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Important Phone Numbers

Communicable Disease
(586) 783-8190

STD/HIV/AIDS
(586) 465-9217

Tuberculosis
(586) 469-5421

Free HIV Testing
(586) 465-8434

IMMUNIZATIONS

Mt. Clemens Clinic
(586) 469-5372

Warren Clinic
(586) 465-8537

St. Clair Shores Clinic
(586) 466-6800

TO REPORT BY FAX

Communicable Disease
Secure Fax
(586) 493-0075

STD/HIV/AIDS
Secure Fax
(586) 573-2019

Hotline for
Emergent Issues
(586) 466-7923

Macomb County Health Department

COMMUNICABLE DISEASE NEWSLETTER

www.macombcountymi.gov/publichealth

Influenza Update March 2, 2010

Influenza season 2009-2010 officially began October 4, 2009. Flu is unpredictable and activity can rise and fall throughout the season. The following information provides situational updates for Influenza Season 2009-2010 on a national, state and local level.

NATIONAL

Nationwide during MMWR Week 8, 1.7% of patient visits reported through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) were due to influenza-like illness (ILI). This percentage is below the national baseline of 2.3%.

Influenza-Associated Hospitalizations

During September 1, 2009 – February 27, 2010, the following preliminary laboratory-confirmed overall influenza associated hospitalization rates were reported by the Emerging Infections Program (EIP) and the new EIP surveillance sites (*rates include influenza A, influenza B, and 2009 influenza A [H1N1]*).

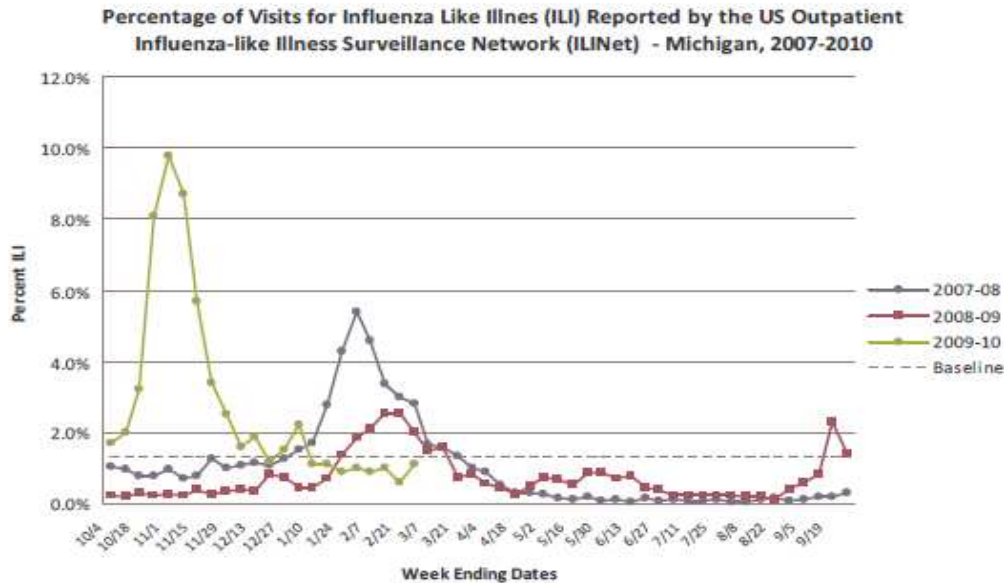
| AGE GROUP | AT FEB. 20, 2010 | | AT FEB. 27, 2010 | |
|-------------------|-----------------------------|-----------------------------|-----------------------------|---------------------------------|
| | Rate per 10,000 (EIP sites) | Rate per 10,000 (New sites) | Rate per 10,000 (EIP sites) | Rate per 10,000 (New EIP sites) |
| Children 0-4 yrs | 6.4 | 10.2 | 6.4 | 10.3 |
| Children 5-17 yrs | 2.5 | 3.6 | 2.5 | 3.6 |
| Adults 18-49 yrs | 2.3 | 1.7 | 2.3 | 1.7 |
| Adults 50-64 yrs | 3.1 | 1.9 | 3.1 | 1.9 |
| Adults ≥65 yrs | 2.6 | 1.7 | 2.6 | 1.7 |

* Source: CDC FluView

MICHIGAN

Sentinel Provider Influenza Surveillance (as of March 4, 2010)

Reports from 33 sentinel sites, during the MMWR Week 8 (ending February 27, 2010) showed the proportion of visits due to ILI increased to **1.1%** overall (103 patient visits due to ILI reported out of 8,967 office visits).



Source: Data reported in Michigan FluFocus Vol7: No. 8

Influenza-associated Pediatric Mortality (as of March 4)

Five 2009 H1N1 influenza-associated pediatric mortalities (Southeast-3, Southwest-1 and North-1) have been reported to MDCH for the 2009-2010 season.

Laboratory Surveillance (as of March 4)

For the 2009-2010 season (starting on 4 October 2009), MDCH BOL identified 605 influenza isolates:

- 2009 Influenza A (H1N1): 604
- Influenza B: 1

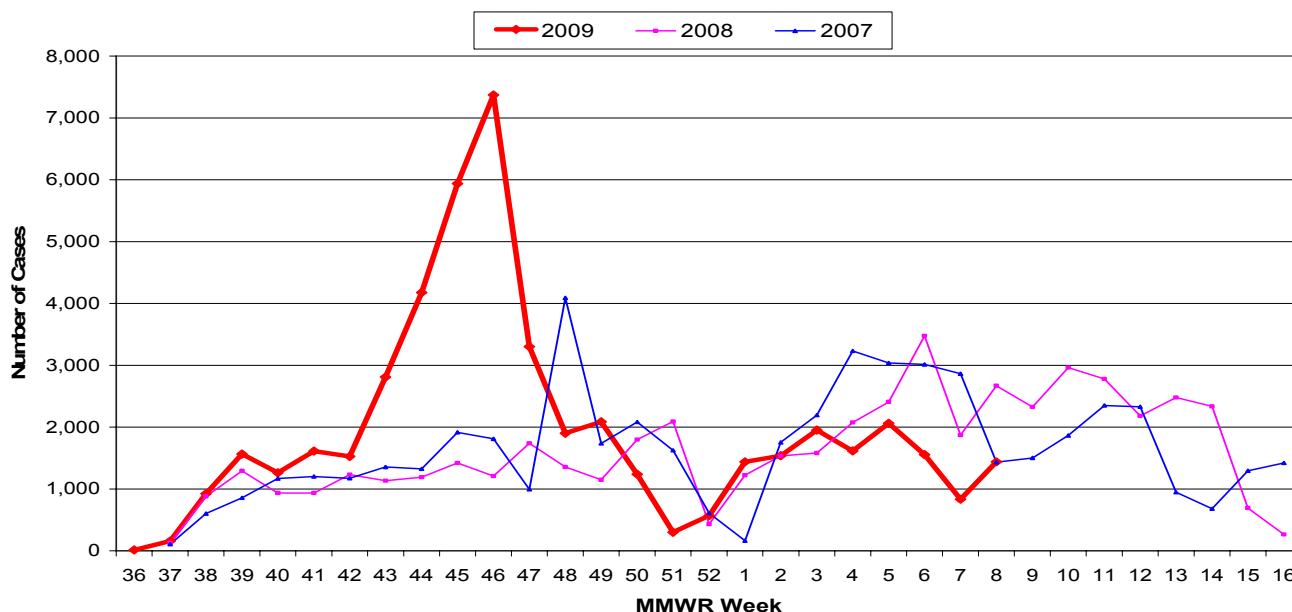
Michigan Influenza Antigenic Characterization (as of March 4)

One 2009 H1N1 influenza A virus from Michigan has been characterized as A/California/07/2009 (H1N1)-like, which is the recommended strain for the H1N1 component of the 2010-11 Northern Hemisphere vaccine.

MACOMB COUNTY

The weekly ILI data for Influenza Season 2009-2010 is shown in the graph below for Macomb County. Reports of influenza-like illness, laboratory diagnosed influenza, and influenza isolates confirmed by MDCH – Bureau of Laboratories (BOL) are represented below in aggregate form. Influenza reports are received weekly from Macomb hospitals, private medical providers, Long Term Care Facilities, schools, childcare centers, Head Start Programs, and preschools.

**Macomb County
Weekly ILI Reports - 2007-2010**



The aggregate number of laboratory-confirmed 2009 H1N1 infections in Macomb County from 1 November is 1,194 and 158 hospitalizations. There has been 1 death reported so far for the present influenza season.

H1N1 Vaccination Program Update

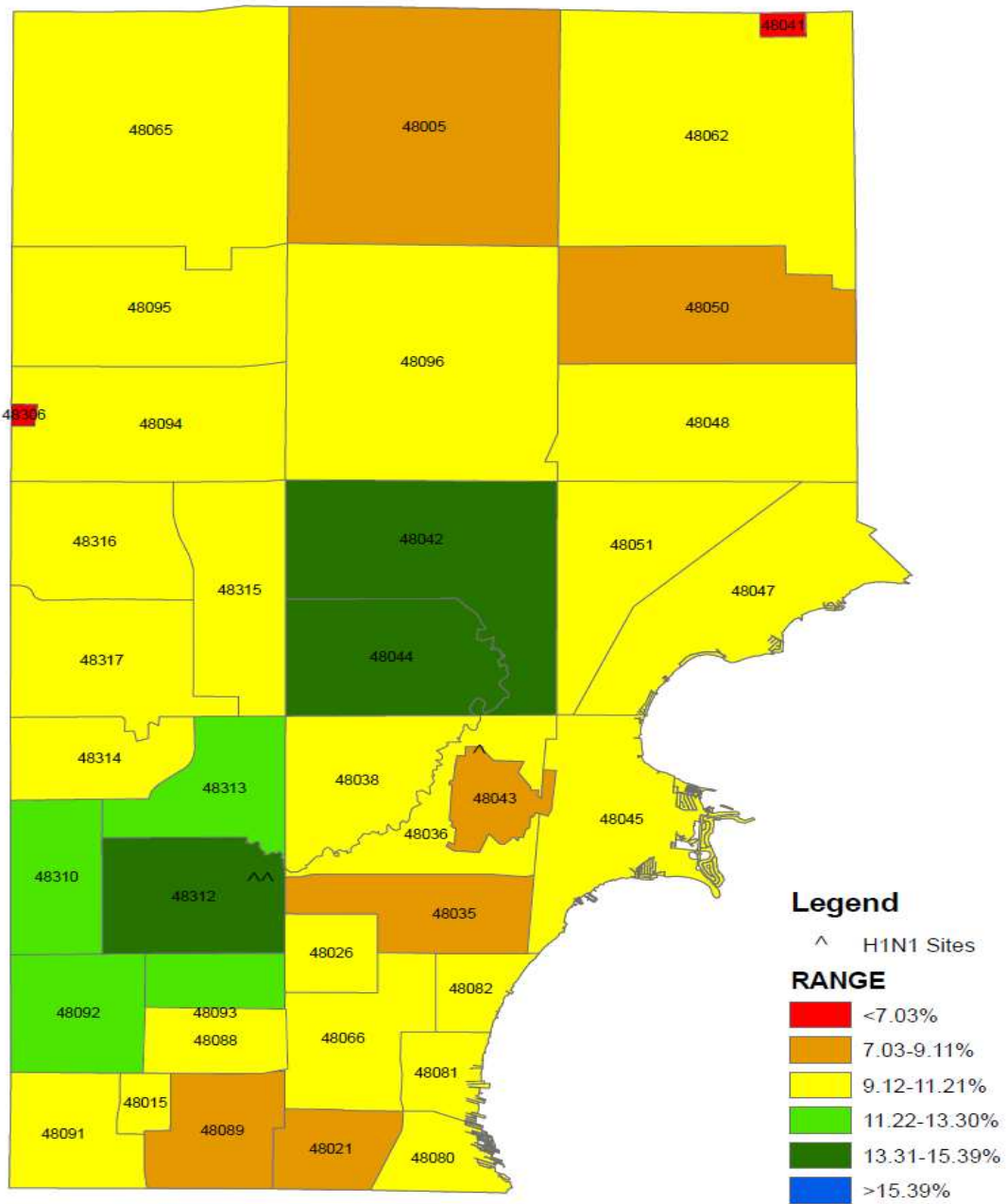
Beginning December 8, 2009, the Macomb County Health Department opened the H1N1 vaccination program up to **all persons 6 months of age and older**.

As of March 5, 2010 the Macomb County Health Department had administered 45,960 doses of H1N1 vaccine to eligible persons.

A report received through the Michigan Care Improvement Registry (MCIR) dated February 26, 2010 showed a total of **101,828** doses administered by providers in Macomb County. Of this amount, **99,053** (or 97.3%) were administered to Macomb County residents.

Based on the 2008 estimate of the county population used by the MDCH for the H1N1 vaccination program (830,663), the overall H1N1 vaccination coverage estimate for Macomb County residents was **12.28%**.

Macomb County: H1N1 Vaccination Coverage by Zip Code, at February 9, 2010



Coverage Ranges are:

<7.03% - (less than 2 Standard Deviations below the County mean coverage)

7.03-9.11% - (between 1 and 2 Standard Deviations below the County mean coverage)

9.12-11.21% - (within 1 Standard Deviation below the County mean coverage)

11.22-13.30% - (within 1 Standard Deviation above the County mean coverage)

13.31-15.39% - (between 1 and 2 Standard Deviations above the County mean coverage)

>15.39% - (more than 2 Standard Deviations above the County mean coverage)

Pertussis

The Macomb County Health Department has noted a recent sharp increase in the number of reported confirmed cases of *Bordetella pertussis* (Whooping Cough) identified in adults and infants living in Macomb County. This increase has also been noted in surrounding jurisdictions in Southeastern Michigan.

Universal immunization of children with DTaP, children 11 years of age and older and adults with Tdap (if five years have passed since the last tetanus containing vaccine was received), evaluation of close contacts, and post-exposure treatment are the best means for controlling transmission of *B. pertussis*. The following information may be helpful to your practice during evaluation, testing and treatment decisions:

Recommended Testing for Pertussis (American Academy of Pediatrics, “Red Book” 2009)

| Recommended Test | Specimen Collection | Timing for Specimens | Specimen Kits | Comments |
|---|--|---------------------------------|--|---|
| Polymerase Chain Reaction (PCR) for <i>B. pertussis</i> | Posterior Nasopharyngeal swab (NP) or aspirate (not throat) | Within two weeks of cough onset | Use Dacron swab only for PCR, place in viral transport media (VTM) | PCR and VTM are available through most hospital and private reference laboratories |
| Culture for <i>B. pertussis</i> | Posterior nasopharyngeal swab (NP) or aspirate (not throat) | Within two weeks of cough onset | Use Dacron or calcium alginate (not cotton) swab for culture and place in viral transport media (VTM) | Cultures and VTM are available through most hospital and private reference laboratories |

Chemoprophylaxis is recommended for all household contacts and other close contacts of confirmed or suspected cases, including those in child care, regardless of age and immunization status. Antibiotics given during the catarrhal stage may ameliorate the disease. The agents, doses and duration of prophylaxis are the same as for Pertussis treatment. After paroxysms are established, antibiotics usually have no significant effect on the course of illness and are recommended primarily to limit the spread of organisms to others.

Recommended Treatment* for Pertussis (American Academy of Pediatrics, “Red Book” 2009)

| Age | Azithromycin | Erythromycin | Clarithromycin | TMP-SMX – Alternative |
|--|--|---|---|---|
| < 1 mo. | 10 mg/kg per day as a single dose for 5 days (preferred macrolide for this age - risk of idiopathic hypertrophic pyloric stenosis with erythromycin) | 40-50 mg/kg per day in 4 divided doses for 14 days | Not recommended | Contraindicated at < 2 mo |
| 1-5 mo. | 10 mg/kg per day as a single dose for 5 days | 40-50 mg/kg per day in 4 divided doses for 14 days | 15 mg/kg per day in 2 divided doses for 7 days | 2 – 5 mo of age: TMP, 8 mg/kg per day; SMX, 40 mg/kg per day in 2 divided doses for 14 days |
| Infants 6mo of age or older and children | 10 mg/kg per day as a single dose on day 1 (max 500 mg) then 5mg/kg per day as a single dose on days 2-5 (max 250 mg per day) | 40-50 mg/kg per day in 4 divided doses for 14 days (max of 2 g/day) | 15 mg/kg per day in 2 divided doses for 7 days (max of 1 g/day) | TMP, 8 mg/kg per day; SMX, 40 mg/kg per day in 2 divided doses for 14 days |
| Adolescents and Adults | 500 mg as a single dose on day 1 then 250 mg as a single dose on days 2-5 | 2 g/per day in 4 divided doses for 14 days | 1 g/per day in 2 divided doses for 7 days | TMP, 300 mg per day; SMX, 1600 mg per day in 2 divided doses for 14 days |

* The agents, doses and duration of prophylaxis are the same as treatment for Pertussis.

Cases of Pertussis should be excluded from day care or school and should be advised not to attend work or other aggregate settings until they have received 5 days of antimicrobial therapy. Cases that do not receive appropriate antibiotic therapy should be excluded from school or work for 21 days after the onset of symptoms.

For more information about Pertussis or other Vaccine Preventable Diseases please contact the Communicable Disease Program at (586) 783-8190, access the MDCH Web site at: www.michigan.gov/mdch, or the CDC Web site at: www.cdc.gov

Join the Influenza Sentinel Surveillance Network

Influenza viruses are constantly evolving, causing substantial morbidity and mortality throughout the U.S. each year. The U.S. Influenza Sentinel Provider Surveillance Network is a collaborative effort between the CDC, state and local health departments and volunteer sentinel health care providers to monitor the impact of influenza in Michigan each year. For more information, contact the Michigan Department of Community Health: Rachel Potter, DVM, MS at PotterR1@michigan.gov, or phone (517) 335-9710, or fax (517) 335-9855.

When you enroll as an influenza sentinel physician your responsibilities are:

1. Collect data
 - Total number of patients seen each month
 - Number of patients with Influenza-like Illness seen in four age categories; 0-4 yrs., 5-24 yrs., 25-64 yrs., and 65+ yrs.
2. Report the data to CDC weekly by fax or internet
3. Collect respiratory specimens from a sample of your patients with influenza-like illness for respiratory viral culture at no cost to you

Advantages of being a Sentinel Physician:

1. Weekly feedback on data submitted
2. Summaries of regional, state, and national influenza data
3. Free hardcopy subscriptions to CDC's *Morbidity and Mortality Weekly Report* and *Emerging Infectious Diseases*
4. Free respiratory viral cultures performed by the state laboratory, for up to eleven specimens yearly
5. Family Practice Residents may fulfill their **residency research requirement** by participating in the influenza surveillance system

Rabies

Michigan is moving into the season where typically there is more interaction between animals and humans. Health Department staff are available to consult with your practice regarding post-exposure risk assessments for patients who have had exposures to wild or domestic animals. Please call the Communicable Disease Program at (586) 783-8190. Please complete the Macomb County Bite Report for individuals bitten and mail or fax it to the Macomb County Animal Shelter at (586) 783-0906.

ACIP has revised their recommendation for post exposure prophylaxis for persons who are not immunosuppressed or who have not previously been vaccinated for rabies, to include four (4) doses of rabies vaccine (administered in the deltoid region) on days 0, 3, 7, and 14 and one dose of Human Rabies Immune Globulin (HRIG) administered on day 0 (20 IU/kg). HRIG should be infiltrated into the area around the bite and the remainder at a site distant from vaccine administration. For more information about Rabies, pre and post-exposure vaccination, and Rabies risk assessment algorithms for animals and humans, please access the Michigan Department of Community Health Web site at www.michigan.gov/rabies or the CDC Web site at www.cdc.gov/rabies.

New Immunization Requirements for School Attendance

A change to the Michigan Communicable Disease Rules effective **January 1, 2010**, requires three additional immunizations for school attendance. The Michigan Department of Community Health and the Macomb County Health Department require:

TWO doses of varicella (Var) vaccine on or after the first birthday, at least 28 days apart or a history of chickenpox disease for all children entering kindergarten, all 6th grade students, and all children changing school districts

ONE dose of meningococcal (MCV4 OR MPSV4) vaccine for all children 11 years of age and older, enrolled in 6th grade, or changing school districts

ONE dose of tetanus/diphtheria/acellular pertussis (Tdap) vaccine (if 5 years have passed since the last dose of tetanus containing vaccine) for all children 11 years of age or older, who are enrolled in 6th grade, or changing school districts

Special Vaccine Program for a limited time:

Older teens and adults whose **insurance will not cover any portion of the cost of these vaccines**, may now be able to get vaccines at Macomb County Health Department offices through the American Recovery and Reinvestment Act (ARRA) program. The vaccines are provided through the Michigan Department of Community Health. The only cost to the client is an administration fee of \$8.00 per injection—cash or check only. For more information about this program or other vaccines, call or visit one of the Macomb County Health Department Health Centers.

HPV4 vaccine (Gardasil): Available for women 19 through 26 years of age

Shingles vaccine (Zostavax): Available for individuals 60 years of age and older

Varicella vaccine: Available for individuals 6 mo. through 30 years of age with incomplete immunization or no evidence of immunity

Pneumococcal Vaccine: Available for individuals 2 years of age and older, including current smokers, or individuals with asthmatic conditions or other high risk health conditions.

The March 2010 Communicable Disease Newsletter – Volume 7 can be found on the Health Department Web site on the Communicable Disease Web page at:
www.macombcountymi.gov/publichealth/HPDC/hpdc_cd.htm

Macomb County Health Department Reportable Diseases Summary

Diseases Reported - Note: Cumulative total for previous years; year-to-date for February 2010

| | 2010 | 2009 | 2008 | | 2010 | 2009 | 2008 |
|-------------------------|-------|-------|-------|---------------------------------|------|------|------|
| AIDS | 4* | 49* | 59* | KAWASAKI SYNDROME | 0 | 4 | 6 |
| AMEBIASIS | 0 | 1 | 2 | LEGIONNAIRE'S DISEASE | 2 | 16 | 27 |
| BLASTOMYCOSIS | 0 | 0 | 0 | LISTERIOSIS | 0 | 3 | 2 |
| BOTULISM (FOODBORNE) | 0 | 0 | 0 | LYME DISEASE | 0 | 0 | 1 |
| BOTULISM (INFECTIOUS) | 0 | 0 | 0 | MALARIA | 0 | 1 | 0 |
| BRUCELLOSIS | 0 | 0 | 0 | MEASLES | 0 | 0 | 0 |
| CAMPYLOBACTER | 6 | 46 | 71 | MENINGITIS VIRAL | 10 | 71 | 94 |
| CHICKENPOX | 10 | 120 | 226 | MENINGITIS BACTERIAL/BACTEREMIA | | | |
| CHLAMYDIA | 415* | 2219* | 1564* | (EXCLUDING N. MENINGITIDIS) | 1 | 17 | 13 |
| COCCIDIOIDOMYCOSIS | 0 | 2 | 2 | MENINGOCOCCAL DISEASE | 0 | 0 | 4 |
| CREUTZFELDT JAKOB | 0 | 4 | 1 | MUMPS | 2 | 5 | 5 |
| CRYPTOCOCCOSIS | 0 | 0 | 1 | PERTUSSIS | 5 | 70 | 30 |
| CRYPTOSPORIDIOSIS | 1 | 3 | 9 | POLIO | 0 | 0 | 0 |
| DENGUE FEVER | 0 | 0 | 0 | PSITTACOSIS | 0 | 0 | 0 |
| DIPHTHERIA | 0 | 0 | 0 | Q FEVER | 0 | 0 | 0 |
| ENCEPHALITIS PRIMARY | 0 | 0 | 2 | RABIES ANIMAL | 0 | 2 | 4 |
| ENC POST OTHER | 0 | 1 | | RABIES HUMAN | 0 | 0 | 0 |
| E. COLI 0157 | 1 | 7 | 15 | REYE SYNDROME | 0 | 0 | 0 |
| FLU-LIKE DISEASE | 12448 | 79787 | 58801 | ROCKY MNTN SPOTTED FVR | 0 | 2 | 0 |
| GIARDIASIS | 5 | 35 | 27 | RUBELLA | 0 | 0 | 0 |
| GONORRHEA | 99* | 570* | 449* | SALMONELLOSIS | 10 | 83 | 65 |
| GRANULOMA INGUINALE | 0 | 0 | 0 | SHIGA TOXIN 1OR 2, E.COLI | 1 | 1 | 7 |
| GUILLAIN-BARRE SYNDROME | 0 | 2 | 2 | SHIGELLOSIS | 2 | 4 | 4 |
| HEMOLYTIC UREMIC SYN. | 0 | 0 | 3 | STREP INVASIVE DISEASE | 2 | 8 | 15 |
| HEPATITIS A | 0 | 5 | 14 | STREP PNEUMO INV DS | 13 | 76 | 73 |
| HEPATITIS B (ACUTE) | 1 | 18 | 30 | SYPHILIS | 1* | 23* | 17* |
| HEPATITIS B (CHRONIC) | 20 | 161 | 146 | SYPHILIS CONGENITAL | 0 | 0 | 0 |
| HEPATITIS C (ACUTE) | 1 | 8 | 10 | TETANUS | 0 | 0 | 0 |
| HEPATITIS C (CHRONIC) | 86 | 536 | 502 | TOXIC SHOCK SYNDROME | 0 | 1 | 0 |
| HEPATITIS D | 0 | 0 | 0 | TUBERCULOSIS | 1 | 4 | 7 |
| HEPATITIS E | 0 | 0 | 1 | TULAREMIA | 0 | 0 | 0 |
| H. FLU INVASIVE DISEASE | 1 | 7 | 2 | TYPHOID FEVER | 0 | 0 | 1 |
| HISTOPLASMOSIS | 0 | 1 | 1 | WEST NILE VIRUS | 0 | 0 | 2 |
| INFLUENZA, NOVEL | 0 | 28 | | YELLOW FEVER | 0 | 0 | 0 |
| INFLUENZA (OUT-SEASON) | 0 | 0 | 1 | YERSINIA | 0 | 2 | 2 |

*PROVISIONAL