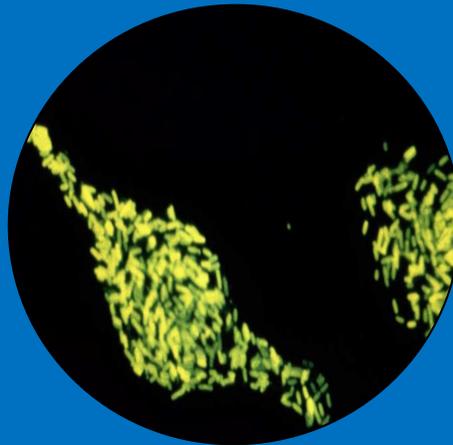
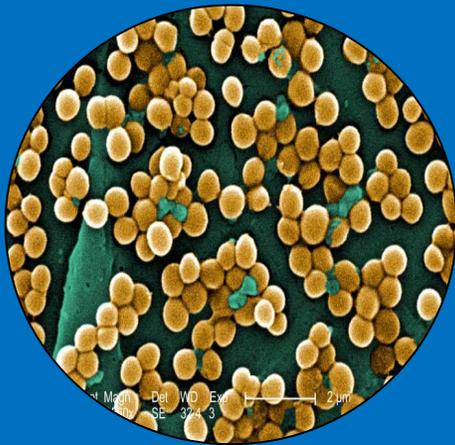


ALEXANDRIA HEALTH DEPARTMENT

Communicable Disease Division



REPORT TO CLINICIANS July 2013



Healthy People, Healthier Communities



Please consider the environment before printing this report. This report contains hyperlinks to enable easy navigation of the report in electronic format.

Introduction

This Alexandria Health Department (AHD) Communicable Disease Division Report to Clinicians summarizes cases of reportable disease investigated by the health department in calendar year 2012. For this report, sexually transmitted infections (STI) and tuberculosis (TB) are presented separately from other communicable diseases.

Case Definitions and Disease Surveillance

Public health surveillance case definitions are published by the Centers for Disease Control and Prevention (CDC) each year to standardize reporting of diseases across the country ([2012 CDC Case Definitions](#))¹. This ensures that disease-specific morbidity is comparable between different states and jurisdictions.

As needed, case definitions are updated as public health learns more about the clinical features and/or adapts to diagnostic tests for reportable conditions. Official statistics released by CDC and the Virginia Department of Health (VDH) include only reports that meet CDC case definitions.

Changes in reported disease burden may reflect either a true change in disease incidence or may reflect changes in disease reporting that are independent of the true disease incidence, such as:

- 1) Change in surveillance case definitions
- 2) Change in reporting practices by healthcare providers
- 3) Change in preferred diagnostic method

Additionally, the reported disease burden is an estimate of the true incidence of disease, since not all persons that are ill seek medical care and not all cases are reported to the health department (Figure 1). It is important to consider these reporting limitations before interpreting the data. It should be noted that public health case definitions are used to standardize disease reporting and should not be used to diagnose patients.

Caution is urged in interpreting rates. Localities with small populations may have only a few reported cases of disease resulting in relatively high disease rates. Both the number of cases and incidence rates should be weighed when considering morbidity by city or county.

Data Source

Unless otherwise noted, data presented here are AHD primary surveillance data available in the Virginia Electronic Disease Surveillance System (VEDSS) as of May 28, 2013. All 2012 data are considered provisional.

Acknowledgements

We would like to thank all community partners, including healthcare providers, infection control practitioners, laboratorians, and public safety personnel who report cases to the Alexandria Health Department. Also, we wish to acknowledge the hard work and dedication of the AHD employees who investigate and control communicable diseases, STI, HIV, and TB in Alexandria.

This report was prepared by AHD Epidemiologist Kelly Hay, MPH, and approved by AHD Health Director Stephen A. Haering, MD, MPH, FACPM; any errors are solely their responsibility. Feedback is welcome: kelly.hay@vdh.virginia.gov or stephen.haering@vdh.virginia.gov.

TABLE OF CONTENTS

| | |
|---|---|
| Introduction..... | 1 |
| 2012 Summary of Selected Communicable Diseases..... | 2 |
| Sexually Transmitted Infections..... | 3 |
| Tuberculosis | 3 |
| Spotlight: Public Health Investigations..... | 4 |
| Spotlight: Rabies Exposures & Postexposure Prophylaxis (PEP)..... | 5 |
| Services..... | 6 |
| Mission..... | 6 |
| Online Resources..... | 6 |
| Contact Information..... | 6 |
| Communicable Disease Division: Working for Our Community..... | 6 |
| Virginia Reportable Disease List..... | 7 |

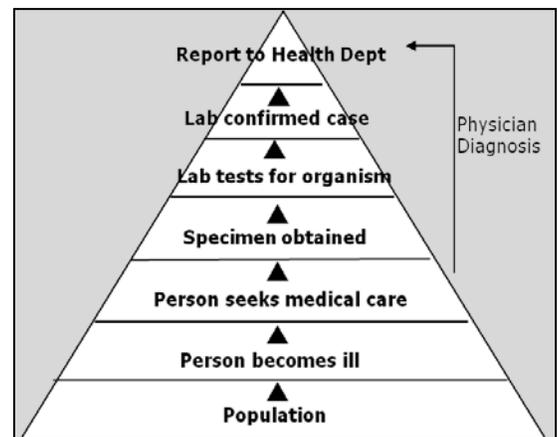


Figure 1. This figure represents prevalent illness. The passive surveillance process only captures a proportion of prevalent illness. Passive surveillance is the basis for AHD surveillance data. **AHD relies on physicians and laboratories to report cases to improve public health functions such as disease control and prevention.** Adapted from [FoodNet Working Group](#)².

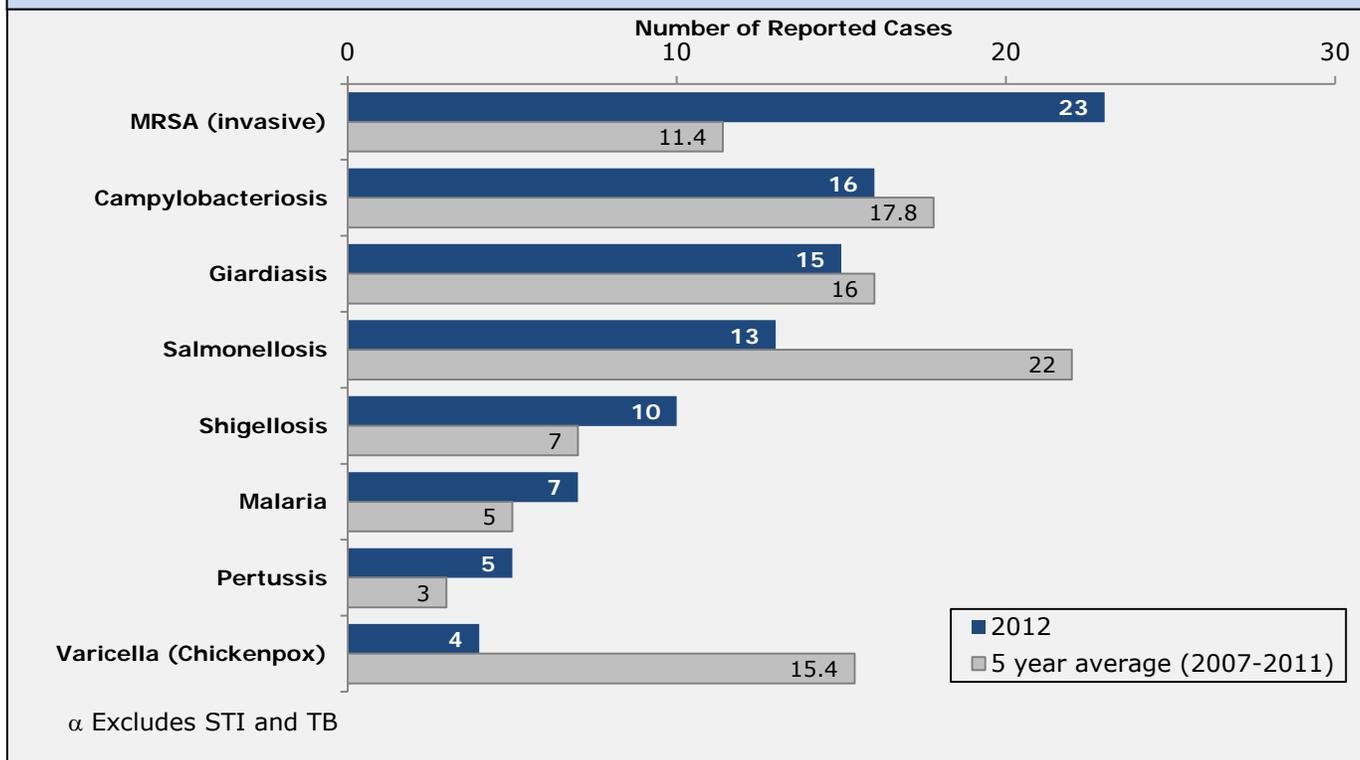
1. 2012 Nationally Notifiable Diseases and Conditions. Available at wwwn.cdc.gov/nndss/document/2012_Case%20Definitions.pdf
2. Foodborne Diseases Active Surveillance Network (FoodNet). Available at wwwnc.cdc.gov/eid/article/3/4/97-0428-f1.htm

2012 Summary of Selected Communicable Diseases

Program Highlights

- The Alexandria Health Department Communicable Disease Division (AHD CD Division) promptly investigates diseases reportable by state law to control and to prevent illness in the community. In 2012, the division investigated over 300 reports of disease^α and 3 outbreaks in Alexandria.

Figure 2. Top Reportable Diseases in Alexandria, VA (2012)^α



Public Health Tips for *Healthy People, Healthier Communities*

- Promote vaccination** by ensuring that patients are fully vaccinated according to the Advisory Committee on Immunization Practices (ACIP) guidelines
 - [Immunization Schedules](#)³
 - [ACIP Complete Recommendations](#)⁴
 - [Information on Vaccines and Vaccine-preventable Diseases](#)⁵
- Encourage healthy behaviors**
 - Cough into your sleeve
 - Wash your hands
 - Stay home when sick. This is especially important for patients who work in high-risk settings (direct patient care, daycare, or food handling). Patients should not return to work until 24 hours after diarrhea and/or fever resolve (*without the use of fever-reducing medication*).
- Report** suspected outbreaks or any unusual occurrence of public health concern. Healthcare providers are the foundation of disease surveillance in our community.

[Back to Table of Contents](#)

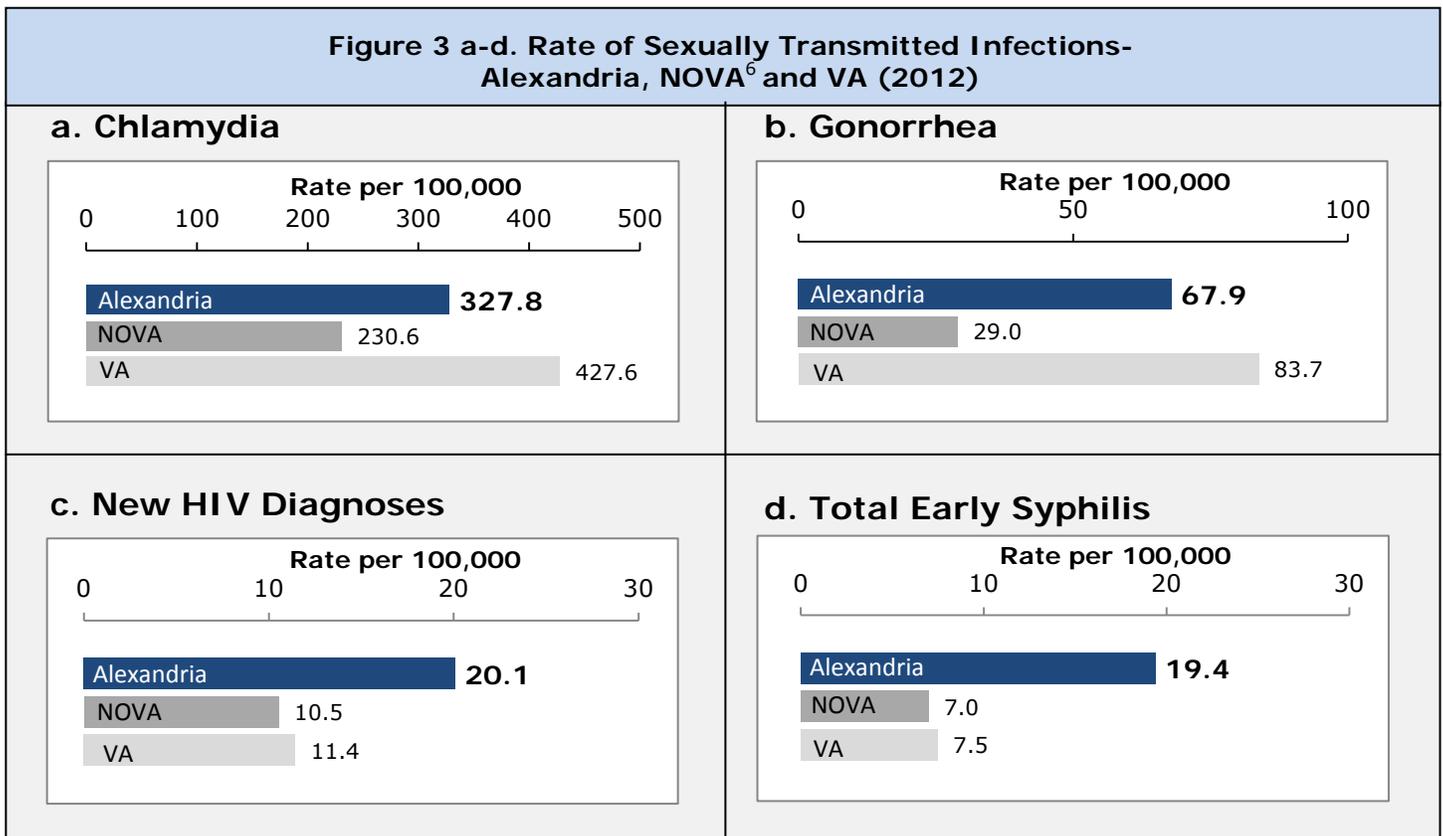
3. CDC Immunization Schedules. Available at www.cdc.gov/vaccines/schedules/index.html

4. ACIP Recommendations. Available at www.cdc.gov/vaccines/pubs/ACIP-list.htm#vacc

5. Vaccines and Preventable Diseases. Available at www.cdc.gov/vaccines/vpd-vac/default.htm

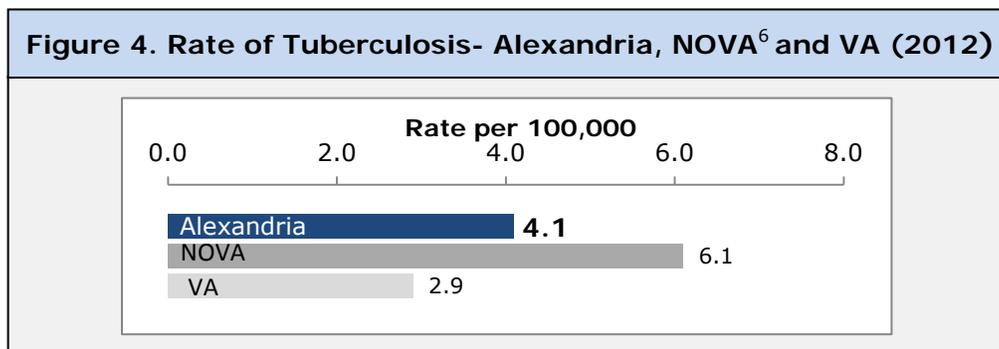
Sexually Transmitted Infections (STI)

In 2012, the rates of STIs in Alexandria were higher than the rates of STIs in the Northern Virginia Region (NOVA)⁶. The VDH Division of Disease Prevention (DDP) publishes annual reports on Sexually Transmitted Infections. These reports summarize demographic and risk factor data and can be accessed online (DDP Reports)⁷. A summary of 2012 data is presented in Figure 3⁸. Updated [STI resources](#) are available from CDC⁹.



Tuberculosis (TB)

In 2012, the rate of Tuberculosis in Alexandria was higher than that of Virginia and lower than that of the Northern Virginia Region⁶. The VDH Division of Disease Prevention publishes annual reports on Tuberculosis. These reports summarize demographic and risk factor data and can be accessed online (DDP Reports)¹⁰. A summary of 2012 data is presented in Figure 4⁸. Updated [TB resources](#) are available from CDC¹¹.



[Back to Table of Contents](#)

6. The Northern Virginia Region includes Alexandria, Arlington, Fairfax, Loudoun, and Prince William Health Districts.

7. HIV/AIDS and Sexually Transmitted Disease Data and Statistics. Available at www.vdh.state.va.us/epidemiology/DiseasePrevention/Data/

8. Data as of 06/09/13; Data for 2012 may be incomplete due to delays in reporting.

9. Sexually Transmitted Diseases. Available at www.cdc.gov/std/default.htm

10. TB Surveillance Reports. Available at

www.vdh.state.va.us/epidemiology/DiseasePrevention/Programs/Tuberculosis/EpidemiologyandSurveillance.htm

11. Tuberculosis. Available at www.cdc.gov/tb/

Spotlight: Public Health Investigations

In the past year, there have been several notable public health investigations into disease outbreaks and emerging infections: [fungal meningitis](#) and other infections among patients who received contaminated steroid injections¹², a moderately severe [2012-2013 influenza season](#)¹³, identification of [Middle East Respiratory Syndrome Coronavirus \(MERS-CoV\)](#)¹⁴, and identification of human [H7N9 influenza](#) infection in China¹⁵. At the time of this report's publication, there have not been any cases of H7N9 or MERS-CoV identified in the United States.

New infections will continue to emerge and known pathogenic organisms will continue to change. The AHD CD Division and VDH monitor these and other public health investigations in order to identify the potential impact of these infections in Alexandria and Virginia, respectively. AHD and VDH will continue to monitor disease trends and will keep the healthcare provider community informed regarding new public health recommendations related to case definitions, risk factors, preferred testing, and infection control.

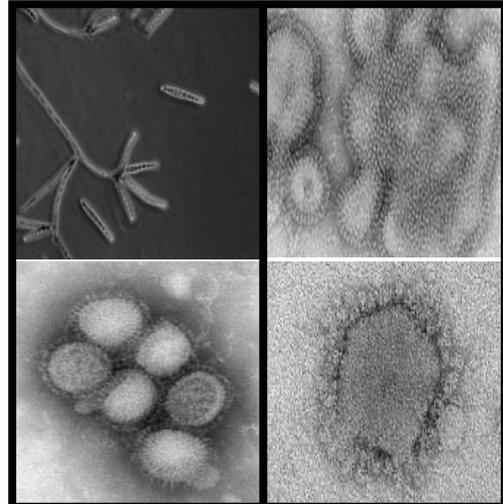


Figure 5. From top left (clockwise): *Exserohilum rostratum*, H7N9, MERS-CoV, and H1N1. Pictures from CDC.

During rapidly changing situations of public health concern, the following are reliable sources of information for the healthcare provider community:

- **Broadcast Faxes from the Alexandria Health Department**
 - Provides timely public health information to healthcare providers in Alexandria. If you do not currently receive these messages, please contact the AHD CD Division at 703.746.4951 so that we can add you to our contact list.
- **VDH Resources for Health Care Professionals**
 - www.vdh.state.va.us/clinicians/
- **Centers for Disease Control and Prevention (CDC)**
 - www.cdc.gov

What if I suspect that a patient has an emerging infection, such as MERS-CoV or H7N9?

Please call the AHD CD Division **immediately** (contact info on [page 6](#)). We can provide laboratory assistance (if a suspect case meets CDC's criteria for testing) and information on infection prevention and control.

[Back to Table of Contents](#)

12. Multistate Fungal Meningitis Outbreak Investigation. Available at www.cdc.gov/mmwr/preview/mmwrhtml/mm6223a5.htm

13. Influenza Activity — United States, 2012–13 Season and Composition of the 2013–14 Influenza Vaccine. Available at www.cdc.gov/mmwr/preview/mmwrhtml/mm6223a5.htm

14. Middle East Respiratory Syndrome (MERS). Available at www.cdc.gov/coronavirus/mers/index.html

15. Avian Influenza A (H7N9) Virus. Available at www.cdc.gov/flu/avianflu/h7n9-virus.htm

Spotlight: Rabies Exposures & Postexposure Prophylaxis (PEP)

Rabies in Alexandria

Rabies is rare in Alexandria, but anyone who has been potentially exposed to rabies is at risk of developing the fatal disease. Information about rabies in Alexandria is in Table 1 (below).



Table 1. Rabies-related Reports in Alexandria: 2010 - 2012

| Year | Reports to AHD of people potentially exposed to rabies | No. of people recommended PEP by AHD | No. of laboratory confirmed cases of animal rabies |
|------|--|--------------------------------------|--|
| 2010 | 112 | 13 | 0 |
| 2011 | 143 | 24 | 0 |
| 2012 | 177 | 14 | 3 |

What types of animals can get rabies?

Only mammals (including humans) get rabies; birds, fish, reptiles and amphibians cannot. Wild animals that are frequently diagnosed with rabies include raccoons, skunks and foxes.

How is rabies transmitted?

The rabies virus is found in the saliva and brain/nervous system tissue of a rabid animal. Rabies can be transmitted through a bite or by getting saliva or brain tissue in one's eyes, nose, mouth, or in an open wound.

What is typically considered an "exposure" to rabies?

Any penetration of the skin by the teeth of an animal constitutes a **bite exposure**. The contamination of open wounds, abrasions, mucous membranes, or theoretically, scratches (potentially contaminated with infectious material from a rabid animal) constitutes a **non-bite exposure**. Other contact by itself, such as touching a wild animal or contact with blood, urine, or feces of a rabid animal, is not considered an exposure. Call us if you have ANY questions about potential exposure to rabies.

Who needs to report animal bites in Alexandria?

City of Alexandria Code states that "it shall be the duty of every physician and medical practitioner in the city and of every hospital in the city to report to an animal control officer or the health department the name and address of any person treated for bites or wounds inflicted by animals, together with all available information necessary for rabies control" ([Code of Alexandria Sec. 5-7-40](#)).

If a patient needs rabies PEP, where can I refer them?

Rabies PEP is available at all area hospital emergency departments.

If I administer rabies PEP to a patient, do I need to report it to the Health Department?

Yes - Virginia State law requires that rabies post-exposure prophylaxis be reported to the local health department. The reportable disease list and reporting regulations can be found on [page 7](#).

What if I have questions about whether or not a person should receive rabies PEP?

Call the AHD CD Division for consultation (contact info on [page 6](#)).

Table 2. Summary of Postexposure Prophylaxis Interventions to Prevent Human Rabies*

| Vaccination status | Intervention |
|----------------------------------|---|
| Not previously vaccinated | <ul style="list-style-type: none"> • Immediate wound cleansing • Human rabies immune globulin (HRIG) administered into/around wound • Rabies vaccine administered on days 0, 3, 7 and 14 |
| Previously vaccinated | <ul style="list-style-type: none"> • Immediate wound cleansing • Human rabies immune globulin (HRIG) should NOT be administered • Rabies vaccine administered on days 0 and 3 |

*Adapted from CDC - Use of a Reduced (4-Dose) Vaccine Schedule for Postexposure Prophylaxis to Prevent Human Rabies. Detailed recommendations for each intervention are available [online](#)¹⁶

[Back to Table of Contents](#)

AHD Services

An overview of our services, including program descriptions, locations, phone numbers and hours of operation, is available in our brochure of services ([English](#) and [Spanish](#)).

AHD [clinic schedules](#) are also available online.

AHD Mission

Our mission is to protect and to promote health and well-being in our communities.

Online Resources

- **AHD Home Page** (News and Services): alexandriava.gov/health
 - **AHD Information for Healthcare Providers** (disease reporting information, forms, contact numbers, and reports to clinicians): alexandriava.gov/health/default.aspx?id=65006%20

Contact Information for Reportable Diseases

- List of reportable diseases available [online](#)¹⁷ or [page 7](#).

| For diseases <u>listed in black</u> | For diseases <u>listed in RED</u> |
|---|--|
| <p>Timeframe: Submit form within 3 days of suspected or confirmed diagnosis</p> <p>Report Form: Epi-1 form¹⁸</p> <p>Report Method: Mail or fax</p> <p>Alexandria Health Department Communicable Disease Division 4480 King Street Alexandria, VA 22302 <u>Fax:</u> 703.746.4953</p> | <p>Timeframe: Report <u>immediately</u> by the most rapid means available</p> <p>Report Form: Epi-1 form¹⁸</p> <p>Report Method: Phone</p> <p><u>Monday – Friday (8:00 a.m. – 5:00 p.m.)</u></p> <p>Office phone: 703.746.4951</p> <p><u>Evenings and Weekends (24/7):</u></p> <p>Cell phone: 571.259.8549</p> |

Communicable Disease Division: Working for Our Community

The AHD CD Division investigates diseases reported by healthcare providers, labs, schools, and other community partners; provides public health recommendations to help mitigate the impact of diseases; monitors disease trends in the community; and analyzes data to guide program and policy development. We also provide disease-specific and infection control and prevention training. If you are interested in communicable disease training for your staff, please contact us.

[Back to Table of Contents](#)

17. Virginia Reportable Disease List. Available at www.vdh.virginia.gov/epidemiology/documents/pdf/reportable_disease_list.pdf

18. Epi-1 Form. Available at www.vdh.virginia.gov/Epidemiology/documents/pdf/Epi1.pdf

Virginia Reportable Disease List

Reporting of the following diseases is required by state law (Sections 32.1-36 and 32.1-37 of the *Code of Virginia* and 12 VAC 5-90-80 and 12 VAC 5-90-90 of the Board of Health *Regulations for Disease Reporting and Control* - <http://www.vdh.virginia.gov/epidemiology/regulations.htm>). Report all conditions when suspected or confirmed to your local health department within three days, except those listed in **RED**, which must be reported immediately by the most rapid means available.

| | |
|---|--|
| Acquired immunodeficiency syndrome (AIDS) | MONKEYPOX |
| Amebiasis | Mumps |
| ANTHRAX | MYCOBACTERIAL DISEASES (INCLUDING AFB), (IDENTIFICATION OF ORGANISM) AND DRUG SUSCEPTIBILITY |
| Arboviral infection (e.g., dengue, EEE, LAC, SLE, WNV) | Ophthalmia neonatorum |
| BOTULISM | OUTBREAKS, ALL (including but not limited to foodborne, healthcare-associated, occupational, toxic substance-related, and waterborne) |
| BRUCELLOSIS | PERTUSSIS |
| Campylobacteriosis | PLAGUE |
| Chancroid | POLIOVIRUS INFECTION, INCLUDING POLIOMYELITIS |
| Chickenpox (Varicella) | PSITTACOSIS |
| <i>Chlamydia trachomatis</i> infection | Q FEVER |
| CHOLERA | RABIES, HUMAN AND ANIMAL |
| Creutzfeldt-Jakob disease if <55 years of age | Rabies treatment, post-exposure |
| Cryptosporidiosis | RUBELLA, INCLUDING CONGENITAL RUBELLA SYNDROME |
| Cyclosporiasis | Salmonellosis |
| DIPHThERIA | SEVERE ACUTE RESPIRATORY SYNDROME (SARS) |
| DISEASE CAUSED BY AN AGENT THAT MAY HAVE BEEN USED AS A WEAPON | Shigellosis |
| Ehrlichiosis/Anaplasmosis | SMALLPOX (VARIOLA) |
| Escherichia coli infection, Shiga toxin-producing | Spotted fever rickettsiosis |
| Giardiasis | <i>Staphylococcus aureus</i> infection, invasive methicillin-resistant (MRSA) and vancomycin-intermediate or vancomycin-resistant |
| Gonorrhea | Streptococcal disease, Group A, invasive or toxic shock |
| Granuloma inguinale | <i>Streptococcus pneumoniae</i> infection, invasive, in children <5 years of age |
| HAEMOPHILUS INFLUENZAE INFECTION, INVASIVE | Syphilis (report PRIMARY and SECONDARY immediately) |
| Hantavirus pulmonary syndrome | Tetanus |
| Hemolytic uremic syndrome (HUS) | Toxic substance-related illness |
| HEPATITIS A | Trichinosis (Trichinellosis) |
| Hepatitis B (acute and chronic) | TUBERCULOSIS (TB), ACTIVE DISEASE |
| Hepatitis C (acute and chronic) | Tuberculosis infection in children <4 years of age |
| Hepatitis, other acute viral | TULAREMIA |
| Human immunodeficiency virus (HIV) infection | TYPHOID/PARATYPHOID FEVER |
| # Influenza | UNUSUAL OCCURRENCE OF DISEASE OF PUBLIC HEALTH CONCERN |
| (report INFLUENZA A, NOVEL VIRUS immediately) | VACCINIA, DISEASE OR ADVERSE EVENT |
| INFLUENZA-ASSOCIATED DEATHS IN CHILDREN <18 YEARS OF AGE | VIBRIO INFECTION |
| Lead, elevated blood levels | VIRAL HEMORRHAGIC FEVER |
| Legionellosis | YELLOW FEVER |
| Leprosy (Hansen disease) | Yersiniosis |
| Listeriosis | |
| Lyme disease | |
| Lymphogranuloma venereum | |
| Malaria | |
| MEASLES (RUBEOLA) | |
| MENINGOCOCCAL DISEASE | |

These conditions are reportable by directors of laboratories. In addition, these and all other conditions except mycobacterial disease (other than TB) and invasive MRSA infection are reportable by physicians and directors of medical care facilities. Reports may be by computer-generated printout, [Epi-1 form](#), CDC surveillance form, or upon agreement with VDH, by means of secure electronic transmission.

A laboratory identifying evidence of these conditions shall notify the local health department of the positive culture and submit the initial isolate to the Virginia Division of Consolidated Laboratory Services (DCLS) or, for TB, to DCLS or other lab designated by the Board.

Laboratories that use a Shiga toxin EIA methodology but do not perform simultaneous culture for Shiga toxin-producing *E. coli* should forward all positive stool specimens or positive enrichment broths to DCLS for confirmation and further characterization.

Physicians and directors of medical care facilities should report influenza by number of cases only (report total number per week and by type of influenza, if known); however, individual cases of influenza A novel virus must be reported immediately by rapid means.

Note: 1. Some healthcare-associated infections are reportable. Contact the VDH Healthcare-Associated Infections Program at (804) 864-8141 or see 12 VAC 5-90-370 for more information.

2. Cancers are also reportable. Contact the VDH Virginia Cancer Registry at (804) 864-7866 or see 12 VAC 5-90-150-180 for more information.

Alexandria Health Department Communicable Disease Division

To report conditions in RED, call 571.259.8549

For general inquiries, call 703.746.4951