

# ANNUAL SUMMARY OF COMMUNICABLE DISEASES

2023

# NEW PHILADELPHIA CITY HEALTH DEPARTMENT

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**NEW PHILADELPHIA, OHIO** 

#### **NEW PHILADELPHIA CITY HEALTH DEPARTMENT**

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# **Table of Contents**

Department Description	4
Personnel	4
Introduction	4
Ohio Reportable Diseases	5
Key Findings	6
Demographic Profile of New Philadelphia	7
Counts and Rates of Confirmed Communicable Diseases	8
Enteric Diseases	8
Hepatitis	8
Sexually Transmitted Diseases	8
Vaccine-Preventable Diseases	9
Vector-Borne and Zoonotic Diseases	9
Other Reportable Diseases (excluding COVID-19)	10
Disease Spotlight: Lyme Disease	11
Comparision to Tuscarawas County and State of Ohio Data	12
Vaccines Administered	13
Basic Information on Reportable Communicable Diseases	14
Deferences	16

# **Department Description:**

The City of New Philadelphia is the county seat for Tuscarawas County. The city of New Philadelphia is represented by the New Philadelphia City Health Department (NPCHD). NPCHD is responsible for communicable disease investigation and control for those cases residing within the city limits of New Philadelphia. The New Philadelphia City Health Department independently investigates and manages all communicable diseases in its jurisdiction excluding Tuberculosis, HIV and Syphilis. The Tuscarawas County Health Department is the Tuberculosis Control unit designated for Tuscarawas County and handles the TB cases for the entirety of the County, HIV and Syphilis cases are investigated and managed on a regional level by Canton City Health Department in collaboration with NPCHD.

#### **Personnel:**

New Philadelphia City Health Department staff that collaborate for the routine communicable disease surveillance, prevention and control include:

- Nichole Bache, BSN, RN, Director of Nursing
- Vickie Ionno, RN, Health Commissioner
- Maegan Cummings, RN, Public Health Nurse
- Itati Lopez, Bilingual Health Educator

## **Introduction:**

This report summarizes communicable diseases reported to the New Philadelphia City Health Department (NPCHD), throughout the year 2023. This Report will also compare rates of diseases reported in the state of Ohio for the year 2023. Communicable diseases (also known as infectious diseases), are transmitted by contact with infected individuals or animals or their bodily fluids, by contact with contaminated surfaces or objects, by ingesting contaminated food or water or by direct contact with disease vectors (mosquitos, mice, fleas, etc.) This summary includes cases of reportable diseases that were found to meet the public health definition of confirmed, probable or suspected cases. The data in this report may not represent all cases of each disease in the community as mild or asymptomatic cases may have chosen not to seek out medical care or laboratory testing. All data in this report is accurate to the best of NPCHD's knowledge and is considered provisional data. All calculations in this report are made based on the population of New Philadelphia being 17,683 as noted in the US Census for New Philadelphia.

NPCHD utilizes the Ohio Disease Reporting System (ODRS) to report, track and investigate reportable diseases to the State of Ohio. Authority for Health Departments in Ohio to track and investigate communicable diseases falls under Ohio Administrative Code 3701-3-02, which reads, "cases and suspected cases of selected infectious diseases are required to be reported to Ohio and local public health agencies". If you are interested in further information on Communicable diseases/Infectious Diseases in New Philadelphia you can reach out to New Philadelphia City Health Department at 330.364.4491.1208.

## Below is a summary of Reportable Diseases in the State of Ohio:

Know Your ABCs: A Quick Guide to Reportable Infectious Diseases in Ohio

From the Ohio Administrative Code Chapter 3701-3; Effective August 1, 2019

Diseases of major public health concern because of the severity of disease or potential for epidemic spread – report immediately via telephone upon recognition that a case, a suspected case, or a positive laboratory result exists.

- · Botulism, foodborne
- Cholera
- · Diphtheria
- · Influenza A novel virus infection
- Measles
- Meningococcal disease
- Middle East Respiratory Syndrome (MERS)
- Plague · Rabies, human
- · Rubella (not congenital) · Severe acute respiratory syndrome (SARS)
- Smallpox · Tularemia
- · Viral hemorrhagic fever (VHF), including Ebola virus disease, Lassa fever, Marburg hemorrhagic fever, and Crimean-Congo hemorrhagio

Any unexpected pattern of cases, suspected cases, deaths or increased incidence of any other disease of major public health concern, because of the severity of disease or potential for epidemic spread, which may indicate a newly recognized infectious agent, outbreak, epidemic, related public health hazard or act of bioterrorism.

Disease of public health concern needing timely response because of potential for epidemic spread – report by the end of the next business day after the existence of a case, a suspected case, or a positive laboratory result is known.

- Arboviral neuroinvasive and non-neuroinvasive disease:
  - Chikungunya virus infection
  - · Eastern equine
  - encephalitis virus disease · LaCrosse virus disease (other California
  - serogroup virus disease) · Powassan virus disease
  - · St. Louis encephalitis
  - · West Nile virus infection
  - · Western equine encephalitis virus disease
  - Yellow fever
  - · Zika virus infection · Other arthropod-borne diseases

infections) by the end of the next business day.

- Babesiosis
- Botulism
- · infant
- wound Brucellosis
- · Campylobacteriosis Candida auris

- Carbapenemase-producing carbapenem-resistant Enterobacteriaceae (CP-CRE)
  - · CP-CRE Enterobacter spp. · CP-CRE Escherichia coli
  - · CP-CRE Klebsiella spp.
- · CP-CRE other
- · Chancroid · Chlamydia trachomatis infections
- Coccidioidomycosis Creutzfeldt-Jakob disease
- (CJD) Cryptosporidiosis
- Cyclosporiasis
- Dengu . E coli O157:H7 and Shiga toxin-producing E. coli (STEC)
- · Ehrlichiosis/anaplasmosis · Giardiasis
- · Gonorrhea (Neisseria gonorrhoeae) Haemophilus influenzae (invasive
- disease) · Hantavirus · Hemolytic uremic syndrome
- · Hepatitis A Hepatitis B (non-perinatal)

- · Hepatitis B (perinatal) Hepatitis C (non-perinatal)
- · Hepatitis C (perinatal) · Hepatitis D (delta hepatitis)
- · Hepatitis E Influenza-associated hospitalization
- · Influenza-associated pediatric mortality
- · Legionnaires' disease · Leprosy (Hansen disease)
- · Leptospirosis · Listeriosis
- · Lyme disease Malaria
- · Meningitis: · Aseptic (viral) Bacterial
- Mumps Pertussis · Poliomyelitis (including
- vaccine-associated cases) · Psittacosis · Q fever
- Rubella (congenital) Salmonella Paratyphi infection Salmonella Typhi infection (typhoid fever)

- Salmonellosis
- · Shigellosis · Spotted Fever Rickettsiosis. including Rocky Mountain
- spotted fever (RMSF) · Staphylococcus aureus, with
- resistance or intermediate resistance to vancomycin (VRSA, VISA)
- Streptococcal disease, group A, invasive (IGAS)
- · Streptococcal disease, group
- B, in newborn · Streptococcal toxic shock syndrome (STSS)
- Streptococcus pneumoniae, invasive disease (ISP)
- Syphilis Tetanus · Toxic shock syndrome (TSS)
- Trichinellosis · Tuberculosis (TB), including multi-drug resistant
- tuberculosis (MDR-TB)
- Vibriosis Yersiniosis

#### Outbreaks:

- Community
- Foodborne

Healthcare-associated

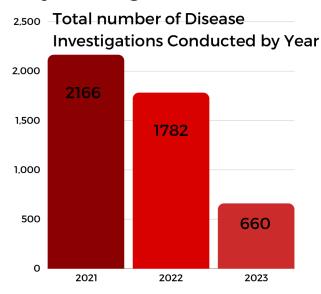
Report an outbreak, unusual incident or epidemic of other diseases (e.g. histoplasmosis, pediculosis, scabies, staphylococcal

- · Institutional
- Waterborne · Zoonotic

Cases of AIDS (acquired immune deficiency syndrome), AIDS-related conditions. HIV (human immunodeficiency virus) infection, perinatal exposure to HIV, all CD4 T-lymphocyte counts and all tests used to diagnose HIV must be reported on forms and in a manner prescribed by the Director.



# **Key Findings:**

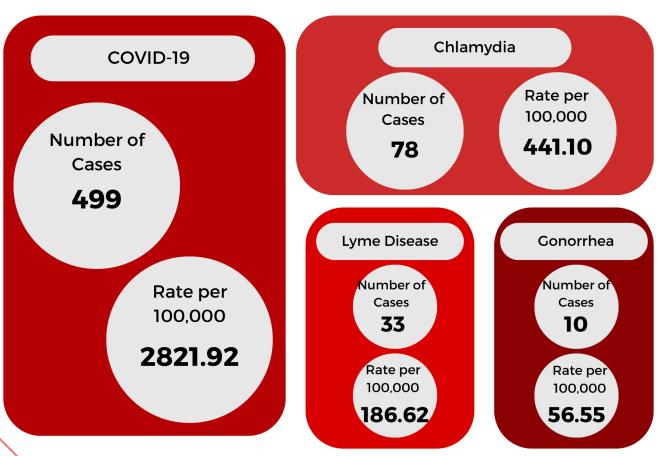


In 2021, NPCHD completed 2,166 disease investigations compared to 660 investigations in 2023, a 69% decrease. The decrease in communicable disease investigations from 2021 to 2023 can be directly attributed to the evolution of the COVID-19 pandemic and public health's response to that pandemic.

The chart to the left shows all confirmed, probable and suspected cases of communicable diseases reported to and investigated by NPCHD over the last 3 years.

# **Most Reported Communicable Diseases**

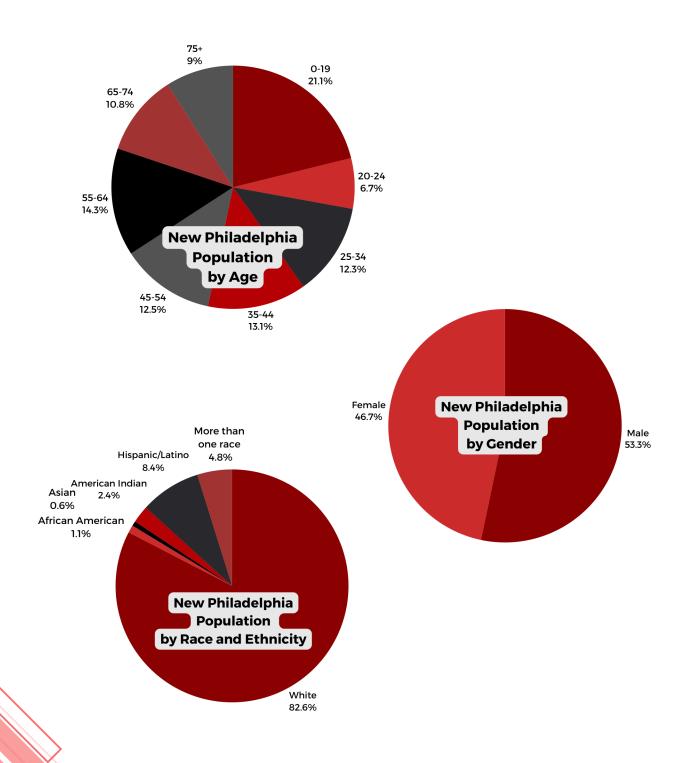
10 or more cases, All ages, New Philadelphia Jurisdiction, 2023



# **Demographic Profile of New Philadelphia**

New Philadelphia Population, 2023 (U.S. Census Bureau)

The New Philadelphia Demographic Profile is described in the graphs below. The New Philadelphia City Health Department serves a population of 17,683.



# **Counts and Rates of Communicable Diseases**

Counts and Rates of Enteric Reportable Diseases (Confirmed, Probable and Suspected) among New Philadelphia City Residents for years 2022 and 2023.

New Philadelphia City Health Department							
	Enteric Diseases						
2022 2023							
Disease Name	Class	# of Cases	Case Rate	# of Cases	Case Rate		
Campylobacteriosis	В	0	0	2	11.31		
Cryptosporidiosis	В	0	0	0	0		
E.coli	В	0	0	0	0		
Giardiasis	В	1	5.7	0	0		
Salmonellosis	В	1	5.7	6	33.93		
Shigellosis	В	0	0	1	5.66		
Yersiniosis	В	0	0	0	0		

Counts and Rates of Reportable Hepatitis Diseases (Confirmed, Probable and Suspected) among New Philadelphia City Residents for years 2022 and 2023.

New Philadelphia City Health Department Hepatitis Diseases					
2022 2023					23
Disease Name	Class	# of Cases	Case Rate	# of Cases	Case Rate
Hepatitis B, Perinatal	В	0	0	1	0
Hepatitis B, Non-perinatal (Acute and Chronic)	В	3	17.2	5	62.21
Hepatitis C (Acute and Chronic)	В	12	68.8	12	67.86

Counts and Rates of Reportable Sexually Transmitted Diseases (Confirmed, Probable and Suspected) among New Philadelphia City Residents for years 2022 and 2023.

New Philadelphia City Health Department						
Sexually Transmitted Diseases Diseases						
	2022 2023				23	
Disease Name	Class	# of Cases	Case Rate	# of Cases	Case Rate	
Chlamydia	В	48	275.3	78	441.10	
Gonorrhea	В	11	63.0	10	56.55	
Syphilis	В	0	0	1	5.66	

Counts and Rates of Vaccine-Preventable Reportable Diseases (Confirmed, Probable and Suspected) among New Philadelphia City Residents for years 2022 and 2023.

New Philadelphia City Health Department						
Vaccine Preventable Diseases						
2022 2023						
Disease Name	Class	# of Cases	Case Rate	# of Cases	Case Rate	
Haemophilus Influenzae, Invasive	В	0	0	0	0	
Influenza Associated Hospitalization	В	11	63.0	1	5.66	
Measles	В	0	0	0	0	
Mumps	В	0	0	0	0	
Pertussis	В	0	0	0	0	
Varicella	В	0	0	0	0	

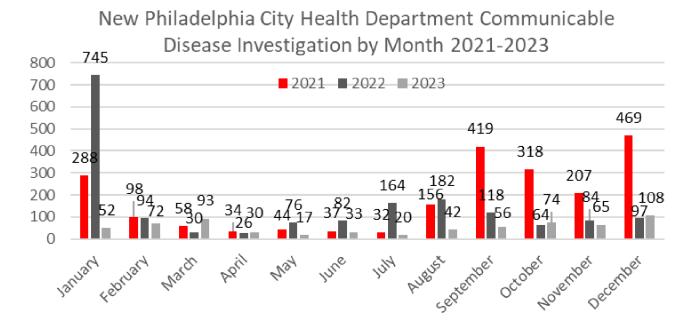
Counts and Rates of Vector-Borne and Zoonotic Reportable Diseases (Confirmed, Probable and Suspected) among New Philadelphia City Residents for years 2022 and 2023.

New Philadelphia City Health Department							
Vector Borne Zoonotic Diseases							
2022 2023							
Disease Name	Class	# of Cases	Case Rate	# of Cases	Case Rate		
Babesiosis	В	0	0	0	0		
Brucellosis	В	0	0	0	0		
La Cross Virus	В	0	0	0	0		
Lyme Disease	В	12	68.8	33	186.62		
Q Fever	В	0	0	0	0		
Rabies, Animal	В	0	0	0	0		
Spotted Fever Rickettsiosis	В	0	0	0	0		
West Nile Virus	В	0	0	0	0		

Counts and Rates of Other Reportable Diseases (Confirmed, Probable and Suspected) among New Philadelphia City Residents for years 2022 and 2023.

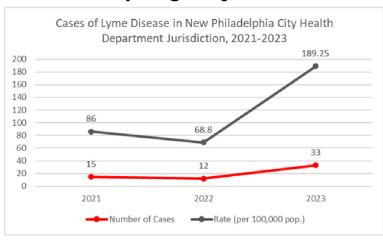
New Philadelphia City Health Department							
Other Reportable Diseases							
		2	022	20:	23		
Disease Name	Class	# of Cases	Case Rate	# of Cases	Case Rate		
CP-CRE	В	0	0	0	0		
Legionellosis	В	0	0	1	5.66		
Meningitis, Aseptic Viral	В	0	0	0	0		
Meningitis, Bacterial	В	1	5.7	0	0		
MIS-C	Α	2	11.5	0	0		
MPOX	Α	1	5.7	0	0		
Psittacosis	В	1	5.7	0	0		
Streptococcal, Group A	В	1	5.7	7	39.59		
Streptococcal, Group B	В	0	0	0	0		
Streptococcal Pneumoniae	В	1	5.7	2	11.31		

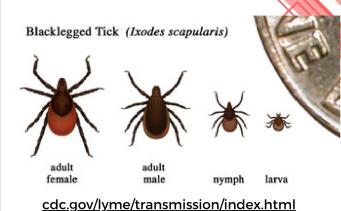
Reportable Communicable Disease Cases by Month, 2021-2023 Comparison



The increase in caseload noted in 2021 and 2022 can be directly attributed to the COVID-19 pandemic. As we navigated our way through the pandemic as a society with a better understanding of the disease and prevention, the caseload dropped to more manageable pre-pandemic numbers.

## **Disease Spotlight: Lyme Disease**





**Epidemiology** 

#### **Reporting Information:**

• Class B: Report by the end of next business day to the Local Public Health Department where the case resides.

### **Infectious Agent:**

• Borrelia burgdorferi, a spirochete-type bacteria

#### **Case Definition:**

 A systemic, tick-borne disease with protean manifestations, including dermatologic, rheumatologic, neurologic and cardiac abnormalities. The most common marker for the disease is erythema migrans (EM), the initial skin lesion that occurs in 60-80% of patients. For most patients the expanding EM lesion is accompanied by other acute symptoms including fatigue, fever, headache, stiff neck, arthralgia and myalgia. These symptoms are intermittent. Diagnosis must be made by a physician and laboratory confirmation is recommended.

#### **Mode of Transmission:**

 The spirochete bacteria is transmitted through the bite of a tick. Particularly the loxides scapularis tick (black legged tick) in the mid western United States.

### **Communicability:**

Human to human transmission is not known to occur.

#### **Incubation Period:**

 3 to 32 days after tick bite (the mean is 7 to 10 days). Early stages of the illness are unapparent and often present with later manifestations.

#### **Treatment:**

• Oral antibiotic therapy, doxycycline or amoxicillin is commonly prescribed.

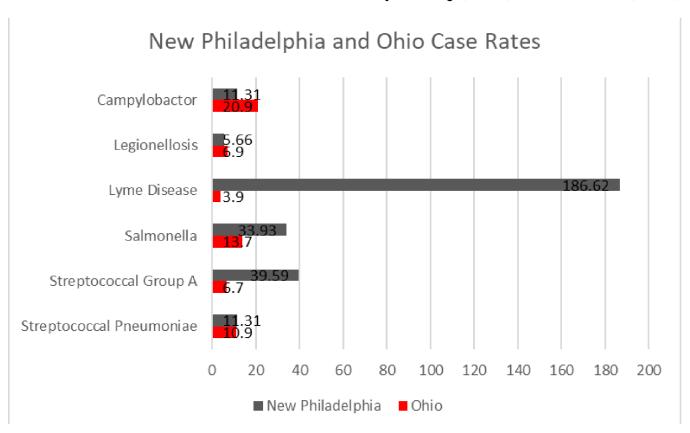
#### **Prevention:**

Tick avoidance in endemic areas is the only prevention. Cover skin with light colored clothing, use insect repellant, remove any noted ticks promptly, inspect pets for ticks daily, keep grass and weeds mowed short.

### **Comparison of New Philadelphia City Data to State of Ohio Data**

The chart below shows select reportable disease data from New Philadelphia City Health Department and compares it with the State of Ohio data. The Ohio Department of Health (ODH) typically publishes its communicable disease data annually, however the last data published by ODH was in 2019. The hiatus in data being published is most likely explained by the COVID-19 pandemic and all resources at ODH being diverted. We will compare our 2023 data with the State's 2019 data as that is the most recent data available. Because the population of the city of New Philadelphia varies vastly from the State of Ohio, we will compare the data based on case rates in a population of 100,000.

### Select Communicable Diseases New Philadelphia City (2023) vs. State Ohio (2019)



## New Philadelphia City and State of Ohio Case Rate per 100,000 population

Reportable Disease	New Philadelphia Case Rate	Ohio Case Rate	<b>NPHD Status</b>
Streptococcal Pneupmniae	11.31	10.9	Higher
Streptococcal Group A	39.59	6.7	Higher
Salmonella	33.93	13.7	Higher
Lyme Disease	186.62	3.9	Higher
Legionellosis	5.66	6.9	Lower
Campylobacter	17.2	11.31	Lower

## **New Philadelphia City Health Department Vaccination Rates:**

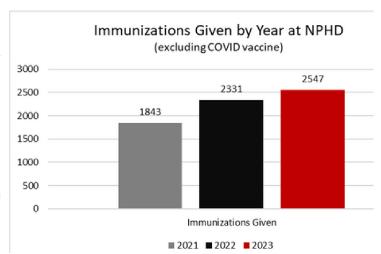
Vaccinations play an important role in controlling the spread of some infectious diseases and helping keep our communities safe. The New Philadelphia City Health Department has taken an active role in educating the community and helping to raise awareness in maintaining up-to-date immunizations. An integral part of our immunization education campaign has been the addition of our bilingual health educator who has assisted us with building trusted relationships in the Hispanic/Latino community.

#### All Vaccines Administered by NPHD by Type and Year for 2021-2023

All vaccine information was pulled from the Ohio Department of Health Vaccine Reporting System, Impact SIIS

	·		•	•	
Vaccine	Protects Against	Number of Recommended Doses	2021	2022	2023
DTap	Diphtheria, tetanus, and whooping cough (pertussis)	5 doses	43	30	40
DTaP-Hep B-IPV	Diphtheria, tetanus, and whooping cough (pertussis), hepatitis B, polio	3 doses	31	20	21
HPV9	Cervical, vaginal, anal cancers or genital warts caused by certain types of HPV	2 or 3 doses	22	59	118
Hep A; adult	Hepatitis A	2 doses		13	3
Hep A; ped/adol, 2 dose	Hepatitis A	2 doses	7	43	64
Нер А-Нер В	Hepatitis A and B	3 doses	6	12	14
Hep B; ped/adol	Hepatitis B	3 doses	70	153	197
Hep B; adult	Hepatitis B	2 or 3 doses	51	37	33
Hib	Haemophilus influenzae Type B	3 doses	46	33	28
IPV	Polio	4 doses	90	146	206
Influenza	Influenza or seasonal flu	1 Annually	763	877	757
MMR	Measles, mumps, rubella	2 doses	51	97	105
MMRV	Measles, mumps, rubella, varicella	2 doses	43	26	52
Meningococcal B	Meningitis	2 doses	50	31	43
Meningococcal MCV4O	Meningitis	2 doses		72	230
Meningococcal MCV4P	Meningitis	2 doses	210	146	
Pneumococcal PCV 13	Pneumonia	4 doses	55	50	12
Pneumococcal PCV 15	Pneumonia	4 doses			20
Pneumococcal PCV 20	Pneumonia	1 dose			40
Pneumococcal PPV23	Pneumonia	2 doses	11	11	
Rotavirus	Rotavirus	2 or 3 doses	15	14	9
RSV	Respiratory Syncytial Virus	1 dose			65
Shingles Zoster	Shingles	2 Dose	5	10	
Td, adult	Tetanus, diphtheria	2 doses	45	122	116
Tdap	Tetanus, diphtheria pertussis	5 doses	164	206	210
Varicella	Varicella (chicken pox)	2 doses	65	123	164
COVID-19	COVID-19		8248	1978	350
			10,091	4,309	2,897

New Philadelphia City Health Department has seen a 38% increase in the number of vaccines given in our clinic from 2021 to 2023 (excluding COVID vaccines). This increase can be directly attributed to the strong working relationship that our Public Health Nurse and Bilingual Health Educator have built with our local school districts. Increased immunization rates promote a healthy community.



### **Information on Reportable Communicable Diseases:**

The following is information on the top 10 most commonly reported communicable diseases reported to the New Philadelphia City Health Department in 2023.

#### COVID-19

- Infectious Agent: SARS-CoV-2 is a novel species of the Coronaviridae virus family,
- Reservoir: Humans
- Mode of Transmission: Through respiratory droplets produced when an infected person coughs, sneezes, talks, or breathes.
- Incubation Period: 1-14 days or longer
- Prevention Measures: Vaccination, avoid close contact with infected individuals, proper handwashing and cleaning/sanitizing.

#### Chlamydia

- Infectious Agent: Chlamydia Trachomatis
- Reservoir: Humans
- Mode of Transmission: Sexual intercourse
- Incubation Period: 7-14 days or longer
- Prevention Measures: Sex education, condom use and screening of at risk population

#### Gonorrhea

- Infectious Agent: Neisseria gonorrhoeae
- Reservoir: Humans
- Mode of Transmission: Sexual intercourse
- Incubation Period: 2-7 days
- Prevention Measures: Sex education, condom use and monogamy

#### **Hepatitis C**

- Infectious Agent: Hepatitis C Virus (HCV)
- Reservoir: Humans
- Mode of Transmission: Usually by skin puncture (needlestick, cut, abrasion, etc). Sexual intercourse.
- Incubation Period: 6-9 weeks. Chronic infections may persist up to 20 years before onset of cirrhosis or hepatoma.
- Prevention Measures: Screening of donated blood products. Safe sex practices and eliminate recreational drug use.

#### **Lyme Disease**

- Infectious Agent: Borrelia burgdorferi, Borrelia garinii, Barrelia afzelii
- Reservoir: Black legged ticks
- Mode of Transmission: Tick bite
- Incubation Period: 7-10 days
- Prevention Measures: Education on tick habitat, prevention, and removal.
   Avoidance of tick infested areas, application of tick repellant and use of long shirts and pants.

#### **Shigellosis**

- Infectious Agent: Shigella dysenteriae, S. flexneri, S. boydii, S. Sonnei
- Reservoir: Humans, primates
- Mode of Transmission: Direct or indirect fecal-oral contact by infected individual. Most commonly, poor hand washing followed by food preparation. Also flies may land on an infected latrine and subsequently on an exposed food
- Incubation Period: 1-3 days
- Prevention Measures: Educate on proper hand-washing techniques, implement fly-proof latrines, pasteurize, refrigerate and thoroughly cook all foods. Enforce quality control measures in food preparation (restaurants and industry).

#### **Hepatitis B**

- Infectious Agent: Hepatitis B Virus (HBV)
- Reservoir: Humans
- Mode of Transmission: Contact with blood or contaminated body fluids.
- Incubation Period: 60-90 days
- Prevention Measures: Vaccination, universal precautions when contact with blood or bodily fluids cannot be avoided.

#### **Salmonellosis**

- Infectious Agent: There are over 2,500 serotypes of Salmonella
- Reservoir: Humans and animals
- Mode of Transmission: Human to human (fecal to oral) or from animals by ingesting contaminated food or water.
- Incubation Period: 6-72 hours
- Prevention Measures: Thoroughly cook all meat and eggs, avoid cross contamination of food, proper handwashing.

#### Legionellosis

- Infectious Agent: Legionella
- Reservoir: Water
- Mode of Transmission: Airborne, most commonly by inhalation of aerosolized contaminated water.
- Incubation Period: 2-10 days for Legionnaires' Disease, 5-72 hours for Pontiac Fever.
- Prevention Measures: Take steps to prevent growth of Legionella in water distribution systems and heating/cooling/venting systems.

#### **Streptococcal Group A**

- Infectious Agent: Streptococcus pyogenes
- Reservoir: Humans
- Mode of Transmission: Direct contact with secretions of infected person
- Incubation Period: 1-5 days
- Prevention Measures: Proper handwashing and cleaning of contaminated items. Isolation of infected individuals.

#### References

- 1. United States Census. "Decennial Census: P1 Race." Last revised: 2020. Last Accessed: January 10,2024. <u>P1 RACE- Census Bureau Table</u>
- 2. United States Census. "Decennial Census: P1 Age and Sex." Last revised: 2020. Last Accessed: January 10,2024. P1 AGE and SEX- Census Bureau Table
- 3. Ohio Department of Health (ODH). "Infectious Disease Control Manual." Last Updated: 15 Oct 2018. Last Accessed: January 10,2024. <u>Infectious Disease Control Manual (IDCM)</u> Ohio Department of Health
- 4. ODH. "ODH Annual Summary of Infectious Diseases Ohio 2019". Last Accessed: January 10,2024. 2019 Annual Summary of Infectious Diseases (ohio.gov)
- 5. Ohio Department of Health. "Ohio Disease Reporting System." Last Updated: November 9,2018. Last Accessed: January 10, 2024. Ohio Disease Reporting System | Ohio Department of Health
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- 7. Ohio Department of Health. "ImpactSIIS." Last Updated: March 2017. Last Accessed: January 11, 2023. <u>Ohio Impact SIIS (ohiopublichealthreporting.info)</u>