2012

Gloucester County Department of Health, Senior& Disability Services

Office of Communicable Disease

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COMMUNICABLE DISEASE REPORT

3RD QUARTER 2012

The Gloucester County Department of Health,Senior and DisabilityServices conducts daily investigations of state mandated disease reports. The information contained in this summary is designed to update key stakeholders on the status of reportable diseases and influenza like illness in Gloucester County. Providers are reminded that all reportable diseases or outbreaks must be reported by phone within the required time period as indicated in NJAC 8:57-1.7. Should you or your agency have questions regarding the contents of this report please contact our Office of Communicable Disease at (856) 218-4102, or email Paul Watkins, Epidemiologist at pwatkins@co.gloucester.nj.us

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Disease Totals	Number of confirmed & probable cases this Year (2012)	Number of confirmed & probable cases (2011)	Number of confirmed & probable cases (2012)
		7/1/11 to 9/30/11	7/1/12 to 9/30/12
Foodborne Disease*	43	31	10
Infectious Diseases*	41	98	7
Vaccine Preventable Diseases (Immunization)*	68	21	18
Vector-Borne Illnesses	104	62	37
Immediately Reportable	2	0	0
Zoonotic Disease	0	3	0
STD**	428	151	133
Numbers with a Zero (0) will produce a inaccurate percentage or #DIV/0!			

[1]This report only contains NJDHSS Approved confirmed and probable cases. It reflects the NJDHSS approved data for 10/11/12.

[2]Vector-Borne Disease is spread by insects, like mosquitoes or ticks.
[3]Zoonotic Disease is defined as any disease that is transmitted by animal, like rabies.

***In the 3rd Quarter of 2012 there was a decrease in Foodborne, Infectious, Vaccine Preventable, Vector-Borne and Zoonoses diseases from the same reporting period in 2011. This is likely due to the number of cases that have not yet been NJDHSS approved.**

The number of Infectious Diseases reported in the 3rd quarter of 2012 appears to be lower than the 3rd quarter of the 2011. However, this is an indication of when infectious disease cases were closed as NJDHSS approved and not an indication of a 5 to 10 fold decrease in the number of cases. CDRSS is a fluid system and all data obtained from said system is subject to change.

Reports By Disease

Hand washing remains the number one defense against disease transmission.

	Number of confirmed & probable cases this Year (2012)	Number of confirmed & probable cases (2011)	Number of confirmed & probable cases (2012)
	2012	July thru September	July thru September
Babesiosis*(Babesia spp.)*	0	2	0
Campylobacteriosis*(Campylobacter spp.)*	19	7	6
Chlamydia	336	109	101
Cryptosporidiosis	3	1	0
Cyclosporiasis	1	0	0
Ehrlichiosis/Anaplasmosis - EnrlichiaChaffeensis	0	5	0
Ehrlichiosis/Anaplasmosis -AnaplasmaPhagotophilum	0	1	0
Giardiasis	3	4	0
Gonorrhea	87	33	32
Hepatitis A	2	0	0
Hepatitis B- Acute	2	2	0
Hepatitis B- Chronic	19	9	4
Hepatitis C- Acute	0	2	0
Hepatitis C- Chronic	7	79	0
Legionellosis	0	3	0
Listeriosis*(Listeria monocytogenes)*	1	1	0
Lyme Disease	102	46	35
Meningococcal disease (Neisseria Meningitidis)	0	0	0
Mumps	0	0	0
Pertussis *(Bordetellapertusis)*	23	4	9
Rocky Mountain Spotted Fever	0	8	0
Salmonellosis (non typhoid) *(Salmonella spp.)*	19	20	2
Shiga Toxin-producing *E. Coli Non 0157:H7*	0	1	0
Shigellosis	2	1	1
Streptococcus Agalactiae (GBS)	2	0	0
Streptococcus Pneumoniae	10	1	0
Streptococcus Pyogenes (GAS) - wo/ Toxic Shock Syndrome	1	1	0
Syphilis	5	9	0
Tuberculosis	0	0	0
Varicella	12	5	5
Vibrio Infections (Other than V. Cholerae spp.)	1	1	1

EMS reports with ILI Presentations in Gloucester, NJ	7/1/12 to 9/30/12)
Number reported during period	3

West Nile Virus

West Nile is a single-stranded RNA virus, referred to as an arbovirus transmitted by infected mosquitoes. Approximately 80 percent of people (about 4 out of 5) who are infected with WNV will not show any symptoms at all.

Up to 20 percent of the people who become infected have Mild symptoms such as:

- Fever
- Headache
- Body aches
- Nausea
- Vomiting
- Swollen lymph glands
- Skin rash on the chest, stomach and back.

These Symptoms can last for as short as a few days.

One in 150 people infected with WNV will develop severe illness. The severe symptoms can include:

- High fever
- Headache
- Neck stiffness
- Stupor
- Disorientation
- Coma
- Tremors
- Convulsions
- Muscle weakness
- Vision loss
- Numbness
- Paralysis

These symptoms may last several weeks, and neurological effects may be permanent.A person infected with West Nile Virus will typically develop symptoms between 3 and 14 days after they are bitten by the infected mosquito. People over 50 years of age and those with certain medical conditions, such as cancer, diabetes, hypertension, kidney disease, and organ transplants, are at greater risk for serious illness.

Treatment is supportive, often involving hospitalization, intravenous fluids, respiratory support, and prevention of secondary infections for patients with severe disease.

An IgM antibody capture enzyme-linked immunosorbent assay (MAC-ELISA) should be used to diagnose WNV. However, since serum IgM antibody may persist for more than a year, physicians must determine whether the antibody is the result of a WNV infection in the previous year and unrelated to the current clinical presentation. The following procedures are recommended:

- The most conclusive diagnostic method to identify persons with WNV infection of the central nervous system (CNS) is detecting WNV-specific IgM antibody in CSF using MAC-ELISA. This can be done with a CSF specimen obtained during initial clinical presentation. Because IgM antibody does not readily cross the blood-brain barrier, IgM antibody in CSF strongly suggests acute CNS infection
- If CSF is not obtained and serum samples are used to make the diagnosis, paired acute- and convalescent-phase serum samples should be acquired. The acute-phase specimen should be obtained during initial clinical presentation and the convalescent-phase specimen should be obtained 7-14 days later. Both samples should be tested with MAC-ELISA.
- If a convalescent-phase specimen cannot be obtained, the acute-phase specimen should be tested with MAC-ELISA. If the specimen is IgM-negative, then the illness is very unlikely to be an acute WNV infection. If the specimen is IgM-positive and the illness is clinically compatible, then it may be a recent WNV infection (presuming the test results for IgM antibody to St. Louis encephalitis (SLE) virus are significantly lower or negative; see below).

Note: Patients who have been recently vaccinated against or recently infected with related flaviviruses (e.g., yellow fever, Japanese encephalitis, dengue) may have positive WNV MAC-ELISA results.

The New Jersey State Mosquito Control Commission and the New Jersey Department of Environmental Protection Office of Mosquito Control Coordination provide funding for mosquito surveillance at numerous sites throughout New Jersey. The Mosquito Control Division (MCD) in Gloucester County provides testing of Avian specimens and Mosquito pools for West Nile and Eastern Equine Encephalitis.

Suspected human cases of West Nile Virus should be reported to the local health department where the infected person resides within 24 hours of diagnosis. To report a case, please contact the Gloucester County Health department at (856) 218-4101.

Sources: *Centers for Disease Control and Prevention. West Nile Virus.Atlanta, GA; 2008. Available at: http://www.cdc.gov/ncidod/dvbid/westnile/index.htm*

Scabies

Human scabies is caused by an infestation of the skin by the human itch mite (Sarcoptesscabiei var. hominis). The microscopic scabies mite burrows into the upper layer of the skin where it lives and lays its eggs. The most common symptoms of scabies are intense itching and a pimple-like skin rash. The scabies mite usually is spread by direct, prolonged, skin-to-skin contact with a person who has scabies.

Scabies occurs worldwide and affects people of all races and social classes. Scabies can spread rapidly under crowded conditions where close body contact is frequent. Institutions such as nursing homes, extended-care facilities, and prisons are often sites of scabies outbreaks.

Scabies signs and symptoms include:

- Itching, often severe and usually worse at night
- Thin, irregular burrow tracks made up of tiny blisters or bumps on your skin
- The burrows or tracks typically appear in folds of your skin.

Diagnosis of a scabies infestation usually is made based upon the customary appearance and distribution of the rash and the presence of burrows.

Whenever possible, the diagnosis of scabies should be confirmed by identifying the mite or mite eggs or fecal matter (scybala). This can be done by carefully removing the mite from the end of its burrow using the tip of a needle or by obtaining a skin scraping to examine under a microscope for mites, eggs, or mite fecal matter (scybala). However, a person can still be infested even if mites, eggs, or fecal matter cannot be found; fewer than 10-15 mites may be present on an infested person who is otherwise healthy.

Scabies treatment involves eliminating the infestation with medications. Several creams and lotions are available. You usually apply the medication over all your body, from your neck down, and leave the medication on for at least eight hours. A second treatment is needed if new burrows and rash appear.

Once a person is diagnosed with Scabies, all close contacts should receive treatment, even if they show no signs of scabies infestation.

Medications commonly prescribed for scabies include:

- **Permethrin 5 % (Elimite) -** generally considered safe for children and adults of all ages, including women who are pregnant or nursing.
- **Lindan -** Not safe for children younger than age 2 years, women who are pregnant or nursing, or people with weakened immune systems.
- **Crotamiton (Eurax)-** Which is Recommended for babies
- **Ivermectin (Stromectol) –** For people with an altered immune system, for people who have crusted scabies, or for people who don't respond to the prescription lotions and creams

Although these medications kill the mites promptly, you may find that the itching doesn't stop entirely for several weeks.

Although Scabies is not a reportable disease or condition in the state of New Jersey, if three or more cases of illness occur in anInstitution such as school, long term care facility or communal living facility, the occurrence should be viewed as an outbreak and must by investigated by the local health department where the outbreak occurred. To report an outbreak, please contact the Gloucester County Health department at (856) 218-4101.

Source: Mellanby K. Scabies. 2nd ed. Hampton, Middlesex, UK: E.W. Classey, Ltd; 1972:1-81
Centers for Disease Control and Prevention.http://www.cdc.gov/parasites//scabies/. Retrieved: October 2012