or reported case, preferably in the “Encounters” tab of EpiTrax. Please use case report forms (CRF) to gather accurate information about the case. Focus on the key data elements listed above. Filling out an electronic version of the CRF in EpiTrax (called a Confidential Morbidity Report (CMR) in EpiTrax) is preferred. If used, the completed PDF version should be attached to the CMR in EpiTrax. The CRF should be completed within 7 days of completing the investigation of the case.¹³

C. Step 3: Identify potential sources of infection¹⁸

The investigation focuses on exposures and symptom monitoring for the first 2 to 5 days. It is important while conducting the case investigation to ask about any risk factors for infection, travel, exposures to animals/water/ and food. It is important to note that people traveling to areas with endemic diphtheria or people who come into contact with infected travelers from such areas are at increased risk of infection; rarely, fomites or milk products can serve as vehicles of transmission.

D. Step 4: Initiate control measures for case and/or for contacts (see Section IV – Section VI below).

E. Step 5: Provide Education and Prevention messaging to the case and/or contacts (see Section IX below).

IV. CONTROL OF CASE

1. *Management/Exclusions for Specific Groups or Settings*

	Symptomatic	Asymptomatic
Sensitive Occupation*	A contact of a case, suspected case or carrier of diphtheria shall not work in a sensitive occupation unless it has been determined that the contact is not a carrier by a health care provider by means of testing nasopharyngeal specimen or a specimen from another site suspected to be infected. *	N/A
Childcare/School Attendee	The most effective way to prevent diphtheria is through vaccination with the DTaP series (for children under 7) or Tdap/Td boosters for older children. Other prevention methods include: - Hand washing	N/A

	- Keeping children away from suspected cases of diphtheria OR - Post-exposure prophylaxis	
Case in a Medical Facility	1. If a case having oropharyngeal toxigenic diphtheria or a suspected case considered to have oropharyngeal toxigenic diphtheria is in a medical facility, the medical facility shall provide care to the case or suspected case in accordance with procedures of strict isolation and other appropriate disease specific precautions. The health authority having jurisdiction where the medical facility is located may waive the requirement of isolation if two specimens from the nose and two specimens from the throat, taken from the case or suspected case at least 24 hours apart and at least 24 hours after cessation of antibiotic therapy, fail to show toxigenic <i>Corynebacterium diphtheriae</i> organisms upon testing by a medical laboratory. 2. If a case having cutaneous toxigenic diphtheria or a suspected case considered to have cutaneous toxigenic diphtheria is in a medical facility, the medical facility shall require contact isolation of the case or suspected case or provide care to the case or suspected case in accordance with the appropriate disease	N/A

	specific precautions. The health authority having jurisdiction where the medical facility is located may waive the requirement of isolation after two specimens from the wound of the case or suspected case fail to show toxigenic <i>Corynebacterium diphtheriae</i> organisms upon testing by a medical laboratory.	
General Population	General recommendations: - Receive immunizations or receive booster - Complete full course of antibiotics when sick - If traveling, ensure vaccinations are up to date when visiting areas with known diphtheria outbreaks	N/A

* The health authority may waive this restriction.

2. *Exclusion Notifications*

Patients with diphtheria must be excluded from work, school, or childcare until they have completed antibiotic therapy and tested negative on two consecutive sets of cultures taken at least 24 hours apart. Close contacts, particularly food handlers or caregivers, are restricted until cleared, with asymptomatic contacts often excluded until they test negative.

V. CONTROL OF CONTACTS (IF APPLICABLE)

Close contacts include all household members, persons with a history of habitual, close contact with the suspected diphtheria patient, or persons directly exposed to secretions from the suspected infection site of the patient. Investigate symptomatic contacts in the same manner as a case and notify all close contacts through phone number, email, or any other means of communication.

1. *Management/Exclusions for Specific Groups or Settings*

	Symptomatic	Asymptomatic
Sensitive Occupation*	A contact of a case, suspected case or carrier of diphtheria shall not work in a sensitive occupation unless it has been determined that the contact is not a carrier by	N/A

	a health care provider by means of testing nasopharyngeal specimen or a specimen from another site suspected to be infected. *	
Childcare/School Attendee	The most effective way to prevent diphtheria is through vaccination with the DTaP series (for children under 7) or Tdap/Td boosters for older children. Other prevention methods include: - Hand washing - Keeping children away from suspected cases of diphtheria OR Post-exposure prophylaxis	N/A
Case in a Medical Facility	1. If a case having oropharyngeal toxigenic diphtheria or a suspected case considered to have oropharyngeal toxigenic diphtheria is in a medical facility, the medical facility shall provide care to the case or suspected case in accordance with procedures of strict isolation and other appropriate disease specific precautions. The health authority having jurisdiction where the medical facility is located may waive the requirement of isolation if two specimens from the nose and two specimens from the throat, taken from the case or suspected case at least 24 hours apart and at least 24 hours after cessation of antibiotic therapy, fail to show toxigenic <i>Corynebacterium diphtheriae</i> organisms upon testing by a medical laboratory.	N/A

	2. If a case having cutaneous toxigenic diphtheria or a suspected case considered to have cutaneous toxigenic diphtheria is in a medical facility, the medical facility shall require contact isolation of the case or suspected case or provide care to the case or suspected case in accordance with the appropriate disease specific precautions. The health authority having jurisdiction where the medical facility is located may waive the requirement of isolation after two specimens from the wound of the case or suspected case fail to show toxigenic <i>Corynebacterium diphtheriae</i> organisms upon testing by a medical laboratory.	
General Population	General recommendations: - Receive immunizations or receive booster - Complete full course of antibiotics when sick - If traveling, ensure vaccinations are up to date when visiting areas with known diphtheria outbreaks	N/A

* The health authority may waive this restriction.

2. *Exclusion Notifications*

Patients with diphtheria must be excluded from work, school, or childcare until they have completed antibiotic therapy and tested negative on two consecutive sets of cultures taken at least 24 hours apart. Close contacts, particularly food handlers or caregivers, are restricted until cleared, with asymptomatic contacts often excluded until they test negative.

VI. CONTROL OF CARRIERS (IF APPLICABLE)

Persons can be *asymptomatic* carriers of diphtheria. It is important to determine if diphtheria symptoms are present in this contact to classify the contact as a newly identified case (symptomatic) or carrier (asymptomatic). Diphtheria antitoxin treatment may be considered if this contact is symptomatic. Carriers may be identified through the following:

- Outbreak investigation, or
- Healthcare provider testing.

Investigate carriers in the same manner as a case.

1. *Carrier Management/Exclusions*

Investigate carriers in the same manner as a case. Carriers must follow the same exclusions as cases or contacts.

2. *Carrier Notifications*

Carriers must be excluded from work, school, or childcare until they have completed antibiotic therapy and tested negative on two consecutive sets of cultures taken at least 24 hours apart. Close contacts, particularly food handlers or caregivers, are restricted until cleared, with asymptomatic contacts often excluded until they test negative.

VII. MANAGEMENT OF SPECIAL SITUATIONS/OUTBREAK CONTROL

Coordinate with senior epidemiology staff to determine if an outbreak is occurring. If so, notify local health authorities, or infection control, as appropriate.

For schools in rural counties notify Nevada Department of Agriculture @ foodsafety@agri.nv.gov or (775) 684-5280.

Most outbreaks of diphtheria are driven by low vaccination coverage, crowded living conditions, and close contact with infected individuals. It is important to encourage immunization to ensure that the largest possible proportion of the population group is involved, especially infants and preschool children. In an epidemic involving adults, immunize groups that are most affected or at high risk. Repeat immunization procedures 1 month later to provide at least 2 doses to recipients.¹⁹

In medical facilities if a case having oropharyngeal toxigenic diphtheria or a suspected case considered to have oropharyngeal toxigenic diphtheria is in a medical facility, the medical facility shall provide care to the case or suspected case in accordance with procedures of strict isolation and other appropriate disease specific precautions. The health authority having jurisdiction where the medical facility is located may waive the requirement of isolation if two specimens from the nose and two specimens from the throat, taken from the case or suspected case at least 24 hours apart and at least 24 hours after cessation of antibiotic therapy, fail to show toxigenic *Corynebacterium diphtheriae* organisms upon testing by a medical laboratory.

If a case having cutaneous toxigenic diphtheria or a suspected case considered to have cutaneous toxigenic diphtheria is in a medical facility, the medical facility shall require

Diphtheria

February 2026

12



contact isolation of the case or suspected case or provide care to the case or suspected case in accordance with the appropriate disease specific precautions. The health authority having jurisdiction where the medical facility is located may waive the requirement of isolation after two specimens from the wound of the case or suspected case fail to show toxigenic *Corynebacterium diphtheriae* organisms upon testing by a medical laboratory.¹³

If a contact of a case is a sensitive occupation the suspected case or carrier of diphtheria shall not work in a sensitive occupation unless it has been determined that the contact is not a carrier by a health care provider by means of testing a nasopharyngeal specimen or a specimen from another site suspected to be infected. The health authority may waive this restriction.¹²

VIII. PREVENTION

The investigator should reference the most recent disease specific public educational materials, from the CDC. The [Nevada OSE website](#) also provides information about Diphtheria. The best way to prevent Diphtheria is to:

- Receive the active immunization with diphtheria toxoid (either through the diphtheria/tetanus and acellular pertussis vaccine (DTaP) or diphtheria/tetanus and whole-cell pertussis vaccine (DTwP)
- Practice proper hand hygiene
- Avoid sharing food, drinks, or utensils with infected individuals
- Isolation of patients as necessary
- Investigators should share educational materials as they are available with the public

IX. REFERENCES

1. Centers for Disease Control and Prevention. Signs and symptoms. Published September 9, 2022. Accessed April 22, 2024. <https://www.cdc.gov/diphtheria/about/symptoms.html>
2. Centers for Disease Control and Prevention. Pinkbook: diphtheria. Published October 19, 2022. Accessed April 29, 2024. <https://www.cdc.gov/vaccines/pubs/pinkbook/dip.html>
3. Centers for Disease Control and Prevention. Clinical information. Published February 8, 2024. Accessed April 29, 2024. <https://www.cdc.gov/diphtheria/clinicians.html>
4. Centers for Disease Control and Prevention. Diphtheria. In: CDC Yellow Book 2024. Accessed May 14, 2024. <https://wwwnc.cdc.gov/travel/yellowbook/2024/infections-diseases/diphtheria>
5. Cleveland Clinic. Diphtheria: causes, symptoms, treatment & prevention. Accessed May 14, 2024. <https://my.clevelandclinic.org/health/diseases/17870-diphtheria>
6. Centers for Disease Control and Prevention. Diphtheria: causes and how it spreads. Published May 25, 2023. Accessed April 22, 2024. <https://www.cdc.gov/diphtheria/about/causes-transmission.html>
7. University of Nevada, Reno School of Medicine. Culture, Diphtheria *Corynebacterium diphtheriae*. Accessed April 22, 2024. <https://med.unr.edu/public-health-lab/disease-characteristics/clinical-analysis/culture-diphtheria>
8. Kimberlin DW, Banerjee R, Barnett ED, Lynfield R, Sawyer MH, eds. Red Book: 2024-2027 Report of the Committee on Infectious Diseases. American Academy of Pediatrics; 2024.
9. REPORTING OF COMMUNICABLE DISEASES - 441A.225. *NAC CHAPTER 441A - INFECTIOUS DISEASES; TOXIC AGENTS*. [Online] November 2021. [Cited: July 23, 2025.] <https://www.leg.state.nv.us/nac/nac-441a.html#NAC441ASec225>.
10. REPORTING OF COMMUNICABLE DISEASES - 441A.230. *NAC CHAPTER 441A - INFECTIOUS DISEASES; TOXIC AGENTS*. [Online] November 2021. [Cited: January 19, 2024.] <https://www.leg.state.nv.us/nac/nac-441a.html#NAC441ASec230>.
11. REPORTING OF COMMUNICABLE DISEASES - 441A.240. *NAC CHAPTER 441A - INFECTIOUS DISEASES; TOXIC AGENTS*. [Online] November 2021. [Cited: July 23, 2025.] <https://www.leg.state.nv.us/nac/nac-441a.html#NAC441ASec240>.
12. REPORTING OF COMMUNICABLE DISEASES - 441A.235. *NAC CHAPTER 441A - INFECTIOUS DISEASES; TOXIC AGENTS*. [Online] November 2021. [Cited: July 23, 2025.] <https://www.leg.state.nv.us/nac/nac-441a.html#NAC441ASec235>.
13. DUTIES AND POWERS RELATING TO THE PRESENCE OF COMMUNICABLE DISEASES. *NAC CHAPTER 441A - INFECTIOUS DISEASES; TOXIC AGENTS*. [Online] November 2021. [Cited: July 23, 2025.] <https://www.leg.state.nv.us/nac/nac-441a.html#NAC441ASec290>.

14. Centers for Disease Control and Prevention. About diphtheria. Accessed [insert access date if required]. <https://www.cdc.gov/diphtheria/about/index.html>
15. Centers for Disease Control and Prevention. Clinical features of diphtheria. Accessed [insert access date if required]. <https://www.cdc.gov/diphtheria/hcp/clinical-signs/index.html>
16. Northern Nevada Public Health. Epi News 2025. Accessed [insert access date if required]. <https://www.nnph.org/programs-and-services/phd/communicable-diseases-and-epidemiology/epi-news/2025.php>
17. Centers for Disease Control and Prevention. Laboratory testing for diphtheria. Accessed [insert access date if required]. <https://www.cdc.gov/diphtheria/php/laboratories/>
18. Centers for Disease Control and Prevention. (n.d.-b). *Chapter 1: Diphtheria*. Centers for Disease Control and Prevention. <https://www.cdc.gov/surv-manual/php/table-of-contents/chapter-1-diphtheria.html>
19. Heymann DL, ed. *Control of Communicable Diseases Manual*. 21st edition. APHA Press, an imprint of American Public Health Association; 2022.

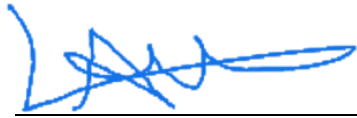
X. ACKNOWLEDGEMENTS

This document was developed based on the content and format of the disease investigation guidelines of several state and local health jurisdictions:

- Oregon Health Authority Investigative Guidelines
- Washington State Department of Health Reporting and Surveillance Guidelines
- Northern Nevada Public Health Epidemiology and Communicable Disease Program Investigation of Communicable Disease Manual
- Centers for Disease Control and Prevention
- University of Nevada, Reno School of Medicine

The Nevada Office of State Epidemiology would like to acknowledge the work of these great partners.

XI. UPDATE LOG



Ihsan Azzam, Ph.D., M.D.
Chief Medical Officer

09/21/2026

Chief Medical Officer Approval Date