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2009 The Year of I-NEDSS

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The Indiana National Electronic Disease Surveillance System (I-NEDSS) is a web-based application that promotes the collection, integration, and sharing of data at federal, state, and local levels. The purpose of I-NEDSS is to automate the current paper-based process to report laboratory results, communicable disease reports (CDR), and case investigations.

I-NEDSS is, above all else, a tool to support and enhance the reporting process outlined in IAC 410 1-2.3 (http://www.in.gov/legislative/iac/T04100/A00010.PDF). Benefits of I-NEDSS include increased speed, accuracy, and accountability in our disease surveillance efforts. This will be accomplished by accessing, completing, and submitting investigation forms electronically.

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Pilot Efforts - 2008

The I-NEDSS Project Team engaged six local health departments (LHDs) in a pilot of the Notification Module beginning on March 31, 2008. A second pilot was undertaken involving those same six LHDs beginning August 11, 2008 and focusing on the Case Investigation Module. The goal of both pilots was to validate the ability for I-NEDSS to support the disease reporting process and to solicit feedback from the LHDs regarding enhancements and improvements to the system.

In October 2008, the I-NEDSS Project Team released an update of I-NEDSS (version 3.2) and engaged an additional twelve LHDs in an expanded pilot of I-NEDSS. The goal of expanding the pilot was to validate the ability of the I-NEDSS Project Team to conduct training and support the I-NEDSS application on a larger scale.

The pilot process was completed in November, and as of December 1, 2008 18 LHDs participate in I-NEDSS. Those counties are:

*Hamilton	*Hendricks	*Pu
*Johnson	*Kosciusko	*Flo
Porter	Starke	Elkl
LaGrange	Huntington	Tip
Boone	Hancock	She
Delaware	Henry	Vig

*Putnam *Floyd Elkhart Tippecanoe Shelby Vigo



I-NEDSS Pilot Counties - Dec 1, 2008

The I-NEDSS Project Team is currently working to incorporate the feedback from these counties and add additional enhancements to be released in January, 2009 as I-NEDSS version 3.3.

Statewide Rollout - 2009

The I-NEDSS Project Team is also planning a statewide rollout of I-NEDSS to begin in February, 2009.

Beginning with District 5, an I-NEDSS Training Team will visit one Preparedness District each month to conduct training for any LHD that wishes to participate in I-NEDSS. After receiving the training, LHDs may then solicit hospitals that submit communicable disease reports to them and encourage the Infection Preventionists (IPs) to complete online I-NEDSS training to use the system for disease reporting.

Training will be given in contiguous districts, so if your LHD cannot participate in your district training, you will have opportunities to participate in training in neighboring districts. The I-NEDSS Training Team will work to include your LHD wherever you choose to do training.

Expect the announcement of the 2009 Training Plan by the end of January. Monthly announcements will be made via the following methods:

- LHD Resource Web site (<u>https://myshare.in.gov/isdh/lhdresource/default.aspx</u>)
- LHD-ISDH conference call (2nd Friday of every month)
- Indiana Epidemiology Newsletter (<u>http://www.in.gov/isdh/17458.htm</u>)
- Indiana Health Alert Network (IHAN)
- Direct communication via the ISDH Field Epidemiologists
- Other outlets as identified

Partnerships, Sponsorship and Success Stories

In 2008, the I-NEDSS Project Team conducted several outreach activities, developing partnerships, and planning for a collaborative approach towards incorporating and enhancing disease surveillance and reporting activities. Among those partnerships:

- The Association of Professionals in Infection Control and Epidemiology (APIC), Indiana Chapter
- The Robert-Wood Johnson "Common Ground" Project, sponsored by the Marion County Health Department
- The Indiana State Public Health Laboratory
- The Regenstrief Institute and the Indiana Network for Patient Care
- ISDH HIV, STD, TB, and Lead Program Areas

I-NEDSS is currently an ISDH development effort based in the Public Health Preparedness Emergency Response (PHPER) Program and championed by project sponsorship from the Epidemiology Resource Center (ERC) Surveillance and Investigation Division (SID). Federal funding supports 100% of development efforts. The primary funding source is the CDC's Preparedness Cooperative Agreement Grant with supplemental funding provided by the CDC's Epidemiology and Laboratory Capacity (ELC) Grant.

The I-NEDSS Project has had several successes during 2008. With your participation we will make major improvements in disease reporting and surveillance for the State of Indiana.

Revised HIV Surveillance Case Definitions

Terry Jackson, RN, BS Daniel Hillman, MPH, CHES ISDH Division of HIV/STD

The information below is excerpted from "Highlights of the Revised Surveillance Case Definitions for HIV Infection Among Adults, Adolescents, and Children Aged <18 Months and for HIV Infection and AIDS Among Children Aged 18 Months to <13 Years-United States, 2008." This article was published in the December 5, 2008 *Morbidity and Mortality Weekly Report* (MMWR). The entire article can be accessed at <u>www.CDC.gov</u>.

Since the beginning of the human immunodeficiency virus (HIV) epidemic, the Centers for Disease Control and Prevention (CDC) have revised the case definition for HIV infection to

respond to diagnostic and therapeutic advances in the disease. These revisions have helped to improve standardization and comparability of surveillance data. It is important to note that these revised "case definitions are intended for public health surveillance only and not as a guide for clinical diagnosis."

According to the article, "Public health surveillance data are used primarily for monitoring the HIV epidemic and for planning on a population level, not for making clinical decisions for individual patients. CDC and the Council of State and Territorial Epidemiologists (CSTE) recommend that all states and territories conduct case surveillance of HIV infection and AIDS using the 2008 surveillance case definitions, effective immediately." The CDC has requested that public health professionals and health care providers view HIV infection as a continuum, with AIDS being the third stage of disease, rather than defining HIV and AIDS as two separate entities. This new terminology will be used in future articles, tables and presentations.

The table below defines the new stages of HIV infection. The new definition requires laboratoryconfirmed evidence of HIV infection to meet the case definition among adults, adolescents, and children aged 18 months to < 13 years.

Table 1:

TABLE. Surveillance case	definition for human	immunodeficiency	virus (HIV)	infection	among adults	s and	adolescents	(aged
>13 years) — United States	s, 2008	-			-			

Stage	Laboratory evidence*	Clinical evidence
Stage 1	Laboratory confirmation of HIV infection and CD4+ T-lymphocyte count of ≥500 cells/µL or CD4+ T-lymphocyte percentage of ≥29	None required (but no AIDS-defining condition)
Stage 2	Laboratory confirmation of HIV infection and CD4+ T-lymphocyte count of 200–499 cells/µL or CD4+ T-lymphocyte percentage of 14–28	None required (but no AIDS-defining condition)
Stage 3 (AIDS)	Laboratory confirmation of HIV infection and CD4+ T-lymphocyte count of <200 cells/µL or CD4+ T-lymphocyte percentage of <14 [†]	or documentation of an AIDS-defining condition (with laboratory confirmation of HIV infection) [†]
Stage unknown§	Laboratory confirmation of HIV infection and no information on CD4+ T-lymphocyte count or percentage	and no information on presence of AIDS-defining conditions

* The CD4+ T-lymphocyte percentage is the percentage of total lymphocytes. If the CD4+ T-lymphocyte count and percentage do not correspond to the same HIV infection stage, select the more severe stage.
† Documentation of an AIDS-defining condition (Appendix A) supersedes a CD4+ T-lymphocyte count of >200 cells/µL and a CD4+ T-lymphocyte percentage

^t Documentation of an AIDS-defining condition (Appendix A) supersedes a CD4+ T-lymphocyte count of ≥200 cells/µL and a CD4+ T-lymphocyte percentage of total lymphocytes of ≥14. Definitive diagnostic methods for these conditions are available in Appendix C of the 1993 revised HIV classification system and the expanded AIDS case definition (CDC. 1993 Revised classification system for HIV infection and expanded surveillance case definition for AIDS among adolescents and adults. MMWR 1992;41[No. RR-17]) and from the National Notifiable Diseases Surveillance System (available at http://www.cdc. gov/ep/dphsl/casedet/case_definitions.htm).

[§] Although cases with no information on CD4+ T-lymphocyte count or percentage or on the presence of AIDS-defining conditions can be classified as stage unknown, every effort should be made to report CD4+ T-lymphocyte counts or percentages and the presence of AIDS-defining conditions at the time of diagnosis. Additional CD4+ T-lymphocyte counts or percentages and any identified AIDS-defining conditions can be reported as recommended. (Council of State and Territorial Epidemiologists. Laboratory reporting of clinical test results indicative of HiV infection: new standards for a new era of surveillance and prevention [Position Statement 04-ID-07]; 2004. Available at http://www.cste.org/ps/2004pdf/04-ID-07-final.pdf.)

(3)

Reference: Revised Surveillance Case Definitions for HIV Infection Among Adults, Adolescents, and Children Aged <18 Months and for HIV Infection and AIDS Among Children Aged 18 Months to < 13 Years- United States, 2008. MMWR 2008; 57; 1-7.



INDIANA STATE DEPARTMENT OF HEALTH IMMUNIZATION PROGRAM PRESENTS:

Immunizations from A to Z

Immunization Health Educators offer this FREE, one-day educational course that includes:

- Principles of Vaccination
- Childhood and Adolescent Vaccine-Preventable Diseases
- Adult Immunizations
 - o Pandemic Influenza
- General Recommendations on Immunization
 - Timing and Spacing
 - Indiana Immunization Requirements
 - Administration Recommendations
 - o Contraindications and Precautions to Vaccination
- Safe and Effective Vaccine Administration
- Vaccine Storage and Handling
- Vaccine Misconceptions
- Reliable Resources

This course is designed for all immunization providers and staff. Training manual, materials, and certificate of attendance are provided to all attendees. Please see the Training Calendar for presentations throughout Indiana. Registration is required. To attend, schedule/host a course in your area or for more information, please reference http://www.in.gov/isdh/17193.htm.

ISDH Data Reports Available

The following data reports and the *Indiana Epidemiology Newsletter* are available on the ISDH Web Page:

HIV/STD Spotlight Reports (June 2007, December 2007, June 2008, January 2009)	Indiana Mortality Report (1999-2006)
Indiana Cancer Report: Incidence; Mortality;	Indiana Infant Mortality Report (1999, 2002,
Facts & Figures	1990-2003)
Indiana Health Behavior Risk Factors (1999-	
2006)	Indiana Natality Report (1998-2006)
Indiana Health Behavior Risk Factors (BRFSS)	Indiana Induced Termination of Pregnancy
<u>Newsletter</u> (2003-2008)	<u>Report</u> (1998-2005)
Indiana Hospital Consumer Guide (1996)	Indiana Marriage Report (1995, 1997, & 2000-2004)
Public Hospital Discharge Data (1999-2006)	Indiana Infectious Disease Report (1997-2006)
	Indiana Maternal & Child Health Outcomes &
	Performance Measures (1989-1998, 1990-
	1999, 1991-2000, 1992-2001, 1993-2002,
Assessment of Statewide Health Needs – 2007	1994-2003, 1995-2004, 1996-2005)
HIV/STD Spotlight Reports (June 2007,	
December 2007, June 2008, January 2009)	Indiana Mortality Report (1999-2006)

http://www.IN.gov/isdh/

HIV Disease Summary

Information as of September 30, 2008 (based on 2000 population of 6,080,485)

HIV - without AIDS to date:

301	New HIV cases from October 2007 thru September 30, 2008	12-month incidence	5.23 cases/100,000			
3,830	Total HIV-positive, alive and without AIDS on September 30, 2008	Point prevalence	66.58 cases/100,000			
AIDS cases to date:						
417	New AIDS cases from October 2007 thru September 30, 2008	12-month incidence	7.25 cases/100,000			
4,225	Total AIDS cases, alive on September 30, 2008	Point prevalence	73.45 cases/100,000			
8,866	Total AIDS cases, cumulative (alive and dead) on September 30, 2008					

REPORTED CASES of selected notifiable diseases						
Disease	Cases Ro Nove MMWR W	eported in ember Veeks 45-48	Cases Reported in January – November MMWR Weeks 1-48			
	2007	2008	2007	2008		
Aseptic Meningitis	12	22	248	241		
Campylobacteriosis	35	24	426	595		
Chlamydia	1,461	917	19,435	18,400		
Cryptococcus	1	1	19	17		
Cryptosporidiosis	19	8	106	176		
<i>E. coli</i> , shiga toxin- producing	7	6	96	85		
Haemophilus influenzae, invasive	4	1	54	66		
Hemolytic Uremic Syndrome (HUS)	0	0	0	1		
Hepatitis A	0	0	27	21		
Hepatitis B	6	8	53	46		
Histoplasmosis	12	2	96	68		
Influenza Deaths (all ages)	Not Reportable	0	Not Reportable	15		
Gonorrhea	544	348	8,302	7,394		
Legionellosis	7	4	57	49		
Listeriosis	2	0	17	6		
Lyme Disease	4	0	48	38		
Measles	0	0	0	0		
Meningococcal, invasive	3	2	27	25		
Mumps	0	0	1	1		
Pertussis	1	13	53	100		
Rocky Mountain Spotted Fever	0	1	5	7		
Salmonellosis	32	30	623	565		
Shigellosis	44	16	162	565		

REPORTED CASES of selected notifiable diseases (cont.)

Disease	Cases R Nov MMWR V	eported in ember Veeks 45-48	Cumulative Cases Reported January – November <i>MMWR</i> Weeks 1-48		
	2007	2008	2007	2008	
Group A Streptococcus, invasive	7	4	109	122	
Group B <i>Streptococcus</i> , Newborn	1	0	25	23	
Group B, <i>Streptococcus</i> , invasive	16	12	241	278	
Streptococcus pneumoniae (invasive, all ages)	37	46	493	713	
<i>Streptococcus pneumoniae</i> (invasive, drug resistant)	8	8	153	187	
<i>Streptococcus pneumoniae</i> (invasive, <5 years of age)	3	3	43	58	
Syphilis (Primary and Secondary)	4	6	51	118	
Tuberculosis	8	7	111	107	
Yersiniosis	1	0	14	6	
Animal Rabies	0	0	12 (bats)	10 (bats)	

For information on reporting of communicable diseases in Indiana, call the *Surveillance and Investigation Division* at 317.233.7125.



The *Indiana Epidemiology Newsletter* is published monthly by the Indiana State Department of Health to provide epidemiologic information to Indiana health care professionals, public health officials, and communities.

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