

KENT COUNTY HEALTH DEPARTMENT

EPI FOCUS

*Kent County, MI
December, 2009*

2008 Communicable Disease Report Executive Summary

Prevention and control of communicable disease is a necessary and critical aspect of assuring community health, and is an affirmative duty of local public health departments. To this end, the Kent County Health Department (KCHD) monitors the occurrence of over 80 communicable diseases on a community-wide basis. As a health care provider in Kent County, you are a critical component of our surveillance system. As such, it is important that KCHD provide feedback on disease trends in our community. This edition of EpiFocus provides surveillance data on the following diseases: ***Campylobacter***, ***shigellosis***, ***chlamydia***, ***gonorrhea***, ***pertussis***, ***chicken pox***, and ***tuberculosis***. Please take a moment to review these data and contact us at 616-632-7228 should you have any questions or comments.

What are reportable diseases?

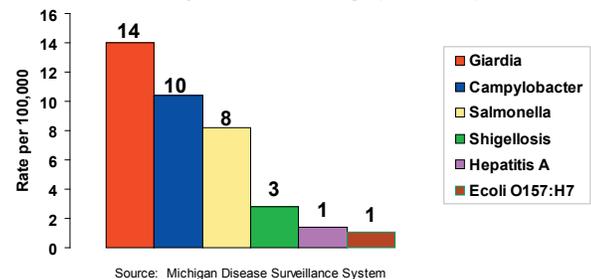
A **reportable disease** (see insert) is any disease, condition, infection or suspect occurrence of disease that is required under Michigan State Law (Section 5111 of Act. No. 368 of the Public Acts of 1978, as amended, being 333.511 of the Michigan Compiled laws) to be reported by physicians, laboratories, schools, day care centers, and camps to the local health department.

Gastrointestinal Illnesses

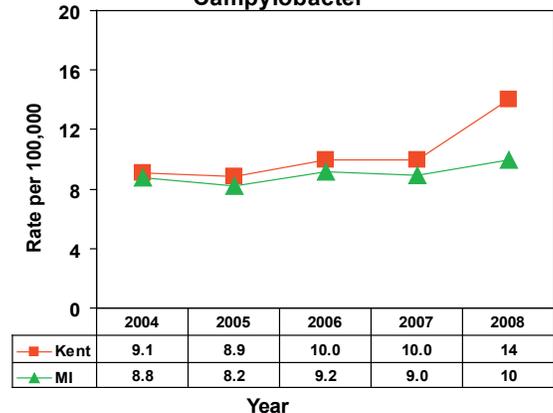
A variety of infectious agents can cause **gastrointestinal illnesses**, and testing does not always identify the cause. Health care providers can assist in identifying potential sources of illness by obtaining a meal and travel history from patients who present with gastrointestinal symptoms. Obtaining this information early in the disease process limits recall bias and provides valuable information to the investigation initiated by KCHD once a report of gastrointestinal illness is received.

While rates of **giardiasis** and **salmonellosis** decreased in 2008, Kent County and the State of Michigan experienced an increase in the rates of illness caused by ***Campylobacter*** and ***Shigella***. Between 2003 and 2007, an average of 53 cases of *Campylobacter* were reported each year in Kent County. In 2008, 84 cases of *Campylobacter* were reported to KCHD. *Campylobacter* typically affects infants and young adults more frequently than other age groups. In 2008, nearly 20% of cases reported in Kent County were in children 5 years of age and younger. Older age groups were also affected as 22% of cases reported were in adults 45 and older.

Gastrointestinal Illnesses of Greatest Frequency, Kent County, Five Year Average (2004-2008)



Campylobacter



After an average of 14 reported cases per year between 2003 and 2007, reports of *Shigella* exploded in 2008 with 44 cases reported in Kent County. Compared to the previous five-year average, reports of Shigella were slightly elevated during the spring (March, April, May). However, cases of Shigella increased dramatically later in the year, as 22 cases were reported during the months of October, November, and December. Fifty (50) percent of the cases reported in the later months were in children 10 years of age and younger. A similar increase was seen statewide beginning in October. A review of cases in Kent County, however, did not uncover any similarities among cases that would indicate a common source of infection.

Sexually-Transmitted Infections

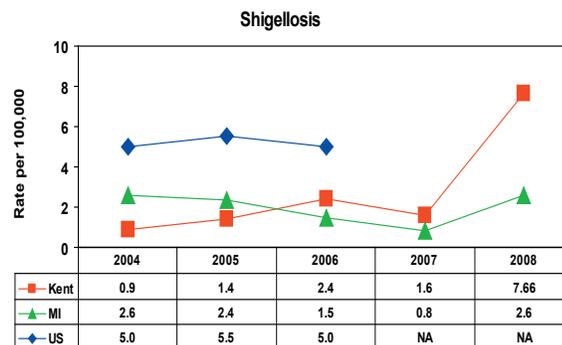
KCHD offers counseling, testing and treatment for **chlamydia, gonorrhea, and syphilis**. Counseling and testing for **HIV** are also available. In addition to testing, the department provides assistance in contacting partners of individuals that have been diagnosed with these infections. Health care providers must report all confirmed cases of chlamydia, gonorrhea, syphilis and HIV to the health department and can obtain reporting forms by calling (616) 632-7171.

In 2008, 3,321 cases of chlamydia were reported to KCHD. There was an average of 3,150 cases reported per year from 2003 to 2007. Although chlamydia rates in Kent County are drastically higher than they were a decade ago, rates have decreased somewhat from 2006 (597 to 578 per 100,000). Data from 2008 reveal that 72% of cases in Kent County were between the ages of 15 to 24 years and 87% of cases were under the age of 30. Seventy (70) percent of all cases were female. Due to the fact that up to 70% of sexually active women with chlamydia infections are asymptomatic, many infections go unreported. It is recommended that sexually active women age 25 years and younger, or older women with risk factors (new sex partner or multiple sex partners), have an annual screening for detection of an asymptomatic infection.

There were 1,030 cases of gonorrhea reported to KCHD in 2008 after an average of 1,178 cases were reported per year from 2003 to 2007. Since 2006, the rate of reported gonorrhea infections has decreased from 227 per 100,000 to 179 per 100,000. In 2008, 64% of cases were between the ages of 15 and 24 years and 81% of cases were under the age of 30. Sixty-one (61) percent of reported cases were female.

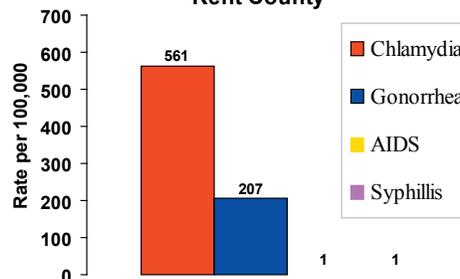
Vaccine-Preventable Diseases

Prevention of many vaccine preventable diseases occurs not only through immunization, but also through post-exposure prophylaxis (PEP) of individuals identified as contacts of confirmed cases. When KCHD receives a confirmed report of **pertussis, meningococcal disease, Haemophilus influenzae type B infection, or hepatitis B** (either acute or in a pregnant woman), an investigation is initiated to determine contacts

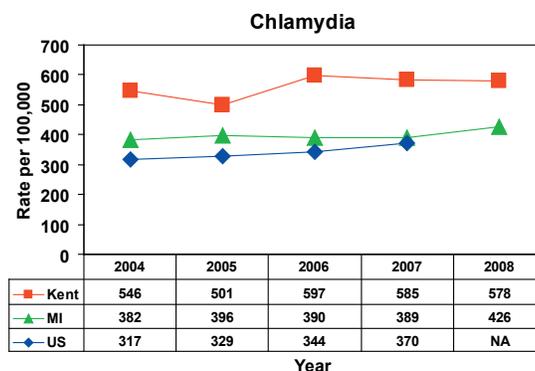


Source: Michigan Disease Surveillance System and Summary of Notifiable Disease, US

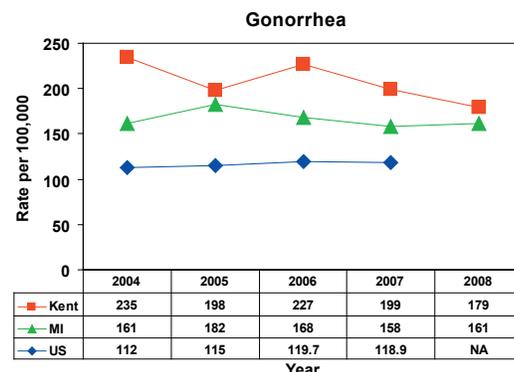
Reportable Sexually Transmitted Infections of Greatest Frequency, 5 year average (2004-08), Kent County



Source: Michigan Disease Surveillance System; HIV/STD & Bloodborne Infections Surveillance Section, Division of Communicable Diseases, Bureau of Epid., MI Dept. of Community Health



Source: Michigan Disease Surveillance System and Summary of Notifiable Disease, US



Source: Michigan Disease Surveillance System and Summary of Notifiable Disease, US



at risk of becoming infected. Once identified, KCHD arranges for the appropriate prophylaxis (antibiotics, immunoglobulin (IG), and/or vaccination).

There were 11 cases of **pertussis** reported in 2008 and an average of 14 cases reported per year from 2003 to 2007. Of the Kent County cases reported from 2004 to 2008, 36% were in infants less than 6 months old, who were too young to have received their required doses of vaccine.

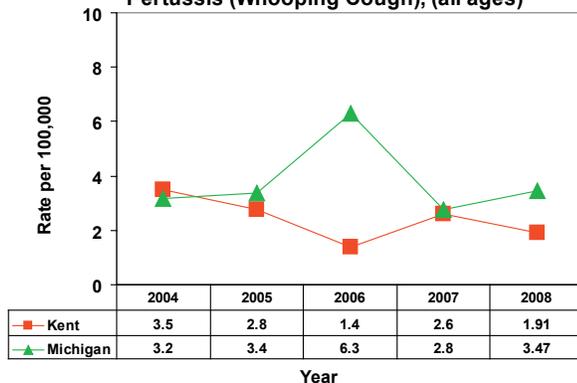
Based on the rate of reported cases, it appears that the rate of pertussis has decreased slightly in Kent County over the last five years. It is likely that pertussis is severely under-diagnosed, however, and its incidence is much greater than that which is detected through passive surveillance. In order to appropriately detect cases and allow for the prevention of further cases through appropriate PEP, physicians are encouraged to consider pertussis in the differential diagnosis of patients with cough illness lasting 2 weeks or longer. Suspected cases of pertussis should receive a culture via nasopharyngeal swab or aspirate. Serologic methods are not appropriate for diagnosis of pertussis (except in rare instances).

Chickenpox became an individually reportable illness at the start of the 2005-2006 school year. With individual reports becoming mandatory, there was a major increase in chickenpox disease reporting in 2006. Since that year, however, reports of chickenpox have declined in Kent County, with 214 cases reported in 2008. Since September 2005, 61% of chickenpox cases have been in children 5 to 9 years of age. Among cases for which disease severity was available, 69% of cases had mild illness (<50 lesions) and 93% of cases reported having less than 250 lesions. Out of cases for which vaccination information is available, 85% reported having at least one dose of varicella vaccine.

Tuberculosis

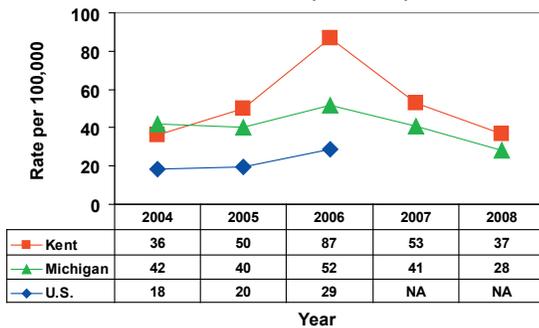
There were 13 new active cases of **Tuberculosis (TB)** reported in 2008 after an average of 20 cases were reported per year from 2003 to 2007. Since 2004, Kent County has experienced a shift in the epidemiology of tuberculosis with respect to race. In 2004, 38% of active cases were in African Americans and 19% of cases were in Asians. In 2008, 38% of active cases were reported in Asians, while only 8% of cases were reported in African Americans. Over the five year period from 2004-2008, approximately 75% of active tuberculosis cases in Kent County were identified in foreign-born individuals. Between 2004 and 2008, there were six tuberculosis isolates in Kent County identified as being resistant to one drug, but no isolates were identified as being multi-drug resistant.

Pertussis (Whooping Cough), (all ages)



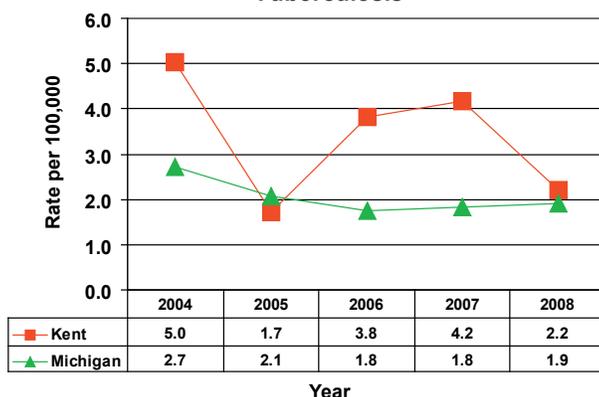
Source: Michigan Disease Surveillance System and Summary of Notifiable Disease, US

Chicken Pox (Varicella)



Source: Michigan Disease Surveillance System and Summary of Notifiable Disease, US

Tuberculosis



Source: Michigan Disease Surveillance System and US Summary of Notifiable Disease, US



HEALTH
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**Communicable Diseases/
Epidemiology Unit
700 Fuller Ave., NE
Grand Rapids, MI 49503**

**Phone: (616) 632-7228
FAX: (616) 632-7085**

*Check us out on the web at
www.accesskent.com/health.*

Editorial Board

Cathy Armstrong, RN, BSN
Public Health Nurse

Denise Bryan, MPA
STD/HIV/TB Supervisor

Janice King, RN, BSN
Public Health Nurse

Mary Lutzke, MPH
Epidemiologist

Julie Payne, MPH
Epidemiologist

If you or someone you know
would like to receive *EpiFocus*,
please call (616) 632-7228
or e-mail your request to:
Julie.Payne@kentcountymi.gov

Thank you.

REPORTABLE DISEASES IN MICHIGAN

A Guide for Physicians, Health Care Providers and Laboratories

The following is a list of conditions that should be reported to the local health department without delay if the agent is identified by clinical diagnosis, direct examination, culture, serology, molecular techniques or by histopathology.

Acquired Immunodeficiency Syndrome (AIDS)	Legionella species
Anaplasma phagocytophilum (Anaplasmosis)	Listeria monocytogenes
Bacillus anthracis (Anthrax)	Meningitis, viral
Blastomyces dermatitidis	Meningitis, bacterial
Bordetella pertussis (Pertussis)	Measles virus (Rubeola)
Borrelia burgdorferi (Lyme Disease)	Mumps virus
Brucella species	Mycobacterium leprae (Leprosy)
Burkholderia pseudomallei	‡ Mycobacterium tuberculosis complex (Tuberculosis)
Burkholderia mallei	Neisseria gonorrhoeae (Gonorrhea)
Calymmatobacterium granulomatis	Neisseria meningitidis, sterile sites (Meningococcal Disease)
Campylobacter jejuni	Orthopox viruses (Smallpox, Monkeypox)
Chlamydia psittaci (Psittacosis)	Poliovirus
Chlamydia trachomatis (Genital infections), (LGV)	Plasmodium species (Malaria)
Chlamydia trachomatis (Trachoma)	Rabies virus
Clostridium botulinum (Botulism)	Reye's Syndrome
Clostridium tetani (Tetanus)	Rheumatic fever
Coccidioides immitis (Coccidioidomycosis)	Rickettsia rickettsii (Rocky Mountain Spotted Fever)
Corynebacterium diphtheriae (Diphtheria)	Rickettsia species (Typhus Group)
Coxiella burnetii (Q Fever)	Rubella virus
Cryptococcus neoformans	Salmonella species
Cryptosporidium species	Salmonella typhi (Typhoid Fever)
Cyclospora species	Severe Acute Respiratory Syndrome (SARS)
Dengue virus	Shigella species
Ehrlichia species	Spongiform Encephalopathy (Includes CJD)
Encephalitis, viral	Staphylococcus aureus, vancomycin intermediate/ resistant (VISA/VRSA)
California serogroup, Eastern Equine, Powassan	Staphylococcus aureus, (MRSA), outbreaks only
St. Louis, Western Equine, West Nile, Unspecified	Streptococcus pyogenes, group A, sterile sites
Entamoeba histolytica (Amebiasis)	Streptococcus pneumoniae, sterile sites, susceptible/resistant
Escherichia coli, O157:H7 and all other shiga toxin positive serotypes	Toxic Shock Syndrome
Francisella tularensis (Tularemia)	Treponema pallidum (Syphilis)
Giardia lamblia	Trichinella spiralis (Trichinosis)
Guillain-Barre Syndrome	Varicella (Chickenpox)
Haemophilus ducreyi (Chancroid)	Vibrio species (Cholera)
Haemophilus influenzae, <15 years of age, sterile site	Yellow fever virus
Hantavirus	Yersinia enterocolitica
Hemolytic Uremic Syndrome (HUS)	Yersinia pestis (Plague)
Hemorrhagic fever viruses	<i>Unusual occurrence, outbreak or epidemic of any disease or condition</i>
Hepatitis, viral	
Hepatitis A virus, (Anti-HAV IgM)	
Hepatitis B virus, (HBsAg)	
within 24 hours on pregnant women	
Hepatitis C virus, (Anti-HCV)	
Hepatitis D virus	
Hepatitis E virus	
Histoplasma capsulatum	
† HIV, (Confirmed positive HIV diagnostic serology and detection tests; CD4 counts/percents and all viral loads on people already known to be infected)	
Influenza virus (Weekly aggregate counts)	
Individual cases of pediatric mortality	
Novel Influenza viruses	
Kawasaki Disease	
Leptospira species	

LEGEND

Blue Bold Text = An isolate or serum sample, where appropriate, must be submitted to MDCH or other laboratory designated by MDCH.

† Confirmed positive HIV diagnostic specimens, if available, are to be submitted for incidence testing.

‡ All preliminary tuberculosis test results are to be reported to appropriate local health department and isolates submitted to MDCH laboratory.

**Report All Listed Conditions to the
Local Health Department (see reverse)
This reporting is expressly allowed under HIPAA
Communicable Disease Rules: R 325.171, 172, 173**

DIRECTORY OF MICHIGAN HEALTH DEPARTMENTS

In general, health care providers should seek consultation regarding communicable disease prevention and control services through their local health department.

COUNTY	HEALTH DEPT.	CO. OFFICE	AREA	PHONE	FAX	COUNTY	HEALTH DEPT.	CO. OFFICE	AREA	PHONE	FAX
Alcona	District 2	Harrisville	989	724-6757	343-1894	Lapeer	Lapeer County	Lapeer	810	245-5581	245-4525
Alger	LMAS DHD	Munising	906	387-2297	387-2224	Leelanau	Benzie-Leelanau DHD	Lake Leelanau	231	256-0200	882-2204
Allegan	Allegan County	Allegan	269	673-5411	673-4172	Lenawee	Lenawee County	Adrian	517	264-5202	264-0790
Alpena	District 4	Alpena	989	356-4507	354-0855	Livingston	Livingston County	Howell	517	546-9850	546-6995
Antrim	NW MI Com Health	Bellaire	231	533-8670	533-8450	Luce	LMAS DHD	Newberry	906	293-5107	293-5453
Arenac	Cent MI DHD	Standish	989	846-6541	846-0431	Mackinac	LMAS DHD	St. Ignace	906	643-1100	643-0239
Baraga	Western UP Dist	Hancock	906	524-6142	524-6144	Macomb	Macomb County	Mt. Clemens	586	469-5235	469-5885
Barry	Barry-Eaton DHD	Hastings	517	485-7110	543-7737	Manistee	District 10	Manistee	231	723-3595	723-1477
Bay	Bay County	Bay City	989	895-4009	895-4014	Marquette	Marquette County	Negaunee	906	475-9977	475-9312
Benzie	Benzie-Leelanau DHD	Benzonia	231	882-4409	882-2204	Mason	District 10	Ludington	231	845-7381	845-0438
Berrien	Berrien County	Benton Harbor	269	926-7121	926-8129	Mecosta	District 10	Big Rapids	231	592-0130	796-7864
Branch	Hbranch/Hills/St Jo	Coldwater	517	279-9561	278-2923	Menominee	Delta/Men Dist	Menominee	906	863-4451	863-7142
Calhoun	Calhoun County	Battle Creek	269	969-6370	966-1489	Midland	Midland County	Midland	989	832-6380	832-6628
Cass	Van Buren-Cass DHD	Cassopolis	269	445-5280	445-5278	Missaukee	District 10	Lake City	231	839-7167	839-7908
Charlevoix	NW MI Com Health	Charlevoix	231	547-6523	547-6238	Monroe	Monroe County	Monroe	734	240-7800	240-7815
Cheboygan	District 4	Cheboygan	231	627-8850	627-9466	Montcalm	Mid-MI DHD	Stanton	989	831-5237	831-3666
Chippewa	Chippewa County	Sault Ste. Marie	906	635-1566	253-1466	Montmorency	District 4	Atlanta	989	785-4428	785-2217
Clare	Cent MI DHD	Harrison	989	539-6731	539-4449	Muskegon	Muskegon County	Muskegon	231	724-6246	724-6674
Clinton	Mid-MI DHD	St. Johns	989	224-2195	224-4300	Newaygo	District 10	White Cloud	231	689-7300	689-7382
Crawford	District 10	Grayling	989	348-7800	348-5346	Oakland	Oakland County	Pontiac	248	858-1280	858-5428
Delta	Delta-Men Dist	Escanaba	906	786-4111	786-7004	Oceana	District 10	Hart	231	873-2193	873-4248
Dickinson	Dick-Iron Dist	Iron River	906	265-9913	265-2950	Ogemaw	District 2	West Branch	989	345-5020	343-1899
Eaton	Barry-Eaton DHD	Charlotte	517	543-2430	543-2656	Ontonagon	Western UP Dist	Ontonagon	906	884-4485	884-2358
Emmet	NW MI Com Health	Petoskey	231	347-6014	347-2861	Osceola	Cent MI DHD	Reed City	231	832-5532	832-1020
Genesee	Genesee County	Flint	810	257-3612	257-3147	Oscoda	District 2	Mio	989	826-3970	343-1895
Gladwin	Cent MI DHD	Gladwin	989	426-9431	426-6952	Otsego	NW MI Com Health	Gaylord	989	732-1794	732-3285
Gogebic	Western UP Dist	Bessemer	906	667-0200	667-0020	Ottawa	Ottawa County	Holland	616	396-5266	393-5767
Gd. Traverse	Grand Traverse Co	Traverse City	231	922-4831	922-4629	Presque Isle	District 4	Rogers City	989	734-4723	734-3866
Gratiot	Mid-MI DHD	Ithaca	989	875-3681	875-3747	Roscommon	Cent MI DHD	Prudenville	989	366-9166	366-8921
Hillsdale	Branch/Hills/St Jo	Hillsdale	517	437-7395x200	437-0166	Saginaw	Saginaw County	Saginaw	989	758-3800	758-3750
Houghton	Western UP Dist	Hancock	906	482-7382	482-9410	St. Clair	St. Clair County	Port Huron	810	987-9396	985-2150
Huron	Huron County	Bad Axe	989	269-9721	269-4181	St. Joseph	Branch/Hills/St Jo	Three Rivers	269	273-2161x200	273-2452
Ingham	Ingham County	Lansing	517	887-4311	887-4310	St. Joseph	Branch/Hills/St Jo	Strugis	269	659-4013x200	651-6090
Ionia	Ionia County	Ionia	616	527-5341	527-5361	Sanilac	Sanilac County	Sandusky	810	648-4098	648-2646
Iosco	District 2	Tawas City	989	362-6183	343-1892	Schoolcraft	LMAS DHD	Manistique	906	341-6951	341-5230
Iron	Dick-Iron Dist	Stambaugh	906	265-9913	265-2950	Shiawassee	Shiawassee County	Corunna	989	743-2318	743-2413
Isabella	Cent MI DHD	Mt. Pleasant	989	773-5921	773-4319	Tuscola	Tuscola County	Caro	989	673-8114	673-7490
Jackson	Jackson County	Jackson	517	768-4420	788-4373	Van Buren	Van Buren-Cass DHD	Hartford	269	621-3143	621-2725
Kalamazoo	Kalamazoo County	Kalamazoo	269	373-5200	373-5363	Washtenaw	Washtenaw County	Ypsilanti	734	544-6700	544-6706
Kalkaska	District 10	Kalkaska	231	258-8669	258-2805	Wayne (out-Wayne)	Wayne County	Wayne	734	727-7006	727-7043
Kent	Kent County	Grand Rapids	616	632-7100	632-7085	Detroit	Detroit City	Detroit	313	876-4000	871-5363
Keweenaw	Western UP Dist	Hancock	906	482-7382	482-9410	Wexford	District 10	Cadillac	231	775-9942	775-5372
Lake	District 10	Baldwin	231	745-4663	745-2501	STATE OF MICHIGAN	Comm Disease Division	Lansing	517	335-8165	335-8263
STATE OF MICHIGAN	Immunization Division	Lansing	517	335-8159	335-9855	STATE OF MICHIGAN	Bureau of Laboratories	Lansing	517	335-8059	335-9631

STATE OF MICHIGAN COMMUNICABLE DISEASE AFTER HOURS CONTACT: (517) 335-9030