DuPage County Health Department
CD REVIEW
Volume 8, No. 5 May 2012

DUPAGE COUNTY HEALTH DEPARTMENT
Everyone, Everywhere, Everyday

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General Information

Communicable Disease and Epidemiology
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Environmental Health
(630) 682-7400

Immunizations
(630) 682-7400

Sexually Transmitted Diseases
(630) 221-7553

HIV/AIDS
(630) 221-7553

Tuberculosis
(630) 221-7522

School Health
(630) 221-7300

Travel Clinic
(630) 682-7400

Animal Care & Control
(630) 407-2800

Please contact Communicable Disease and Epidemiology at (630) 221-7553 or ebarajas@dupagehealth.org to send suggestions or to be added to the distribution list.

The purpose of this two-page surveillance update is to promote the control and prevention of **communicable disease (CD)** by providing clinically relevant information and resources to healthcare professionals in DuPage County.

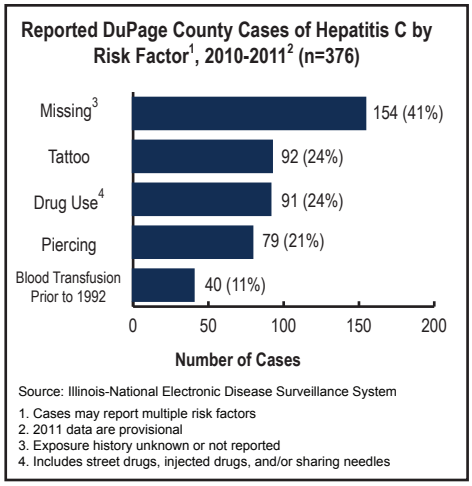
Under the Microscope
Hepatitis C

For questions or to report suspect and known cases of hepatitis C, please call the DuPage County Health Department at (630) 221-7553.

May 2012 marks the 17th anniversary of Hepatitis Awareness Month and May 19 as the first National Hepatitis Testing Day in the U.S.[1] Hepatitis C virus (HCV) infection is a major public health problem and a leading cause of chronic liver disease. **Hepatitis C is the principal cause of death from liver disease and the leading indication for liver transplantation in the U.S.**[2]

HCV infection is the most common chronic bloodborne infection in the U.S.; approximately 3.2 million persons are chronically infected.[3] Infection is most prevalent among those born during 1945–1965, the majority of whom were likely infected during the 1970s and 1980s when rates were highest.[3]

HCV is transmitted primarily through large or repeated percutaneous (i.e., passage through the skin) exposures to infectious blood. Approximately 80 percent of persons who share needles to inject drugs are infected with HCV. Receipt of donated blood, blood products, and organs was once a common means of transmission, but is now rare in the U.S. since blood screening became available in 1992. In health care settings, after a needlestick or sharps exposure to HCV-positive blood, the risk of HCV infection is approximately 1.8% (range: 0%–10%). Hepatitis C has been transmitted between sex partners and among household members, but the degree of risk is believed to be low. HCV is not spread by food or water or casual contact, such as shaking hands or sharing a work space or bathroom facility.[3,4]



Although generally a mild condition, hepatitis C is much more likely than hepatitis B to lead to chronic liver disease. People infected with HCV can become chronic carriers of the virus, although they may have no symptoms. **Around 70 percent of all HCV carriers will develop chronic liver disease, regardless of whether they have symptoms**.[4]

Most persons with chronic HCV infection are asymptomatic. However, many have chronic liver disease, which can range from mild to severe, including cirrhosis and liver cancer. Chronic liver disease in HCV-infected persons is **usually insidious, progressing slowly without any signs or symptoms for several decades**. In fact, HCV infection is often not recognized until asymptomatic persons are identified as HCV-positive when screened for blood donation or when elevated alanine aminotransferase (ALT) levels are detected during routine examinations.[3]

Unlike hepatitis A, which does not cause a long-term infection, hepatitis B and hepatitis C can become chronic, life-long infections. Chronic viral hepatitis can lead to serious liver problems including liver cancer. Both hepatitis B and hepatitis C can cause liver cancer and have contributed to the increase in rates of liver cancer in recent decades. **At least half of new cases of liver cancer are from chronic hepatitis C**.[5]

HCV testing is recommended for anyone at increased risk for HCV infection, including:

- Persons who have ever injected illegal drugs, including those who injected only once many years ago
- Recipients of clotting factor concentrates made before 1987
- Recipients of blood transfusions or solid organ transplants before July 1992
- Patients who have ever received long-term hemodialysis treatment
- Persons with known exposures to HCV, such as
  - health care workers after needlesticks involving HCV-positive blood
  - recipients of blood or organs from a donor who later tested HCV-positive
- All persons with HIV infection
- Patients with signs or symptoms of liver disease (e.g., abnormal liver enzyme tests)
- Children born to HCV-positive mothers (to avoid detecting maternal antibody, these children should not be tested before age 18 months)[3]

Current CDC guidelines call for testing only individuals with certain known risk factors for hepatitis C infection. But studies find that many baby boomers (the generation born from 1945 through 1965) do not perceive themselves to be at risk and are not being tested. **More than 2 million U.S. baby boomers are infected with hepatitis C, accounting for more than 75 percent of all American adults living with the virus**. CDC has recently issued draft guidelines proposing that all U.S. baby boomers receive a one-time test for the hepatitis C virus. CDC believes this approach will address the largely preventable consequences of this disease, especially in light of **newly available therapies that can cure up to 75 percent of infections**.[6]

References:

1. www.cdc.gov/mmwr/pdf/wk/mm6119.pdf
2. www.aasld.org/practiceguidelines/Documents/Bookmarked%20Practice%20Guidelines/Diagnosis_of_HEP_C_Update.Aug%20_09pdf.pdf
3. www.cdc.gov/hepatitis/HCV/index.htm
4. www.idph.state.il.us/public/hb/hbhepc.htm
5. www.cdc.gov/Features/HepatitisAwareness/
6. www.cdc.gov/nchhstp/newsroom/HepTestingRecsPressRelease2012.html

DUPAGE COUNTY HEALTH DEPARTMENT

CASES[1] OF REPORTABLE DISEASES*

* Last updated by the Illinois Department of Public Health in March 2008

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		2012		2011		2010		2009		2008		Median	
Vaccine Preventable Diseases	**Report Within**	**Apr**	**Jan - Apr**	**Jan - Apr**	**Total**	**Jan - Apr**	**Total**	**Jan - Apr**	**Total**	**Jan - Apr**	**Total**	**Jan - Apr**	**Total ('08-'11)**
Chickenpox (varicella)	24 hrs	11	43	31	82	51	95	56	146	83	236	51	120.5
Diphtheria	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Haemophilus influenzae, invasive	24 hrs	0	4	4	15	3	7	3	11	1	6	3	9
Hepatitis A	24 hrs	0	0	2	9	2	3	2	6	7	11	2	7.5
Hepatitis B	7 days	0	1	0	0	0	4	4	8	0	3	0	3.5
Hepatitis B (carriers)	7 days	7	36	34	113	37	108	48	127	51	128	37	120
Influenza, deaths in < 18 yrs old	7 days	0	0	0	0	0	0	0	1	0	0	0	0
Influenza ICU admissions	24 hrs	1	5	23	24	0	3	NR	NR	NR	NR	5	13.5
Measles (rubeola)	24 hrs	0	0	0	0	0	0	1	1	0	14	0	0.5
Mumps	24 hrs	0	1	2	4	0	2	0	2	1	2	1	2
Neisseria meningitidis, invasive	24 hrs	0	0	1	2	0	1	2	6	1	4	1	3
Pertussis (whooping cough)	24 hrs	6	82	52	272	10	92	5	26	1	13	10	59
Poliomyelitis	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Streptococcus pneumoniae, invasive disease, in those < 5 yrs old	7 days	1	2	7	13	4	8	4	8	1	6	4	8
Tetanus	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Other Communicable Diseases													
Anaplasmosis[2]	7 days	0	0	0	3	0	0	0	0	0	0	0	0
Anthrax	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Botulism, foodborne	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Botulism, other	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Brucellosis	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
California encephalitis[3]	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Cholera	24 hrs	0	0	0	0	0	0	0	0	0	1	0	0
Creutzfeldt-Jakob disease	7 days	0	0	1	2	0	0	0	0	0	0	0	0
Cryptosporidiosis	7 days	1	2	0	5	0	5	2	5	0	1	0	5
Cyclosporiasis	7 days	0	0	0	0	0	0	0	1	0	0	0	0
Dengue fever[3]	7 days	0	0	1	1	2	4	0	4	0	0	0	2.5
Ehrlichiosis[2]	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Enteric *E. coli* infections[4]	24 hrs	1	5	6	21	5	18	4	12	5	21	5	19.5
Giardiasis	7 days	2	14	13	54	21	49	13	40	13	53	13	51
Glomerulonephritis[5]	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Hantavirus pulmonary syndrome	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Hemolytic uremic syndrome	24 hrs	0	0	0	1	0	0	0	0	0	1	0	0.5
Hepatitis C (cases & carriers)	7 days	7	53	62	189	66	187	82	213	89	246	66	201
Hepatitis D	7 days	0	0	0	1	0	0	0	0	0	0	0	0
Histoplasmosis	7 days	0	0	0	0	2	2	1	2	2	6	1	2
Influenza A, novel virus	3 hrs	0	0	0	0	11	11	3	181	0	0	0	5.5
Legionellosis	7 days	1	5	1	15	2	11	2	13	1	5	2	12
Leprosy	7 days	0	0	0	0	0	0	0	0	1	1	0	0
Leptospirosis	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Listeriosis	7 days	0	0	1	3	1	6	1	3	0	1	1	3
Lyme disease[2]	7 days	1	1	0	31	1	19	0	17	0	16	0	18
Malaria	7 days	0	1	1	7	1	4	1	4	1	4	1	4
Ophthalmia neonatorum	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Plague	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Psittacosis	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Q fever[6]	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Rabies, human case	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Rabies, potential exposure	24 hrs	1	2	3	31	7	54	0	15	1	45	2	38
Reye syndrome	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Rheumatic fever[5]	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Rocky Mountain spotted fever[2]	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Salmonellosis	7 days	7	23	30	99	28	136	25	89	26	105	26	102
Severe Acute Respiratory Syndrome	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Shigellosis	7 days	1	7	7	22	258	277	5	12	9	24	7	23
Smallpox	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Smallpox vaccination, complications	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
St. Louis encephalitis[3]	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Staphylococcus aureus, methicillin resistant (MRSA), in those < 61 days old	24 hrs	0	1	1	3	1	6	2	6	0	3	1	4.5
Staphylococcus aureus, methicillin resistant (MRSA), community cluster[7]	24 hrs	0	1	0	0	1	1	0	1	1	4	1	1
Staphylococcus aureus (vancomycin-resistant)	24 hrs	0	0	0	1	1	1	0	0	0	0	0	0.5
Streptococcal infections, group A invasive disease[8]	24 hrs	1	10	18	30	8	20	7	14	8	16	8	18
Toxic shock syndrome[9]	7 days	0	0	1	1	0	0	0	0	0	1	0	0.5
Trichinosis	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Tuberculosis[10]	7 days	0	4	8	23	10	26	11	29	12	43	10	27.5
Tularemia	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Typhoid fever	24 hrs	0	1	3	3	2	3	2	5	1	3	2	3
Typhus	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Vibriosis (non-cholera)	7 days	1	1	0	3	0	1	0	2	0	0	0	1.5
West Nile disease[3]	7 days	0	0	0	2	0	17	0	0	0	1	0	1.5
Yersiniosis	7 days	1	3	1	3	0	0	2	5	0	1	1	2
STDs, HIV and AIDS													
AIDS[11] (April - June)	7 days	--	5	5	16	10	26	**	19	6	22	4.5	20.5
Chancroid	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Chlamydia[12]	7 days	96	487	470	1558	515	1539	539	1555	507	1587	507	1556.5
Gonorrhea[12]	7 days	12	62	72	256	78	223	72	225	91	268	72	240.5
HIV infection[11] (April - June)	7 days	--	6	5	24	13	27	11	40	6	23	8.5	25.5
Syphilis	7 days	2	3	11	24	3	25	13	33	9	18	9	24.5

DuPage County healthcare providers and hospitals **must report any suspected or confirmed case of these diseases** to the local health authorities within the number of hours or days indicated.

REPORTING NUMBERS:

Communicable Diseases
(630) 221-7553
24 hours: (630) 682-7400

Tuberculosis
(630) 221-7522

STDs
(630) 221-7553

HIV/AIDS:
(630) 221-7553

[1] Provisional cases, based on date of onset

[2] Listed in CD Rules and Regulations under "Tickborne Disease"

[3] Listed in CD Rules and Regulations under "Arboviral Infections"

[4] O157:H7, STEC, EIEC, ETEC, EPEC

[5] Listed in CD Rules and Regulations under "Streptococcal infections, group A invasive disease sequelae"

[6] Q fever case in 2004 not related to any suspected bioterrorism threat or event

[7] Two or more laboratory-confirmed cases of community onset MRSA infection during a 14 day period

[8] Includes streptococcal toxic shock syndrome and necrotizing fasciitis

[9] Due to *Staphylococcus aureus*

[10] Provisional cases, based on count date per IDPH

[11] HIV/AIDS data are provided quarterly by IDPH and are provisional, based on date of diagnosis

[12] Provisional cases, based on date of test

NR = Not reported

** = Count of 5 cases or less

Websites

CDC:
www.cdc.gov

IDPH:
www.idph.state.il.us

DuPage:
www.dupagehealth.org

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www.dupagehealth.org/publications