

Weekly

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# Prevalence of Self-Reported Postpartum Depressive Symptoms — 17 States, 2004–2005

Postpartum depression (PPD) affects 10%-15% of mothers within the first year after giving birth (1). Younger mothers and those experiencing partner-related stress or physical abuse might be more likely to develop PPD (2,3). CDC analyzed data from the Pregnancy Risk Assessment Monitoring System (PRAMS) for 2004-2005 (the most recent data available) to 1) assess the prevalence of self-reported postpartum depressive symptoms (PDS) among mothers by selected demographic characteristics and other possible risk factors for PDS and 2) determine factors that identify mothers most likely to develop PPD. This report summarizes the results of that analysis, which indicated that, during 2004-2005, the prevalence of self-reported PDS in 17 U.S. states\* ranged from 11.7% (Maine) to 20.4% (New Mexico). Younger women, those with lower educational attainment, and women who received Medicaid benefits for their delivery were more likely to report PDS. State and local health departments should evaluate the effectiveness of targeting mental health services to these mothers and incorporating messages about PPD into existing programs (e.g., domestic violence services) for women at higher risk.

PRAMS is an ongoing, state-specific, population-based surveillance project that collects self-reported information on maternal attitudes and experiences before, during, and after delivery of a live infant. PRAMS is administered by CDC in collaboration with participating states and cities and is designed to be representative of women in participating states who have delivered during the preceding 2–6 months (4). Response rates were  $\geq$ 70% for 2004 and 2005 in each of the 17 participating states. During 2004–2005, these 17 states included two questions on self-reported PDS in their PRAMS surveys: 1) "Since your new baby was born, how often have you felt down, depressed, or hopeless?" and 2) "Since your new baby was born, how often have you had little interest or little pleasure in doing things?" The response choices were "always," "often," "sometimes," "rarely," and "never"; women who said "often" or "always" to either question were classified as experiencing selfreported PDS. Because of their high sensitivity (96%), these two questions have been recommended as a depression casefinding instrument by health professionals (5,6). Chi-square tests were used to test for significant differences (p<0.05) in the proportion of women reporting PDS by demographic characteristics and other possible risk factors for PDS within each of the 17 states; approximate 95% confidence intervals for these proportions were calculated.<sup>†</sup> To measure the strength of the association overall, the median difference across all states in the proportion of women reporting PDS between two levels of each covariate was calculated. Sample

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<sup>\*</sup> Alaska, Colorado, Georgia, Hawaii, Maryland, Maine, Minnesota, North Carolina, Nebraska, New Mexico, New York (excluding New York City), Oregon, Rhode Island, South Carolina, Utah, Vermont, and Washington.

 $<sup>^{\</sup>dagger}$  Confidence intervals are approximate because, when adjusting for the clustered survey design, the confidence intervals computed were close to but not equal to  $\pm 1.96 \times$  standard error.

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sizes varied for each estimate because women who were missing data on any variable (<5% of all women) were excluded from analysis of that variable. The analysis was conducted using statistical software to adjust for the complex survey design and produce statewide estimates. Estimates based on small sample sizes (fewer than 30 respondents) were considered to be unreliable.

The maternal characteristics analyzed included age at delivery, race/ethnicity, education, marital status, and receipt of Medicaid for delivery. Possible risk factors for PDS included in the analysis were low infant birth weight (<2,500 g), admission to a neonatal intensive-care unit (NICU), number of previous live births, tobacco use during the last 3 months of pregnancy, physical abuse before or during pregnancy, and experiencing emotional, financial, partner-related, or traumatic stress<sup>§</sup> during the 12 months before delivery. Women were considered physically abused if they said that a current or former husband/ partner had pushed, hit, slapped, kicked, choked, or physically hurt them in any way during the 12 months before or during the most recent pregnancy. Women who reported smoking one or more cigarettes on an average day were classified as using tobacco during the last 3 months of pregnancy.

During 2004–2005, overall prevalence of self-reported PDS ranged from 11.7% (Maine) to 20.4% (New Mexico) (Table 1). Demographic characteristics significantly associated with PDS in all of the 17 states were maternal age, marital status, maternal education, and Medicaid coverage for delivery. Among the 17 states, the median percentage point difference in PDS prevalence was 13.4 percentage points between the youngest and oldest mothers, 13.6 between the lowest and highest education groups, 9.7 by marital status, and 11.0 by Medicaid receipt. In 13 of the 16 states for which data were available, a significant association was observed between race/ethnicity and PDS, with non-Hispanic white women having a lower prevalence of PDS compared with women of other racial/ethnic groups.

PDS was significantly associated with five possible risk factors in all or nearly all of the 17 states (Table 2). The number of states with significant associations and state

Stressors during pregnancy were categorized as 1) emotional (a very sick family member had to go into the hospital or someone close to the respondent died), 2) financial (the respondent moved to a new address, her husband/partner lost his job, she lost her job, or she had a lot of bills she could not pay; 3) partner-related (the respondent separated or divorced from her husband/partner, she argued more than usual with her husband/partner, or her husband/partner said he did not want her to be pregnant); and 4) traumatic (the respondent was homeless, she was involved in a physical fight, she or her husband/partner went to jail, or someone close to her had a problem with drinking/drugs).

#### **MMWR**

# TABLE 1. Prevalence of self-reported postpartum depressive symptoms (PDS), by selected characteristics — Pregnancy Risk Assessment Monitoring System, 17 states, 2004–2005

Characteristic         9           Sample size         2,6           PDS         15           (±1         (±1           Age (yrs)         25           (±6)         (±6)	AK % CI <sup>†</sup> ) ,671 5.7 (1.8) 5.9 <sup>§</sup> (6.3) 9.5	<b>CO</b> % (CI) 3,942 14.3 (±1.6) 22.7 <sup>§</sup>	GA % (Cl) 3,364 16.6 (±1.8)	HI % (CI) 3,805 15.7	MD % (CI) 2,953	ME % (CI) 2,348	MN % (CI)	NC % (CI)	NE %	NM %	NY %	OR %	RI %	SC %	UT %	VТ %	WA
PDS 15 (±1 Age (yrs) <20 25 (±6	5.7 1.8) 5.9 <sup>§</sup> 6.3)	14.3 (±1.6)	16.6	<i>,</i>	2,953	2 3/18		(0.)	(CI)	(CI)	(CI)	(Cľ)	(Cľ)	(CI)	(CI)	% (Cl)	% (CI)
(±1 Age (yrs) <20 25 (±6	:1.8) :5.9 <sup>§</sup> :6.3)	(±1.6)		15.7		2,040	3,070	2,580	3,614	2,559	2,253	3,803	2,887	3,131	3,868	2,173	2,829
<20 25 (±6	6.3)	22.7 <sup>§</sup>		(±1.2)	15.7 (±2.2)	11.7 (±1.6)	12.7 (±1.6)	19.0 (±2.0)	14.1 (±1.4)	20.4 (±1.6)	14.0 (±2.0)	12.2 (±1.6)	14.0 (±1.6)	19.5 (±2.4)	13.9 (±1.2)	11.8 (±1.4)	13.2 (±1.6)
(±6	6.3)	22.7 <sup>§</sup>															
20.24 10	9.5	(±6.1)	23.8 <sup>§</sup> (±6.1)	25.6 <sup>§</sup> (±5.3)	20.9 <sup>§</sup> (±8.6)	23.7 <sup>§</sup> (±8.2)	23.7 <sup>§</sup> (±7.4)	31.9 <sup>§</sup> (±7.4)	27.4 <sup>§</sup> (±5.7)	25.7 <sup>§</sup> (±4.5)	16.8 <sup>§</sup> (±7.6)	17.2 <sup>§</sup> (±6.3)	22.1 <sup>§</sup> (±5.7)	31.7 <sup>§</sup> (±7.8)	28.0 <sup>§</sup> (±5.3)	25.0 <sup>§</sup> (±7.6)	20.1 <sup>§</sup> (±6.7)
	3.5)	18.3 (±3.7)	24.2 (±3.9)	19.0 (±2.5)	17.8 (±5.3)	16.8 (±3.5)	18.1 (±3.9)	21.4 (±3.9)	15.6 (±2.5)	21.0 (±2.9)	27.7 (±5.9)	14.7 (±3.3)	22.8 (±4.3)	22.4 (±4.5)	13.4 (±2.0)	17.2 (±3.5)	15.3 (±3.7)
	4.3 3.1)	15.3 (±3.3)	14.1 (±3.1)	14.4 (±2.2)	19.5 (±4.5)	10.6 (±2.5)	12.6 (±2.7)	17.4 (±3.5)	11.6 (±2.2)	21.9 (±3.1)	10.8 (±3.1)	13.7 (±3.1)	12.9 (±2.9)	19.6 (±4.7)	13.1 (±2.2)	10.4 (±2.5)	15.1 (±3.3)
_	0.8 2.4)	9.3 (±2.0)	10.4 (±2.4)	12.5 (±1.6)	11.1 (±2.4)	6.6 (±2.0)	8.1 (±2.0)	14.6 (±2.7)	12.2 (±2.2)	14.8 (±2.7)	10.1 (±2.4)	8.0 (±2.0)	9.4 (±1.8)	11.4 (±3.1)	12.4 (±2.4)	8.1 (±1.8)	9.4 (±2.2)
Race/Ethnicity																	
	1.8 <sup>§</sup> 2.2)	11.6 <sup>§</sup> (±1.8)	13.1 <sup>§</sup> (±2.5)	9.3 <sup>§</sup> (±2.2)	13.4 (±2.7)	11.1 (±1.6)	9.0 <sup>§</sup> (±1.6)	16.1 <sup>§</sup> (±2.4)	11.8 <sup>§</sup> (±1.6)	15.2 <sup>§</sup> (±2.5)	13.2 (±2.2)	10.6 <sup>§</sup> (±2.2)	10.8 <sup>§</sup> (±1.8)	14.6 <sup>§</sup> (±2.7)	12.8 <sup>§</sup> (±1.4)		10.9 <sup>§</sup> (±2.2)
Black,	¶	40.6	20.6	¶	18.6	(≟1.0) ¶	27.3	26.3	23.0	¶	20.5	18.5	30.6	27.9	(≟…) ¶		18.9
-	_	(±14.3)	(±2.4)	_	(±4.1)	_	(±6.5)	(±4.7)	(±2.9)	_	(±7.4)	(±3.1)	(±6.9)	(±4.7)	_	_	(±3.9)
	3.4 7.6)	15.9 (±3.3)	19.6 (±6.1)	15.8 (±3.1)	14.8 (±6.3)	¶ 	¶ 	17.9 (±5.1)	21.0 (±2.9)	22.1 (±2.4)	15.9 (±5.7)	15.8 (±2.4)	19.0 (±3.7)	23.0 (±9.6)	16.7 (±2.7)		14.2 (±2.7)
	0.5 2.7)	¶ 	¶ 	17.2 (±1.6)	24.3 (±10.2)	1 	28.5 (±7.8)	1	21.0 (±2.5)	25.5 (±5.1)	¶ 	16.1 (±2.2)	13.5 (±6.1)		24.5 (±7.4)		20.2 (±3.9)
Current marital sta	atus																
	1.5 <sup>§</sup> 2.0)	11.8 <sup>§</sup> (±1.8)	13.0 <sup>§</sup> (±2.2)	13.3 <sup>§</sup> (±1.4)	13.1 <sup>§</sup> (±2.4)	8.5 <sup>§</sup> (±1.6)	9.1 <sup>§</sup> (±1.6)	14.9 <sup>§</sup> (±2.2)	10.8 <sup>§</sup> (±1.4)	16.0 <sup>§</sup> (±2.2)	10.3 <sup>§</sup> (±2.0)	9.6 <sup>§</sup> (±1.8)	10.2 <sup>§</sup> (±1.6)	13.4 <sup>§</sup> (±2.5)	11.5 <sup>§</sup> (±1.2)	9.1 <sup>§</sup> (±1.6)	11.5 <sup>§</sup> (±1.8)
	3.5 3.3)	21.5 (±3.7)	22.1 (±2.9)	20.4 (±2.4)	20.3 (±4.1)	18.1 (±3.3)	21.2 (±3.5)	25.5 (±3.7)	22.0 (±2.7)	24.9 (±2.5)	21.7 (±4.1)	17.5 (±3.1)	20.7 (±2.9)	27.5 (±4.1)	26.4 (±3.3)	18.4 (±3.1)	17.1 (±3.3)
Education (yrs)																	
<12 28	8.3 <sup>§</sup> 5.7)	20.3 <sup>§</sup> (±4.3)	24.9 <sup>§</sup> (±4.5)	24.0 <sup>§</sup> (±4.9)	23.9 <sup>§</sup> (±6.9)	28.0 <sup>§</sup> (±7.3)	26.9 <sup>§</sup> (±6.7)	23.5 <sup>§</sup> (±4.5)	22.6 <sup>§</sup> (±3.5)	26.2 <sup>§</sup> (±3.5)	24.2 <sup>§</sup> (±6.5)	19.9 <sup>§</sup> (±3.9)	22.6 <sup>§</sup> (±4.7)	31.1 <sup>§</sup> (±5.9)	24.5 <sup>§</sup> (±2.7)	25.7 <sup>§</sup> (±6.9)	18.4 <sup>§</sup> (±4.3)
12 16	6.4 2.5)	18.0 (±3.5)	18.3 (±3.1)	(±1.0) 18.1 (±2.0)	19.3 (±4.5)	(±7.0) 15.2 (±2.9)	15.1 (±3.3)	22.2 (±3.9)	19.0 (±3.1)	21.3 (±2.9)	19.5 (±4.3)	(±0.0) 12.5 (±2.9)	(±1.7) 18.8 (±3.3)	19.8 (±4.7)	17.6 (±2.2)	15.6 (±2.7)	15.6 (±3.7)
>12 11	1.0 2.4)	9.6 (±1.8)	10.8 (±2.0)	12.1 (±1.4)	(±4.0) 12.0 (±2.4)	6.3 (±1.4)	9.0 (±1.6)	(±0.0) 15.0 (±2.4)	10.0 (±1.6)	(±2.3) 14.9 (±2.4)	9.2 (±2.0)	8.8 (±2.0)	9.0 (±1.6)	(±4.7) 14.2 (±2.7)	9.4 (±1.6)	(±2.7) 7.5 (±1.4)	10.8 (±2.0)
Medicaid recipient	t																
	0.4 <sup>§</sup> 2.0)	10.9 <sup>§</sup> (±1.8)	8.9 <sup>§</sup> (±2.0)	12.6 <sup>§</sup> (±1.2)	13.8 <sup>§</sup> (±2.4)	5.9 <sup>§</sup> (±1.4)	8.4 <sup>§</sup> (±1.6)	13.0 <sup>§</sup> (±2.4)	9.7 <sup>§</sup> (±1.6)	15.5 <sup>§</sup> (±2.4)	10.4 <sup>§</sup> (±2.0)	7.9 <sup>§</sup> (±1.8)	12.9 <sup>§</sup> (±1.6)	10.8 <sup>§</sup> (±2.7)	9.9 <sup>§</sup> (±1.4)	7.3 <sup>§</sup> (±1.4)	8.8 <sup>§</sup> (±2.0)
Yes 21	1.4	20.6 (±3.1)	22.7 (±2.5)	22.4 (±2.5)	20.1 (±4.3)	18.9 (±2.9)	20.8 (±3.3)	24.0 (±2.9)	20.2 (±2.2)	24.1 (±2.4)	21.3 (±3.9)	17.5 (±2.7)	23.9 (±5.9)	25.8 (±3.5)	21.1 (±2.2)	19.2 (±2.7)	17.9 (±2.5)

\* AK = Alaska, CO = Colorado, GA = Georgia, HI = Hawaii, MD = Maryland, ME = Maine, MN = Minnesota, NC = North Carolina, NE = Nebraska, NM = New Mexico, NY = New York (excluding New York City), OR = Oregon, RI = Rhode Island, SC = South Carolina, UT = Utah, VT = Vermont, and WA = Washington.

<sup>†</sup> 95% confidence interval. Confidence intervals are approximate because, when adjusting for the clustered survey design, the confidence intervals computed were close to but not equal to ±1.96 × standard error.

§ p<0.05 by chi-square test.

<sup>¶</sup> Insufficient sample size (based on fewer than 30 respondents).

\*\* Includes Asian/Pacific Islander, American Indian/Alaska Native, and other/multiple race/ethnicity.

<sup>††</sup> Vermont did not include information on race/ethnicity.

median percentage point differences in PDS prevalence for women with and without these risk factors were using tobacco during the last 3 months of pregnancy (16 states; median difference: 10.7), physical abuse before or during pregnancy (17 states; median difference: 22.4), partnerrelated stress during pregnancy (17 states; median difference: 16.4), traumatic stress during pregnancy (17 states; median difference: 16.4), and financial stress during pregnancy (17 states; median difference: 9.2). In 14 states, PDS was significantly associated with delivering a low birth weight infant and experiencing emotional stress during pregnancy. NICU admission was associated with PDS in nine states. The state median percentage point differences in PDS prevalence were 5.7 by low birth weight delivery, 5.2 by emotional stress, and 6.2 by NICU admission. The effect of parity on PDS was unclear; the association was significant in only two states, and the results were inconsistent across all states regarding risk for developing PDS.

# TABLE 2. Prevalence of self-reported postpartum depressive symptoms (PDS), by selected risk factors — Pregnancy Risk Assessment Monitoring System, 17 states, 2004–2005

									State*				<b>.</b>				10.00
	AK %	CO %	GA %	HI %	MD %	ME %	MN %	NC %	NE %	NM %	NY %	OR %	RI %	SC %	UT %	VT %	WA %
Risk factor	(CI <sup>†</sup> )	(CI)															
PDS	15.7 (±1.8)	14.3 (±1.6)	16.6 (±1.8)	15.7 (±1.2)	15.7 (±2.2)	11.7 (±1.6)	12.7 (±1.6)	19.0 (±2.0)	14.1 (±1.4)	20.4 (±1.6)	14.0 (±2.0)	12.2 (±1.6)	14.0 (±1.6)	19.5 (±2.4)	13.9 (±1.2)	11.8 (±1.4)	13.2 (±1.6)
Low birth wei	ght (<2,50	00 g)															
No	15.4 <sup>§</sup>	13.9 <sup>§</sup>	15.9 <sup>§</sup>	15.3	15.1 <sup>§</sup>	11.2 <sup>§</sup>	12.6	18.3 <sup>§</sup>	13.7 <sup>§</sup>	19.9 <sup>§</sup>	13.5 <sup>§</sup>	11.8 <sup>§</sup>	13.5 <sup>§</sup>	18.8 <sup>§</sup>	13.5 <sup>§</sup>	11.3 <sup>§</sup>	13.2
Yes	(±1.8) 21.1 (±1.6)	(±1.8) 18.4 (±2.2)	(±2.0) 23.7 (±2.7)	(±1.2) 20.2 (±5.1)	(±2.4) 22.3 (±2.5)	(±1.6) 16.7 (±2.0)	(±1.6) 14.8 (±7.4)	(±2.2) 25.5 (±2.5)	(±1.4) 20.3 (±6.3)	(±1.8) 25.6 (±6.5)	(±2.0) 20.5 (±2.7)	(±1.6) 19.7 (±3.3)	(±1.6) 18.4 (±1.2)	(±2.5) 24.2 (±2.4)	(±1.2) 19.0 (±2.4)	(±1.6) 19.6 (±1.8)	(±1.8) 14.2 (±6.3)
Tobacco use	during pre	gnancy															
No	14.3 <sup>§</sup>	13.2 <sup>§</sup>	14.4 <sup>§</sup>	14.6 <sup>§</sup>	14.4 <sup>§</sup>	9.1 <sup>§</sup>	11.1 <sup>§</sup>	17.2 <sup>§</sup>	12.9 <sup>§</sup>	19.1 <sup>§</sup>	12.1 <sup>§</sup>	10.9 <sup>§</sup>	12.8 <sup>§</sup>	18.6	12.7 <sup>§</sup>	10.4 <sup>§</sup>	12.4 <sup>§</sup>
	(±1.8)	(±1.8)	(±1.8)	(±1.2)	(±2.2)	(±1.6)	(±1.6)	(±2.0)	(±1.4)	(±1.8)	(±1.8)	(±1.6)	(±1.6)	(±2.4)	(±1.2)	(±1.4)	(±1.6)
Yes	21.6 (±4.3)	24.6 (±5.7)	35.7 (±7.6)	27.0 (±5.3)	26.4 (±8.0)	22.4 (±4.7)	19.5 (±4.7)	27.9 (±5.9)	21.9 (±4.7)	33.1 (±6.5)	28.2 (±7.3)	18.3 (±5.7)	22.9 (±5.5)	25.7 (±7.4)	31.6 (±6.3)	19.5 (±4.5)	22.5 (±8.0)
Neonatal inte	nsive-care	e unit adn	nission														
No	15.1	14.0	15.2 <sup>§</sup>	14.9 <sup>§</sup>	15.3	11.3	11.7 <sup>§</sup>	18.2 <sup>§</sup>	13.2 <sup>§</sup>	20.1	13.3 <sup>§</sup>	11.2 <sup>§</sup>	13.5	18.6 <sup>§</sup>	13.8	11.2 <sup>§</sup>	12.8
	(±1.8)	(±1.8)	(±1.8)	(±1.2)	(±2.4)	(±1.6)	(±1.6)	(±2.0)	(±1.4)	(±1.8)	(±2.0)	(±1.6)	(±1.6)	(±2.5)	(±1.4)	(±1.6)	(±1.8)
Yes	19.8 (±4.5)	17.0 (±4.3)	26.4 (±5.5)	21.1 (±4.5)	17.6 (±5.1)	15.4 (±4.5)	21.1 (±6.5)	27.8 (±6.1)	20.1 (±4.5)	23.3 (±5.7)	20.0 (±5.3)	19.0 (±5.5)	17.5 (±4.3)	25.9 (±6.7)	14.6 (±3.1)	19.2 (±5.1)	16.1 (±4.9)
Previous live	. ,	( -)	( /	( - )	(-)	( - )	( /	()	( -)	(-)	( /	( )	( - )	( - )	(-)	( - )	( - )
0	16.1	12.7	16.6	16.8	14.0	12.6	12.1	16.7	14.3 <sup>§</sup>	20.1	13.9	12.4	13.4	19.5	12.0	10.9	10.0 <sup>§</sup>
	(±2.7)	(±2.4)	(±2.7)	(±1.8)	(±3.1)	(±2.4)	(±2.4)	(±2.7)	(±2.2)	(±2.7)	(±2.7)	(±2.5)	(±2.2)	(±3.5)	(±2.0)	(±2.0)	(±2.2)
1–2	15.9	15.7	16.2	14.8	15.6	10.6	12.5	19.8	12.8	19.5	13.8	11.7	13.4	18.7	14.9	12.1	14.5
≥3	(±2.5) 14.0	(±2.5) 15.1	(±2.4) 19.3	(±1.8) 15.3	(±2.9) 22.7	(±2.2) 1	(±2.2) 15.9	(±2.9) 24.5	(±1.8) 19.8	(±2.4) 25.3	(±2.7) 17.0	(±2.2) 14.0	(±2.2) 19.9	(±3.3) 24.3	(±1.8) 14.4	(±2.0) 1	(±2.5) 17.8
	(±3.7)	(±5.7)	(±5.9)	(±3.5)	(±7.1)	_	(±5.5)	(±6.7)	(±4.3)	(±5.3)	(±6.9)	(±4.9)	(±5.7)	(±9.8)	(±2.9)	_	(±5.7)
Physical abus	se before (	or during	pregnan	cy													
No	14.0 <sup>§</sup>	12.8 <sup>§</sup>	15.3 <sup>§</sup>	14.6 <sup>§</sup>	13.5 <sup>§</sup>	10.5 <sup>§</sup>	11.5 <sup>§</sup>	17.4 <sup>§</sup>	12.6 <sup>§</sup>	18.2 <sup>§</sup>	13.0 <sup>§</sup>	10.7 <sup>§</sup>	12.9 <sup>§</sup>	17.0 <sup>§</sup>	12.3 <sup>§</sup>	9.7 <sup>§</sup>	12.1 <sup>§</sup>
Vee	(±1.8)	(±1.6)	(±1.8)	(±1.2) 33.7	(±2.2) 39.9	(±1.6)	(±1.6)	(±2.0) 39.2	(±1.4) 33.9	(±1.8)	(±1.8) 32.3	(±1.6)	(±1.6)	(±2.4)	(±1.2)	(±1.4)	(±1.6) 33.1
Yes	36.6 (±8.0)	41.3 (±10.6)	35.6 (±8.2)	(±6.3)	39.9 (±10.8)	35.9 (±10.8)	30.8 (±8.8)	39.2 (±9.4)	(±6.9)	40.6 (±6.3)	32.3 (±11.2)	30.9 (±10.8)	36.6 (±9.8)	52.7 (±10.8)	44.7 (±7.6)	33.9 (±10.2)	(±9.2)
Stressors du	ing pregn	ancy**															
Emotional	31-5																
No	14.1 <sup>§</sup>	13.9	14.4 <sup>§</sup>	14.2 <sup>§</sup>	15.1	10.4 <sup>§</sup>	12.2	16.6 <sup>§</sup>	12.6 <sup>§</sup>	18.4 <sup>§</sup>	12.5 <sup>§</sup>	10.5 <sup>§</sup>	12.8 <sup>§</sup>	16.5 <sup>§</sup>	12.3 <sup>§</sup>	10.3 <sup>§</sup>	11.6 <sup>§</sup>
Yes	(±2.0) 19.4	(±2.0) 16.0	(±2.2) 21.7	(±1.4) 19.7	(±2.5) 17.1	(±1.8) 13.8	(±1.8) 13.8	(±2.4) 22.9	(±1.4) 17.3	(±2.0) 25.0	(±2.2) 17.0	(±1.8) 15.4	(±1.8) 16.7	(±2.7) 24.9	(±1.4) 17.5	(±1.6) 15.5	(±1.8) 17.3
165	(±3.3)	(±3.1)	(±3.3)	(±2.5)	(±3.9)	(±2.7)	(±2.9)	(±3.5)	(±2.5)	(±3.3)	(±3.5)	(±3.5)	(±2.9)	(±4.3)	(±2.5)	(±2.9)	(±3.5)
Financial																	
No	10.5 <sup>§</sup>	9.3 <sup>§</sup>	9.4 <sup>§</sup>	12.4 <sup>§</sup>	10.8 <sup>§</sup>	6.1 <sup>§</sup>	7.7 <sup>§</sup>	12.9 <sup>§</sup>	10.0 <sup>§</sup>	14.7 <sup>§</sup>	9.5 <sup>§</sup>	8.6 <sup>§</sup>	10.1 <sup>§</sup>	14.2 <sup>§</sup>	8.6 <sup>§</sup>	7.5 <sup>§</sup>	9.8 <sup>§</sup>
Vaa	(±2.0)	(±2.2)	(±2.0)	(±1.4)	(±2.4)	(±1.6)	(±1.8)	(±2.4)	(±1.6)	(±2.2)	(±2.2)	(±2.0)	(±1.8)	(±3.1)	(±1.6)	(±1.6)	(±2.2)
Yes	19.5 (±2.5)	18.6 (±2.4)	24.1 (±2.9)	19.4 (±2.0)	21.2 (±3.5)	16.4 (±2.4)	18.4 (±2.7)	23.8 (±2.9)	17.7 (±2.0)	25.8 (±2.5)	18.3 (±2.9)	14.6 (±2.4)	18.1 (±2.4)	24.2 (±3.5)	17.8 (±1.8)	16.4 (±2.4)	16.1 (±2.4)
Partner-relate	ed																
No	10.8 <sup>§</sup>	9.7 <sup>§</sup>	9.2 <sup>§</sup>	10.8 <sup>§</sup>	11.5 <sup>§</sup>	7.4 <sup>§</sup>	8.1 <sup>§</sup>	12.7 <sup>§</sup>	9.8 <sup>§</sup>	13.1 <sup>§</sup>	9.1 <sup>§</sup>	7.9 <sup>§</sup>	9.1 <sup>§</sup>	9.6 <sup>§</sup>	8.6 <sup>§</sup>	7.5 <sup>§</sup>	8.5 <sup>§</sup>
Vaa	(±1.8)	(±1.6)	(±1.6)	(±1.2)	(±2.2)	(±1.6)	(±1.4)	(±2.0)	(±1.4)	(±1.8)	(±1.8)	(±1.6)	(±1.4)	(±2.2)	(±1.2)	(±1.4)	(±1.6)
Yes	26.2 (±3.7)	26.3 (±3.7)	32.8 (±3.9)	26.2 (±2.5)	25.3 (±4.5)	21.7 (±3.5)	26.1 (±4.1)	31.7 (±4.1)	24.1 (±2.9)	34.9 (±3.3)	25.5 (±4.3)	21.8 (±3.9)	25.4 (±3.5)	36.2 (±4.7)	29.3 (±3.1)	23.6 (±3.5)	25.5 (±4.1)
Traumatic	. ,		. ,	. /	. ,	. ,				. ,	. ,	. ,	. ,	. ,	. ,	. ,	. /
No	12.4 <sup>§</sup>	12.9 <sup>§</sup>	13.1 <sup>§</sup>	13.7 <sup>§</sup>	13.0 <sup>§</sup>	9.7 <sup>§</sup>	10.1 <sup>§</sup>	16.0 <sup>§</sup>	11.7 <sup>§</sup>	15.6 <sup>§</sup>	10.8 <sup>§</sup>	9.1 <sup>§</sup>	11.2 <sup>§</sup>	16.1 <sup>§</sup>	11.2 <sup>§</sup>	8.7 <sup>§</sup>	11.4 <sup>§</sup>
	(±1.8)	(±1.8)	(±1.8)	(±1.2)	(±2.2)	(±1.6)	(±1.6)	(±2.0)	(±1.4)	(±1.8)	(±1.8)	(±1.6)	(±1.6)	(±2.4)	(±1.2)	(±1.4)	(±1.8)
Yes	25.7 (±4.1)	22.8	31.3	27.0	29.6	21.6	25.3	32.4	24.9	35.9	30.1	22.0	29.5 (+5.1)	35.1	28.8	26.9	20.8
· · · · · · · · · · · · · · · · · · ·	$\frac{(\pm 4.1)}{a, CO = Co}$	(±4.7)	(±5.1)	(±3.9)	(±6.7)	(±4.7)	(±4.9)	(±5.5)	(±3.9)	(±4.1)	(±6.7)	(±4.7)	(±5.1)	(±6.5)	(±3.9)	(±4.9)	(±4.7)

\* AK = Alaska, CO = Colorado, GA = Georgia, HI = Hawaii, MD = Maryland, ME = Maine, MN = Minnesota, NC = North Carolina, NE = Nebraska, NM = New Mexico, NY = New York (excluding New york City), OR = Oregon, RI = Rhode Island, SC = South Carolina, UT = Utah, VT = Vermont, and WA = Washington.

<sup>†</sup> 95% confidence interval. Confidence intervals are approximate because, when adjusting for the clustered survey design, the confidence intervals computed were close to but not equal to ±1.96 × standard error.

§ p<0.05 by chi-square test.

<sup>¶</sup> Insufficient sample size (based on fewer than 30 respondents).

\*\* Stressors during pregnancy were categorized as 1) emotional (a very sick family member had to go into the hospital or someone close to the respondent died), 2) financial (the respondent moved to a new address, her husband/partner lost his job, she lost her job, or she had a lot of bills she could not pay; 3) partner-related (the respondent separated or divorced from her husband/partner, she argued more than usual with her husband/partner, or her husband/partner said he did not want her to be pregnant); and 4) traumatic (the respondent was homeless, she was involved in a physical fight, she or her husband/partner went to jail, or someone close to her had a problem with drinking/drugs).

**Reported by:** *K Brett, PhD, Office of Analysis and Epidemiology, National Center for Health Statistics; W Barfield, MD, Div of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion; C Williams, ScD, EIS Officer, CDC.* 

Editorial Note: The continuum of depressive disorders after delivery ranges from "baby blues" to PPD. Although "baby blues" is more prevalent, the symptoms of this disorder, which occur within the first few weeks after delivery, are less severe and do not require treatment. PPD can occur up to a year after delivery, is more severe, and requires treatment by a physician. PPD has important consequences for the well-being of mothers and their children. For example, in a 2006 study, mothers who reported depressive symptoms were less likely to engage in practices to promote child development, such as playing with their infant (7). PPD also might also be associated with discontinuation of breastfeeding (8).

The significant associations between PDS and young maternal age and experiencing partner-related stress or physical abuse indicated in this report are consistent with previous research (2,3). The other significant risk factors for PDS described in this report (i.e., delivery of a low birth weight infant, tobacco use during pregnancy, and experiencing traumatic or financial stress) have not been previously identified as significant factors (3). The associations are not unexpected, given that these risk factors all can be considered either actual stressors or indicators of stress during pregnancy. Further research is needed to examine the relationship between stressors during pregnancy and PDS. Association of PDS with other potential postpartum stressors, such as NICU admission and parity, were not consistent across states and also warrant further study.

The findings in this report are subject to at least four limitations. First, data from the PRAMS survey are based on self-report and are not confirmed by physician diagnosis. The screening questions used in the survey have a low specificity (66%) which, although similar to that of other depression screening instruments, might produce a high rate of false positives, leading to overestimates of PPD prevalence (5). Second, mothers were asked about symptoms experienced since birth, so the duration of time about which symptoms are reported ranged from 2 to 6 months. Some women might have been misclassified as experiencing PDS because of depressive symptoms that were not associated with being postpartum, whereas others might have been misclassified because they developed PDS after the interview. However, these possible misclassifications should not differentially affect subgroups of women and, therefore, should not affect the associations identified in this report.

Third, additional variables of interest, such as alcohol or illicit drug use, could not be analyzed because of limited sample sizes across all states. Finally, the analysis described in this report could not identify women with preexisting depression who might or might not also have reported PDS. These women might have been classified as experiencing PDS but might have required different interventions to address their condition than other women without a history of depression. A study conducted by a health maintenance organization found that 54.2% of women with PPD also had been diagnosed with depression either before or during their most recent pregnancy (9).

The findings in this report can be used to estimate the number of women in each state requiring a more complete evaluation (and thus the potential burden on health-care services for those with suspected PPD). Although some states (e.g., Maryland) have already implemented methods for addressing PPD, more targeted screening and interventions for PPD could be directed at women at higher risk for developing PPD and incorporated into existing public health programs (e.g., those that address women who were physically abused). These women also could be more effectively targeted for public health interventions developed according to state and local needs and resources. Adolescent mothers or women who received Medicaid for their delivery are examples of subsets of the population at increased risk for developing PPD that could be easily identified at delivery for interventions in the postpartum period.

The American College of Obstetricians and Gynecologists includes screening for PPD among the essential parts of a women's 4–6 week postpartum visit. Postpartum women also can be screened for PPD by pediatricians at their infants' well-child visits (10). Women who are considered to have self-reported PDS based on these screenings should be administered a full diagnostic interview because they are most likely to develop PPD. State and local health departments and other health-care providers can use these screening results in their maternal and child health needs assessments and in planning for the provision of appropriate mental health services to new mothers. Additionally, the effectiveness of targeting services to mothers at higher risk for PPD should be evaluated.

#### Acknowledgments

The findings in this report are based on contributions by members of the PRAMS Working Group and the CDC PRAMS Team, Div of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

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# Preliminary FoodNet Data on the Incidence of Infection with Pathogens Transmitted Commonly Through Food — 10 States, 2007

The Foodborne Diseases Active Surveillance Network (FoodNet) of CDC's Emerging Infections Program collects data from 10 U.S. states\* regarding diseases caused by pathogens commonly transmitted through food. FoodNet quantifies and monitors the incidence of these infections by conducting active, population-based surveillance for laboratory-confirmed infections (1). This report describes preliminary surveillance data for 2007 and compares them with data for previous years. In 2007, the estimated incidence of infections caused by *Campylobacter, Listeria*, Shiga toxin-producing *Escherichia coli* O157 (STEC O157), *Salmonella, Shigella, Vibrio,* and *Yersinia* did not change significantly, and *Cryptosporidium* infections increased compared with 2004–2006. Progress toward the targets

for Healthy People 2010 national health objectives and targets (2) regarding the incidence of foodborne infections occurred before 2004; however, none of the targets were reached in 2007. *Salmonella* incidence was the furthest from its national health target, suggesting that reaching this target will require new approaches.

### **Surveillance Methods**

In 1996, FoodNet began active, population-based surveillance for laboratory-confirmed cases of infection caused by *Campylobacter*, *Listeria*, *Salmonella*, STEC O157, *Shigella*, *Vibrio*, and *Yersinia*. FoodNet added surveillance for cases of *Cryptosporidium* and *Cyclospora* infection in 1997 and STEC non-O157 infection in 2000. In 2004, FoodNet began collecting data regarding which laboratory-confirmed infections were associated with outbreaks.

Infection with STEC O157 can cause hemolytic uremic syndrome (HUS), a complication in which the kidneys fail. HUS surveillance, which began in 2000, is conducted in nine states through a network of pediatric nephrologists and infection-control practitioners and validated through review of hospital discharge data. Because of the time required for review of hospital records, this report contains preliminary HUS data for 2006.

During 1996–2007, the FoodNet surveillance population increased from 14.3 million persons (5% of the U.S. population) in five states to 45.5 million persons (15% of the U.S. population) in 10 states. The preliminary incidence for 2007 was calculated by dividing the number of laboratory-confirmed infections by population estimates for 2006. Final incidence will be reported when population estimates for 2007 are available from the U.S. Census Bureau. In previous years, final incidence has been comparable to preliminary incidence.

### **Surveillance Data**

In 2007, a total of 17,883 laboratory-confirmed cases of infection in FoodNet surveillance areas were identified. The number of cases and incidence per 100,000 population were reported as follows: *Salmonella* (6,790; 14.92), *Campylobacter* (5,818; 12.79), *Shigella* (2,848; 6.26), *Cryptosporidium* (1,216; 2.67), STEC O157 (545; 1.20), STEC non-O157 (260; 0.57), *Yersinia* (163; 0.36), *Listeria* (122; 0.27), *Vibrio* (108; 0.24), and *Cyclospora* (13; 0.03). Substantial variation occurred across surveillance sites (Table). The highest incidence per 100,000 population for *Salmonella* (62.11), *Shigella* (27.77), *Campylobacter* (24.01), and STEC O157 (3.66) infections was among children aged <5 years. In 2006, FoodNet identified 82 cases of

<sup>\*</sup> Connecticut, Georgia, Maryland, Minnesota, New Mexico, Oregon, Tennessee, and selected counties in California, Colorado, and New York.

TABLE. Incidence\* of laboratory-confirmed bacterial and parasitic infections in 2007 and postdiarrheal hemolytic uremic syndrome (HUS) in 2006, by site and pathogen, compared with national health objectives<sup>†</sup> — Foodborne Diseases Active Surveillance Network, United States

Dathaway	California	Colorado	Compositions	Coordia	Mandand	Minnesete	New	Now York	0	Tannaaaaa	Quarall	National health
Pathogen	California	Colorado	Connecticut	Georgia	Maryland	Minnesota	Mexico	New York	Oregon	Tennessee	Overall	objective
Bacteria												
Campylobacter	28.21	15.85	14.01	7.29	7.19	17.51	17.55	11.98	19.02	7.39	12.79	12.30
Listeria	0.25	0.34	0.34	0.33	0.27	0.14	0.20	0.26	0.24	0.26	0.27	0.24
Salmonella	14.29	11.99	12.27	21.78	15.33	13.74	14.38	12.09	8.65	14.13	14.92	6.80
Shigella	5.55	3.00	1.26	17.39	1.91	4.61	5.42	0.89	1.78	6.01	6.26	N/A <sup>§</sup>
STEC <sup>¶</sup> O157	1.21	1.21	1.28	0.50	0.39	3.19	0.46	1.35	1.97	0.91	1.20	1.00
STEC non-O157	0.22	2.12	0.74	0.44	0.46	0.74	1.28	0.28	0.14	0.40	0.57	N/A
Vibrio	0.37	0.15	0.46	0.25	0.45	0.15	0.00	0.21	0.22	0.05	0.24	N/A
Yersinia	0.47	0.15	0.51	0.46	0.14	0.45	0.20	0.37	0.51	0.22	0.36	N/A
Parasites												
Cryptosporidium	1.24	3.87	1.20	2.45	0.57	5.81	6.14	2.07	3.51	2.19	2.67	N/A
Cyclospora	0.03	0.00	0.09	0.03	0.02	0.00	0.10	0.05	0.00	0.02	0.03	N/A
HUS**	2.36	2.50	1.48	1.00	0.81	2.32	_	0.43	2.60	5.02	2.01	0.90
Surveillance population												
(millions)	3.23	2.64	3.50	9.36	5.62	5.17	1.95	4.29	3.70	6.04	45.50	

\* Per 100,000 population.

<sup>†</sup> Healthy People 2010 objective 10 targets for incidence of *Campylobacter, Salmonella*, and Shiga toxin-producing *Escherichia coli* O157 infections and HUS for 2010 and for incidence of *Listeria* infections for 2005 and 2010, as revised by midcourse review.

§ No national health objective exists for these pathogens.

<sup>¶</sup> Shiga toxin-producing *Escherichia coli*.

\*\* Incidence of postdiarrheal HUS in children aged <5 years; denominator is surveillance population aged <5 years in sites that conduct hospital discharge data review.

postdiarrheal HUS in persons aged <18 years (0.78 cases per 100,000 children); 58 (0.7%) cases occurred in children aged <5 years (2.01 cases per 100,000 children).

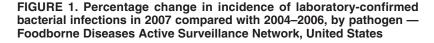
Of the 6,299 (92.8%) Salmonella isolates serotyped, seven serotypes accounted for 61.6% of infections: Enteritidis, 1,062 (16.9%); Typhimurium, 1,006 (16.0%); Newport, 656 (10.4%); I 4,[5],12:i:-, 358 (5.7%); Javiana, 347 (5.5%); Heidelberg, 243 (3.9%); and Montevideo, 211 (3.4%). Among 102 (94.4%) Vibrio isolates for which the species was identified, 59 (57.8%) were parahaemolyticus, 18 (17.7%) were alginolyticus, and 13 (12.8%) were vulnificus. Among 260 STEC non-O157 isolates tested for O antigen determination, 228 (87.7%) had an identifiable O antigen, primarily O26 (21.5%), O103 (20.6%), or O121 (19.3%).

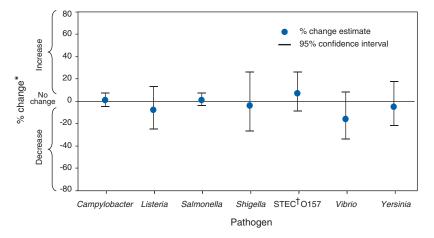
### **Comparison with Previous Years**

A main-effects, log-linear Poisson regression model (negative binomial) was used to estimate statistically significant changes in incidence of infections in 2007 compared with previous years. This model accounts for the increase in the surveillance population and for variations in incidence among sites (1). The average annual incidence for 2004– 2006 and for 1996–1998 (1997–1998 for *Cryptosporidium*), the first years of surveillance, were used for comparison. The estimated change in incidence (relative rate) between 2007 and the comparison periods was calculated, along with 95% confidence intervals (CIs). For HUS surveillance, 2000–2001, the first years of surveillance, was used as the comparison period. Changes over time have not been analyzed for non-O157 STEC, partly because changes in clinical laboratory practices might have affected incidence reporting (3).

The estimated incidence of *Campylobacter*, *Listeria*, *Salmonella*, *Shigella*, STEC O157, *Vibrio*, and *Yersinia* infections (Figure 1) did not change significantly in 2007 compared with 2004–2006, but the estimated incidence of *Cryptosporidium* infections increased 44% (CI = 8%–91%). Among the seven most common *Salmonella* serotypes, the incidence of Typhimurium and Heidelberg decreased, I 4,[5],12:i- and Newport increased, and the others did not change significantly.

In comparison with 1996–1998, relative rates of *Yersinia* decreased 49% (CI = 36%–59%), *Listeria* decreased 42% (CI = 28%–54%), *Shigella* decreased 36% (CI = 9%–55%), *Campylobacter* decreased 31% (CI = 25%–36%), STEC O157 decreased 25% (CI = 9%–38%), and *Salmonella* decreased 8% (CI = 1%–14%) in 2007 (Figure 2). The estimated incidence of infection with *Cryptosporidium* and *Vibrio* did not change significantly. The incidence of

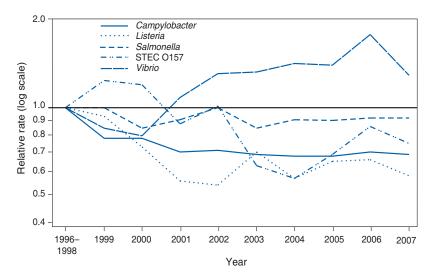




\* *No significant change* = 95% confidence interval is both above and below the no change line; *significant increase* = estimate and entire 95% confidence interval are above the no change line; *significant decrease* = estimate and entire 95% confidence \_\_\_\_\_\_\_, interval are below the no change line.

Shiga toxin-producing Escherichia coli.

FIGURE 2. Relative rates of laboratory-confirmed infections with *Campylobacter*, STEC\* 0157, *Listeria, Salmonella*, and *Vibrio* compared with 1996–1998 rates, by year — Foodborne Diseases Active Surveillance Network, United States, 1996–2007<sup>†</sup>



\* Shiga toxin-producing Escherichia coli.

<sup>+</sup> The position of each line indicates the relative change in the incidence of that pathogen compared with 1996–1998. The actual incidences of these infections can differ.

postdiarrheal HUS has paralleled that of STEC O157, declining in 2003 and 2004, followed by increases the next 2 years. The estimated incidence of postdiarrheal HUS in children aged <5 years in 2006 did not change significantly compared with 2000–2001.

## Outbreak-Associated Cases of Infection

In 2007, outbreak-associated infections accounted for 86 (15.8%) of STEC O157 cases and 364 (5.4%) of *Salmonella* cases ascertained, similar to proportions in previous years. Four large multistate outbreaks of *Salmonella* infections that included FoodNet sites were investigated in 2007: an outbreak of *S.* Tennessee infections caused by contaminated peanut butter (4), an outbreak of *S.* I 4,[5],12:i:- infections caused by contaminated frozen pot pies, an outbreak of *S.* Wandsworth and *S.* Typhimurium infections attributed to a puffed vegetable snack, and an outbreak of *S.* Paratyphi B var. Java associated with exposure to turtles (5).

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Editorial Note: Although significant declines in the incidence of certain foodborne pathogens have occurred since 1996, these declines all occurred before 2004. Comparing 2007 with 2004–2006, the estimated incidence of infections caused by *Campylobacter, Listeria, Salmonella, Shigella*, STEC O157, *Vibrio*, and *Yersinia* did not decline significantly, and the incidence of *Cryptosporidium* infections increased. The incidence of *Salmonella* infections in 2007 (14.92 cases per 100,000) was the furthest from the national target for 2010 (6.80 cases), and only infections caused by *Salmonella* serotypes Typhimurium and Heidelberg declined significantly.

Salmonella organisms live in the intestines of most food animals. Transmission of Salmonella to humans can occur by many routes, including consumption of food animal products or raw produce contaminated with animal waste, contact with animals and their environment, and contaminated water. Outbreaks caused by contaminated peanut butter, frozen pot pies, and a puffed vegetable snack in 2007 underscore the need to prevent contamination of commercially produced products. The outbreak associated with turtle exposure highlights the importance of animals as a nonfood source of human infections. To reduce the incidence of Salmonella infections, concerted efforts are needed throughout the food supply chain, from farm to processing plant to kitchen. Recognizing the need to prevent Salmonella contamination of poultry products and other meats, the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA FSIS) launched a Salmonella initiative in 2006, with enhancements in 2008 (5). A USDA FSIS testing program reported recent declines in the percentage of broiler chicken carcasses that yielded Salmonella, from 16.3% in 2005 to 11.4% in 2006 and 8.5% in 2007 (7).

Declines in the incidence of STEC O157 infections in 2003 and 2004 have not been maintained. Although the USDA FSIS and the beef processing industry have implemented interventions to reduce ground beef contamination, 21 beef product recalls for possible contamination with STEC O157 were issued in 2007, of which 10 were illness associated, an increase compared with previous years. USDA FSIS launched an STEC O157 initiative in fall 2007 and hosted a public meeting in spring 2008 to explore solutions to the challenges this pathogen presents.<sup>†</sup> Additional efforts are needed to control STEC O157 in cattle and to prevent its spread to other food animals and food products, such as produce.

The increase in reported *Cryptosporidium* infections compared with 2004–2006 might reflect an increase in diagnostic testing stimulated by licensing of a new treatment (nitazoxanide). The incidence of *Campylobacter*, *Salmonella*, *Shigella*, and STEC O157 infections remains highest among children aged <5 years, highlighting the need for targeted interventions. Identified risk factors for bacterial enteric illness in young children include riding in a shopping cart next to raw meat or poultry, attendance at day care, visiting or living on a farm, and living in a home with a reptile (8,9). Recent *Salmonella* outbreaks associated with exposure to small turtles (carapace lengths of <4 inches) highlight the importance of enforcing a 1975 prohibition on their sale and distribution in the United States (5).

The findings in this report are subject to at least four limitations. First, FoodNet relies on laboratory diagnoses, and changing laboratory practices might affect the reported incidence for some pathogens, especially STEC. Second, many foodborne illnesses (e.g., norovirus) are not reported to FoodNet. Third, differences in health-care seeking behaviors might contribute to a higher incidence of reported illnesses in certain age groups (e.g., young children). Finally, although the FoodNet population is similar to the U.S. population, the findings might not be generalizable (1).

Enhanced measures are needed to understand the complex ecologies that link pathogens to animals and plants; to control or eliminate pathogens in food sources; to reduce or prevent contamination during food growing, harvesting, and processing; and to educate restaurant workers and consumers about infection risks and prevention measures. Such measures can be more focused when the sources of human infections are known. More outbreaks can be recognized through more rapid and complete subtyping of pathogens and interviewing of ill persons and controls when clusters of illness are recognized.

Consumers can reduce their risk for foodborne illness by following safe food-handling and preparation recommendations and avoiding unsafe foods. Information on food safety practices is available at http://www.foodsafety.gov, http://www.fightbac.org, and http://www.cdc.gov/healthy pets.

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<sup>&</sup>lt;sup>†</sup> Additional information about USDA FSIS and the STEC O157 initiative and meeting is available at http://www.fsis.usda.gov.

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## Malnutrition and Micronutrient Deficiencies Among Bhutanese Refugee Children — Nepal, 2007

Acute and chronic malnutrition and micronutrient deficiencies have been found in refugee camp populations (1). In southeastern Nepal, despite consistent access by refugees to general rations,\* certain micronutrient deficiencies have posed a substantial health burden to the approximately 100,000 Bhutanese residing in seven refugee camps (2). Limited food diversity, frequent illness, and poor feeding practices have been cited as underlying causes of poor nutritional status in this population. Annual surveys to assess levels of acute malnutrition (i.e., wasting) and chronic malnutrition (i.e., stunting) have been conducted in these camps by the Association of Medical Doctors of Asia (AMDA) and United Nations High Commissioner for Refugees (UNHCR); however, the capacity to reliably evaluate micronutrient deficiencies has not existed locally in the camps (3). In January 2007, AMDA and CDC, at the request of UNHCR and the World Food Programme (WFP), conducted a nutritional survey of children aged 6-59 months, assessing 1) the prevalence of acute malnutrition, chronic malnutrition, underweight, anemia, and angular stomatitis (i.e., riboflavin deficiency); 2) the cumulative incidence of diarrhea and acute respiratory illness (ARI); and 3) the feeding practices of the children's mothers. This report describes the results of that survey, which indicated that, although acute malnutrition was found in only 4.2% of the children, chronic malnutrition was found in 26.9% and anemia in 43.3%. These findings underscore the importance of monitoring both malnutrition and micronutrient deficiencies and addressing the underlying causes of nutritional deficits.

In 1991, approximately 100,000 Bhutanese mostly of Nepali origin began fleeing ethnic persecution in Bhutan and now live in seven refugee camps in southeastern Nepal. This refugee population has been stable since 1993 but remains dependent on food assistance. During January 28-February 6, 2007, a cross-sectional survey was conducted in the Bhutanese refugee camps. The number of households selected in each camp was proportional to the size of the camp; individual households were selected using a systematic random sampling method. Information was collected regarding all children aged 6-59 months in each household by interviewing their mothers. Questions were asked regarding foods eaten by their children within the preceding 24 hours, incidence of diarrhea (i.e., three or more episodes within the preceding 24 hours) or ARI (i.e., fever plus either cough or difficulty breathing) in children within the preceding 14 days, and beliefs regarding their practices for feeding their children. In addition, the children's weight and height measurements, hemoglobin levels, and presence of clinical signs of angular stomatitis were assessed.

Weight was measured using digital scales, and height (or recumbent length for children aged <2 years) was measured using a Shorr Infant-Child Height Board (4). Acute malnutrition was defined as a weight-for-height z-score <-2 or the presence of edema; severe acute malnutrition was defined as a weight-for-height z-score <-3 or edema (5). Chronic malnutrition was defined as a height-for-age z-score <-2; severe chronic malnutrition was defined as a height-for-age z-score <-3. Underweight was defined as a weight-for-age z-score <-3. Hemoglobin was measured using a Hemocue B-Hemoglobin Photometer (6). Anemia was defined as hemoglobin  $\leq 11.0$  g/dL for children and pregnant women and  $\leq 12.0$  g/dL for nonpregnant women.

The survey sample included 497 children and their 413 mothers. Twenty-one (4.2%) of the children aged 6–59 months had acute malnutrition, and one (0.2%) had severe acute malnutrition (Table). The prevalence of acute malnutrition was greatest (6.0%) among children aged 12–23 months. Chronic malnutrition was identified in 134 (26.9%) children, and severe chronic malnutrition was identified in 21 (4.2%) children. A total of 125 (25.1%) children were underweight, and 24 (4.8%) were severely underweight. Both chronic malnutrition and underweight increased with age (chi square for both trends: p = 0.001).

Among the children, 215 (43.3%) had anemia; prevalence of anemia decreased with age (Figure), from 78.8% among infants aged 6–11 months to 20.1% among children aged 48–59 months (chi square for trend: p<0.001).

<sup>\*</sup> A daily general ration in Bhutanese refugee camps in Nepal consists of parboiled rice, 400 g; whole grain, 20 g; lentils, 40 g; vegetable oil, 25 g; sugar, 20 g; wheat soya blend, 35 g; salt, 7.5 g; fresh vegetables, 260 g (rotated each month and including cauliflower, potato, pumpkin, squash, and radish).

			Age gro	oup (mos)					
	6	-11	12	2–23	24	1–59		Tota	al
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	
Malnutrition/Deficiency	(n	= 52)	(n :	= 117)	(n =	= 328)	(N	= 497)	(95% CI*)
Acute malnutrition									
(wt for ht z-score) <sup>†</sup>	1	(1.9)	7	(6.0)	13	(3.9)	21	(4.2)	(2.8–6.4)
Severe§	0	(0)	0	(0)	1	(0.3)	1	(0.2)	(0.0–1.1)
Chronic malnutrition									
(ht for age z-score) <sup>¶</sup>	5	(9.6)	27	(23.1)	102	(31.1)	134	(26.9)	(23.2–31.0)
Severe**	0	(0)	5	(4.3)	16	(4.9)	21	(4.2)	(2.8–6.4)
Jnderweight (wt for age z-score) <sup>¶</sup>	4	(7.7)	25	(21.4)	96	(29.3)	125	(25.1)	(21.5–29.1)
Severe**	3	(5.8)	3	(2.6)	18	(5.5)	24	(4.8)	(3.3–7.1)
Anemia	41	(78.8)	80	(68.4)	94	(28.7)	215	(43.3)	(39.0-47.7)
Angular stomatitis	1	(1.0)	4	(3.4)	51	(15.5)	56	(11.3)	(8.8–14.3)
Diarrhea	27	(51.9)	54	(46.2)	68	(20.7)	149	(30.0)	(26.2-34.2)
Acute respiratory illness	23	(44.2)	45	(38.5)	75	(22.9)	143	(28.8)	(25.0-32.9)

TABLE. Number and percentage of Bhutanese refugee children aged 6–59 months with malnutrition or micronutrient deficiencies, by age group — Nepal, 2007

\* Confidence interval.

<sup>†</sup> Defined as a z-score <-2.0 standard deviations from the reference median or presence of edema. (World Health Organization Expert Committee on Physical Status. Physical status: the use and interpretation of anthropometry. World Health Organ Tech Rep Ser 1995;854).

§ Defined as a z-score <-3.0 standard deviations from the reference median or presence of edema.

<sup>¶</sup> Defined as a z-score <-2.0 standard deviations from the reference median.

\*\* Defined as a z-score <-3.0 standard deviations from the reference median.

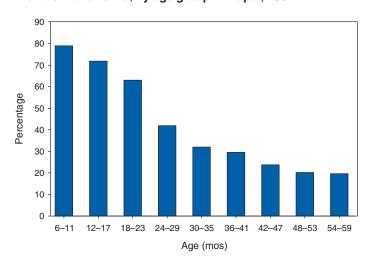


FIGURE. Percentage of Bhutanese refugee children aged 6–59 months with anemia, by age group — Nepal, 2007\*<sup>†</sup>

\*Chi-square test for trend, p<0.001. †N = 497.

Angular stomatitis was identified in 56 (11.3%) children. The reported cumulative incidence of diarrhea and ARI in children during the preceding 14 days was 30.0% and 28.8%, respectively (Table).

Among the mothers, 56 (13.6%) had anemia; prevalence of anemia was significantly higher (p = 0.01) among mothers who were vegetarians (26.3%) than among nonvegetarians (12.1%). Twenty (4.9%) mothers reported exclusive breastfeeding of their children aged <6 months, and 314 (76.1%) reported introducing liquids other than breast milk to their children aged <3 months.

Cumulative incidence of diarrhea and ARI, frequency of foods consumed within the preceding 24 hours, and presence of anemia in mothers were not associated with anemia among the children. However, given the high prevalence of anemia, iron supplementation was recommended for all children aged <2 years, in accordance with World Health Organization guidelines (7). Other recommendations included investigation of the causes of high incidence of diarrhea and ARI in the children and expanded education of mothers regarding recommended feeding practices, particularly exclusive breastfeeding of children aged <6 months and age-appropriate introduction of complementary foods. Reported by: F Abdalla, J Mutharia, MD, United Nations High Commissioner for Refugees, Geneva, Switzerland. N Rimal, MD, Assoc of Medical Doctors of Asia, Bhadrapur, Nepal. O Bilukha, MD, PhD, L Talley, MPH, T Handzel, PhD, National Center for Environmental Health; S Bamrah, MD, EIS Officer, CDC.

**Editorial Note:** The nutritional status of refugees is determined by the prevalence of conditions related to both malnutrition and micronutrient deficiencies. However, historically, much attention has been paid to acute malnutrition and little attention to chronic malnutrition and micronutrient deficiencies. In the Bhutanese camps in Nepal, a stable population of refugees has been receiving a general ration that includes some fresh vegetables and fortified blended flour but does not meet requirements for key micronutrients such as iron, riboflavin, and vitamin C. Food often is brought to refugee camps from a distance and requires storage and distribution. Perishable foods, such as vegetables (particularly green vegetables), fruits, and meats often are too costly and logistically difficult to be purchased in large quantities, stored, transported, likely stored again, and then distributed to refugees.

Restriction of refugee movement to participate in agriculture, forage for supplemental foods, or earn wages to buy commodities, further diminishes their ability to obtain micronutrient-rich foods not included in the general ration. Refugees in this setting have access to food markets; however, most do not have resources to afford foods rich in vitamins and minerals.

Micronutrient deficiencies are not clinically identifiable until late stages, and serologic testing is logistically difficult and costly. Given their diagnostic difficulty and impact on growth and development, micronutrient deficiencies should be addressed in children at an early age. This survey found that the prevalence of anemia was high in children, particularly those aged 6–11 months. Anemia is a common clinical manifestation of micronutrient deficiency, particularly iron deficiency. The prevalence of anemia was much higher in the children than in their mothers, despite access to similar foods. Potential reasons for this include 1) inadequate numbers of iron-rich foods, 2) poor feeding practices, and 3) frequent episodes of common diseases, such as those causing diarrhea and respiratory infections, which can increase loss of micronutrients.

Because options for diversification of the general ration are limited, diet supplementation and/or food fortification are the most likely methods to prevent micronutrient deficiencies. However, both fortification and supplementation are costly, and the addition of some fortificants reduces the shelf-life of commodities (8). Implementing supplementation and fortification programs will require changes in policies and practices of food aid agencies and increased donor participation, although fortification often is a cost-effective strategy for addressing micronutrient problems.

Educating mothers regarding appropriate breastfeeding and complementary feeding practices also is critical to preventing anemia and malnutrition in young children. Appropriate feeding practices include both exclusive breastfeeding until age 6 months and introduction of complementary foods rich in vitamins and minerals at appropriate ages. Exclusive breastfeeding until age 6 months is nutritionally adequate, protects children against infection, and prevents introduction of liquids, such as tea, that can inhibit iron absorption (9).

The high incidence of illness, particularly diarrheal disease, in these children can decrease absorption and increase loss of micronutrients while also increasing metabolic (and consequently micronutrient) requirements. Determining the causes of frequent illnesses in the Bhutanese refugee children and implementing appropriate interventions to address these causes can decrease the effects of morbidity on micronutrient deficiencies and overall nutritional status (10).

The findings in this report are subject to at least one limitation. Although anemia was evaluated as a marker for iron deficiency, levels of iron deficiency (e.g., ferritin or transferrin receptors) were not measured directly. In addition, other clinically relevant micronutrients, such as thiamine, vitamin A, or zinc, were not measured because of cost and logistical constraints.

Additional priority given to chronic malnutrition and micronutrient deficiencies in refugee camps might reduce the incidence of anemia and other potential sequelae of these conditions, including slowed growth and development. One strategy that has been shown to reduce anemia in children and is currently being evaluated in refugee camp settings is the use of Sprinkles<sup>®</sup>,<sup>†</sup> packets of dry powder, containing iron and other micronutrients intended for home fortification of foods. As lengths of stay in refugee camps increase, agencies should consider this and other new strategies to address all possible negative nutritional outcomes of prolonged dependence on food aid.

#### Acknowledgment

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<sup>&</sup>lt;sup>†</sup> Additional information available at http://www.sghi.org/about\_sprinkles/index.html.

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# Automated Detection and Reporting of Notifiable Diseases Using Electronic Medical Records Versus Passive Surveillance — Massachusetts, June 2006–July 2007

Electronic medical record (EMR) systems have the potential to improve reporting of notifiable diseases beyond either traditional clinician-initiated or automated laboratory-based reporting systems. Traditional clinicianinitiated passive surveillance is burdensome to clinicians and often incomplete and delayed (1,2). Electronic laboratory reporting addresses these limitations (3,4) but often lacks information needed for public health purposes (e.g., patient signs and symptoms, prescribed treatments, and pregnancy status). Laboratory systems also do not integrate multiple laboratory tests to satisfy a case definition. Many EMRs, however, contain this information and store it in a form that is amenable to electronic analysis and reporting. Consequently, EMR-based reporting has the potential to provide active notifiable disease surveillance that is more timely, complete, and clinically detailed. This report summarizes findings from a pilot EMR-based electronic surveillance system in Massachusetts, which documented increases of 39% in reported chlamydia and 53% in reported gonorrhea for the period June 2006-July 2007, compared with the existing passive surveillance system. Eighty-one instances of pregnancy not identified by passive surveillance were reported by the electronic system in patients with chlamydia or gonorrhea. In addition, the electronic system identified 20 cases of pelvic inflammatory disease and four cases of acute hepatitis A, compared with none and one, respectively, reported via the passive system.

Improved reporting can help public health departments better allocate limited resources for targeted investigations and interventions.

The Massachusetts Department of Public Health, the Department of Ambulatory Care and Prevention at Harvard Medical School and Harvard Pilgrim Health Care, and Atrius Health collaborated under the auspices of the CDC Center of Excellence in Public Health Informatics at Harvard Pilgrim Health Care and Children's Hospital in Boston to create a system called Electronic Support for Public Health (ESP) (5). Atrius Health is a multispecialty group practice that provides primary care and outpatient specialty services to approximately 600,000 children and adults at 35 clinical facilities in eastern Massachusetts. ESP is designed to be compatible with most commercial EMR systems. Data on patient visits are exported from the EMR system to an independent ESP server every 24 hours. Transfer of data is an important aspect of ESP's compatibility with most EMR systems. Export of data also enables analysis without burdening the medical practice EMR system. The ESP server is secured behind the practice's electronic firewall to ensure the security of sensitive clinical information.

ESP was activated in January 2007 and populated with data beginning in June 2006. Data transferred from the EMR system to ESP include patient demographics, vital signs, test orders, test results, prescriptions, diagnostic codes, and health-care provider details. These data were regularly analyzed by ESP for evidence of four notifiable diseases: chlamydia, gonorrhea, pelvic inflammatory disease, and acute hepatitis A. Cases were defined on the basis of combinations of test orders, test results, medication prescriptions, and International Statistical Classification of Diseases and Related Health Problems, Ninth Revision (ICD-9) diagnostic codes. ESP case definitions were modeled after CDC surveillance definitions but limited to the coded data captured by EMRs (Table). When one of the four notifiable diseases was detected, ESP generated an electronic report and transmitted it to the state health department via the Internet. The report included the patient's name and contact information, clinician's name and contact information, disease diagnosed, laboratory test results, prescriptions, pregnancy status, and any patient symptoms that were inferred from ICD-9 codes in the electronic record. During the study period, the practice's conventional reporting continued routinely, independent of ESP, under the auspices of an infection-control practitioner in some facilities and through spontaneous clinician initiative in others. The practice's personnel were not informed of cases identified by ESP.

Disease	ESP definition	CDC surveillance definition
Chlamydia	<ul> <li>Positive result on any of the following tests:</li> <li>Chlamydia trachomatis culture</li> <li>C. trachomatis nucleic acid probe, nucleic acid amplification assay, or enzyme immunoassay</li> </ul>	Isolation of <i>C. trachomatis</i> by culture or Demonstration of <i>C. trachomatis</i> in a clinical specimen by detection of antigen or nucleic acid
Gonorrhea	<ul> <li>Positive result on any of the following tests:</li> <li>Neisseria gonorrhoeae culture</li> <li>N. gonorrhoeae nucleic acid probe, nucleic acid amplification assay, or enzyme immunoassay</li> </ul>	Isolation of <i>N. gonorrhoeae</i> from a clinical specimen or Observation of gram-negative, intracellular diplococci in a urethral smear obtained from a man
Pelvic inflammatory disease	<ul> <li>Diagnosis with any of the following ICD-9* codes:</li> <li>614.0 – acute salpingitis or oophoritis</li> <li>614.2 – salpingitis or oophoritis, not otherwise specified</li> <li>614.3 – acute parametritis and pelvic cellulitis</li> <li>614.5 – acute pelvic peritonitis</li> <li>614.9 – pelvic inflammatory disease</li> <li>099.56 – <i>C. trachomatis</i> infection of the peritoneum</li> <li>And at least one of the following within 28 days before or after diagnosis with the ICD-9 code:</li> <li>Meets the ESP case definition for <i>C. trachomatis</i></li> <li>Meets the ESP case definition for <i>N. gonorrhoeae</i></li> </ul>	<ul> <li>All of the following:</li> <li>Abdominal direct tenderness</li> <li>Tenderness with motion of the cervix</li> <li>Adnexal tenderness</li> </ul> And at least one of the following: <ul> <li>Meets the surveillance case definition of <i>C. trachomatis</i> infection or gonorrhea</li> <li>Temperature &gt;100.4°F (&gt;38.0°C)</li> <li>Leukocytosis &gt;10,000 white blood cells/µL</li> <li>Purulent material in the peritoneal cavity obtained by culdocentesis or laparoscopy</li> <li>Pelvic abscess or inflammatory complex on bimanual examination or by sonography</li> <li>Patient is a sexual contact of a person known to have gonorrhea, chlamydia, or nongonococcal urethritis</li> </ul>
Acute hepatitis A	<ul> <li>Either of the following:</li> <li>Alanine aminotransferase or aspartate aminotransferase greater than two times the upper limit of normal</li> <li>ICD-9 code 782.4 for jaundice</li> </ul>	An acute illness with 1) discrete onset of symptoms and 2) jaundice or elevated serum aminotransferase levels and Positive IgM antibody to hepatitis A virus or
	<ul><li>And the following within a 14-day period:</li><li>Positive immunoglobulin M (IgM) antibody to hepatitis A virus</li></ul>	A case that meets the clinical case definition and occurs in a person who has an epidemiologic link with a person who has laboratory-confirmed hepatitis A (i.e., household or sexual contact with an infected person during the 15–50 days before the onset of symptoms)

# TABLE. Comparison of notifiable diseases definitions used by the Electronic Support for Public Health (ESP) system with CDC surveillance definitions — Massachusetts, June 2006–July 2007

SOURCES: Klompas M, Lazarus R, Daniel J, et al. Electronic medical record Support for Public Health (ESP): automated detection and reporting of statutory notifiable diseases to public health authorities. Adv Dis Surv 2007;3:3.

CDC. Case definitions. Atlanta, GA: US Department of Health and Human Services, CDC; 2008. Available at http://www.cdc.gov/ncphi/disss/nndss/ casedef/case\_definitions.htm.

\* International Classification of Diseases, Ninth Revision.

For the period June 2006–July 2007, ESP reported 758 cases of chlamydia, 95 cases of gonorrhea, 20 cases of pelvic inflammatory disease, and four cases of acute hepatitis A. The charts of all cases identified by ESP were manually reviewed and matched with conventional, passive surveillance case reports in health department records. Compared with passive, paper-based reporting, ESP increased the number of chlamydia reports by 39% (758 cases versus 545) and gonorrhea by 53% (95 cases versus 62). In addition, ESP identified 20 cases of pelvic inflammatory disease cases, compared with none identified by passive surveillance, and four cases of acute hepatitis A, compared with one.

A total of six cases of chlamydia in health department records were not detected by ESP. Chart reviews revealed five of these to be false positives. The one true case missed by ESP had been miscoded in the EMR system that fed data to ESP. All cases of gonorrhea, pelvic inflammatory disease, and acute hepatitis A detected by passive surveillance also were identified by ESP.

All ESP case reports included patient treatment information and pregnancy status. In contrast, passive surveillance reports included pregnancy status for 5% of cases and treatment information for 88% of cases. ESP reported 81 cases of pregnancy in females with chlamydia or gonorrhea that were not noted on passive surveillance reports. Spellings of patient names on passive surveillance reports were compared with spellings in ESP data. Passive surveillance reports had a 5% rate of transcription errors, compared with no errors in ESP reports. **Reported by:** *M Klompas, MD, R Lazarus, MBBS, MPH, R Platt, MD, Dept of Ambulatory Care and Prevention, Harvard Medical School and Harvard Pilgrim Health Care; X Hou, MSc, Channing Laboratory, Brigham and Women's Hospital and Harvard Medical School; FX Campion, MD, B Kruskal, MD, PhD, Atrius Health and Harvard Medical School, Boston; G Haney, MPH, W Dumas, J Daniel, MPH, A DeMaria, MD, Massachusetts Dept of Public Health. SJN McNabb, PhD, Div of Integrated Surveillance Systems and Services, National Center for Public Health Informatics, CDC.* 

Editorial Note: This comparison of EMR-based detection and reporting of four notifiable diseases with traditional methods illustrates that automated, active surveillance using EMR data has the potential to improve public health monitoring by ensuring that cases are reported and by enhancing the timeliness, accuracy, and clinical detail of reports. Improved reporting can help public health departments better allocate limited resources for targeted investigations and interventions. For example, ESP has the potential to reliably identify high-priority cases for intervention, such as untreated chlamydia or gonorrhea in women who are pregnant. EMR-based surveillance and reporting also might support additional public health practices, such as populating immunization information systems or enabling statistical analyses for outbreak detection and investigation.

Currently, EMR-based surveillance cannot obviate the need for additional data collection by public health department personnel for certain cases. EMRs typically do not contain certain pieces of key epidemiologic data in a coded form that can be identified readily by electronic algorithms. Examples include case contacts, risky behaviors, foreign travel, and relevant occupations (e.g., food handler or day care worker).

ESP complements the existing National Electronic Diseases Surveillance System (NEDSS), established by CDC in 2001 to enable local and state health departments to send electronic data to CDC for public health monitoring of notifiable conditions nationwide (6). NEDSS-compatible systems currently operate in 38 states and the District of Columbia (7). ESP can facilitate electronic collection and transmission of case reports from health-care providers to local and state public health departments, which in turn can use NEDSS-compatible systems to deliver summary data to CDC.

Different strategies for implementing EMR-based case detection and reporting will need to be developed for different kinds of medical organizations. The stand-alone, server-based implementation of ESP described in this report is designed for large practices or health information exchanges. Incorporating ESP logic into commercial EMR software or developing stand-alone ESP modules that can operate side by side with EMRs on clinicians' office-based computers also should be feasible. Source code for ESP is freely available (at http://esphealth.org) under an open source license compatible with commercial development.

Widespread implementation of electronic case detection and reporting is currently limited by the slow pace of adoption of EMRs by clinical practices, variation in coding practices among proprietary EMR systems, and an absence of standards for identifying cases using electronic data alone. As of 2006, only 29% of ambulatory medical practices were using EMR systems (8). In addition, the breadth of information collected by EMR systems varies substantially. EMRs that do not include prescription data, for example, limit the sensitivity and specificity of some electronic disease-detection algorithms (9). Further, different EMR systems use different proprietary coding systems. ESP does include tools to translate proprietary codes into standard nomenclatures; however, use of this translation requires customization for each system. Finally, existing case definitions for notifiable diseases (10) incorporate clinical descriptors such as "acute onset of symptoms" or "undue fatigue" or "jaundice" that are inconsistently noted on EMRs.

Development of ESP continues. The system has added reporting of acute hepatitis B, acute hepatitis C, and active tuberculosis. In addition, ESP's portability is being assessed by installing it in a regional health information exchange populated by a different EMR system. Meanwhile, development of electronic case definitions and widespread adoption of standard laboratory test nomenclatures, consensus lists of treatments, and standard reporting elements will facilitate more meaningful, comparable, and widespread electronic reporting of notifiable diseases.

#### Acknowledgment

This report is based, in part, on the contributions of J Dunn, MPH, Dept of Ambulatory Care and Prevention, Harvard Medical School and Harvard Pilgrim Health Care, Boston, Massachusetts.

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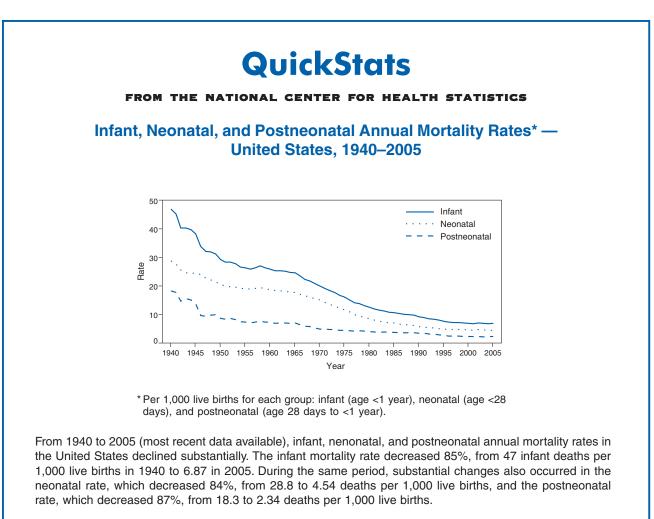
#### Notice to Readers

## Introduction to Public Health Surveillance Course

CDC and the Rollins School of Public Health at Emory University will cosponsor the course, Introduction to Public Health Surveillance, to be held May 19–23, 2008, at Emory University in Atlanta, Georgia. The course is designed for state and local public health professionals. Tuition is charged.

The course will provide practicing public health professionals with theoretical and practical knowledge to design, implement, and evaluate effective surveillance programs. Course topics include an overview and history of surveillance systems; planning considerations; sources and collection of data; analysis, interpretation, and communication of data; surveillance systems technology; ethics and legalities; state and local concerns; and future considerations.

Additional information and applications are available from Emory University by mail (Hubert Global Health Dept., 1518 Clifton Rd. NE, Rm. 746, Atlanta, GA 30322), by telephone (404-727-3485), by fax (404-727-4590), online (http://www.sph.emory.edu/epicourses), or by e-mail (pvaleri@sph.emory.edu).



**SOURCE:** Kung HC, Hoyert DL, Xu J, Murphy SL. Deaths: final data for 2005. Natl Vital Stat Rep 2008;56(10). Available at http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56\_10.pdf.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) - United States, week ending April 5, 2008 (14th Week)\*

	0	0	5-year	Total	cases rep	orted for	previous	vears	
Disease	Current week	Cum 2008	weekly average <sup>†</sup>	2007	2006	2005	2004	2003	States reporting cases during current week (No.)
Anthrax	_	_	_	_	1	_	_	_	
Botulism:									
foodborne	1	2	0	28	20	19	16	20	CA(1)
infant	_	16	1	83	97	85	87	76	- ()
other (wound & unspecified)	_	1	0	24	48	31	30	33	
Brucellosis	1	11	2	128	121	120	114	104	NV (1)
Chancroid		13	1	30	33	17	30	54	(.)
Cholera	_		0	7	9	8	6	2	
Cyclosporiasis§	1	19	2	91	137	543	160	75	FL (1)
Diphtheria			_	_				1	1 = (1)
Domestic arboviral diseases <sup>§,1</sup> :									
California serogroup	_		0	44	67	80	112	108	
eastern equine			_	4	8	21	6	14	
Powassan	_	_	_	1	1	1	1		
St. Louis		_	0	7	10	13	12	41	
	_	_		_					
western equine	_		_	_	_	_	_	_	
Ehrlichiosis/Anaplasmosis <sup>§,**</sup> :		00		704	570	500	000	001	
Ehrlichia chaffeensis	1	22	1	734	578	506	338	321	MD (1)
Ehrlichia ewingii	_	1	_						
Anaplasma phagocytophilum		6	2	731	646	786	537	362	
undetermined	_	1	0	162	231	112	59	44	
Haemophilus influenzae,††									
invasive disease (age <5 yrs):									
serotype b	1	10	0	23	29	9	19	32	AZ (1)
nonserotype b	—	38	3	174	175	135	135	117	
unknown serotype	4	65	4	190	179	217	177	227	KS (1), MD (1), FL (1), AZ (1)
Hansen disease§	1	17	2	73	66	87	105	95	CA(1)
Hantavirus pulmonary syndrome <sup>§</sup>	_	2	0	32	40	26	24	26	
Hemolytic uremic syndrome, postdiarrheal§	_	15	2	276	288	221	200	178	
Hepatitis C viral, acute	8	163	16	847	766	652	720	1,102	NY (1), MD (2), FL (1), CO (1), WA (1), CA (2)
HIV infection, pediatric (age <13 yrs) <sup>§§</sup>	_	_	4	_	—	380	436	504	
Influenza-associated pediatric mortality <sup>§, ¶¶</sup>	6	65	1	76	43	45	_	N	CHI (1), CT (1), NYC (1), TX (1), VA (1), TN (1)
Listeriosis	5	110	11	784	884	896	753	696	NC (1), FL (2), CA (2)
Measles***	_	10	1	42	55	66	37	56	
Meningococcal disease, invasive <sup>†††</sup> :									
A, Č, Y, & W-135	1	75	7	306	318	297	_	_	WA (1)
serogroup B	_	45	3	149	193	156	_	_	
other serogroup	_	14	1	31	32	27	_	_	
unknown serogroup	12	190	18	580	651	765		_	PA (1), OH (1), DE (1), FL (3), OR (1), CA (5)
Mumps	7	156	91	777	6,584	314	258	231	NY (2), PA (1), OH (1), KS (1), NC (1), CA (1)
Novel influenza A virus infections	_	_	_	1	Ń	N	N	N	
Plague	_	1	_	6	17	8	3	1	
Poliomyelitis, paralytic	_	_	_	_	_	1	_	_	
Poliovirus infection, nonparalytic <sup>§</sup>	_	_	_	_	N	Ň	Ν	Ν	
Psittacosis <sup>§</sup>	_	1	0	11	21	16	12	12	
Q fever <sup>§,§§§</sup> total:	1	12	2	190	169	136	70	71	
acute	1		_	_	_	_		_	TX (1)
chronic	_	3	_	_	_	_	_	_	
Rabies, human	_	_	_	_	3	2	7	2	
Rubella <sup>mn</sup>	_	2	0	11	11	11	10	7	
Rubella, congenital syndrome	_		0		1	1		1	

-: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

\* Incidence data for reporting years 2007 and 2008 are provisional, whereas data for 2003, 2004, 2005, and 2006 are finalized.

<sup>†</sup> Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf. § Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 and 2008 for the domestic arboviral diseases

and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.

<sup>1</sup> Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-

Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II. The names of the reporting categories changed in 2008 as a result of revisions to the case definitions. Cases reported prior to 2008 were reported in the categories: Ehrlichiosis, human monocytic (analogous to E. chaffeensis); Ehrlichiosis, human granulocytic (analogous to Anaplasma phagocytophilum), and Ehrlichiosis, unspecified, or other agent (which included cases unable to be clearly placed in other categories, as well as possible cases of E. ewingii).

<sup>++</sup> Data for *H. influenzae* (all ages, all serotypes) are available in Table II.

St Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.

11 Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Sixty-five cases occurring during the 2007–08 influenza season have been reported.

No measles cases were reported for the current week.

ttt Data for meningococcal disease (all serogroups) are available in Table II.

§§§ In 2008, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.

1111 No rubella cases were reported for the current week.

\*\*\*\* Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

# TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending April 5, 2008 (14th Week)

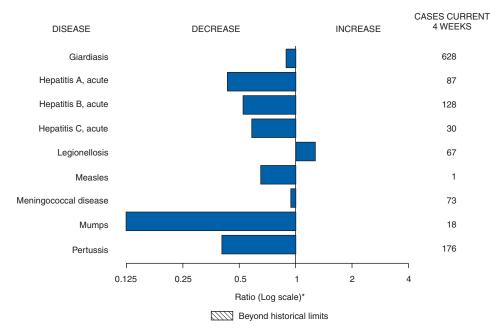
	Current	Cum	5-year weeklv	Total	cases rep	orted for	previous	syears	
Disease	week	2008	average <sup>†</sup>	2007	2006	2005	2004	2003	States reporting cases during current week (No.)
Smallpox§	_		_	_	_	_		_	
Streptococcal toxic-shock syndrome§	4	34	5	104	125	129	132	161	OH (3), NE (1)
Syphilis, congenital (age <1 yr)	_	22	7	308	349	329	353	413	
Tetanus	_	1	0	23	41	27	34	20	
Toxic-shock syndrome (staphylococcal)§	_	13	2	84	101	90	95	133	
Trichinellosis	_	1	0	6	15	16	5	6	
Tularemia	2	4	0	115	95	154	134	129	NC (1), TN (1)
Typhoid fever	3	79	5	381	353	324	322	356	NE (1), TX (1), WA (1)
Vancomycin-intermediate Staphylococcus aureu	<i>IS</i> § —	1	0	27	6	2	_	N	
Vancomycin-resistant Staphylococcus aureus	_	_	0	_	1	3	1	N	
Vibriosis (noncholera Vibrio species infections)§	_	32	2	361	N	N	N	N	
Yellow fever	_	_	_	_	_	_	_	_	

-: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

\* Incidence data for reporting years 2007 and 2008 are provisional, whereas data for 2003, 2004, 2005, and 2006 are finalized.

<sup>†</sup> Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf.

§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 and 2008 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.



# FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals April 5, 2008, with historical data

\* Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

Notifiable Disease Data Team and 122 Cities Mortality Data TeamPatsy A. HallDeborah A. AdamsRosaline DharaWillie J. AndersonCarol WorshamLenee BlantonPearl C. Sharp

(14th Week)*			Chlamvd	iat			Coccid	ioidomyo	ocic			Cnu	ptosporid	iocic	
		Pre	vious	ia <sup>.</sup>				vious	:0515				vious	10515	
Reporting area	Current week	52 v	veeks Max	Cum 2008	Cum 2007	Current week	52 v Med	weeks Max	Cum 2008	Cum 2007	Current week	52 v Med	veeks Max	Cum 2008	Cum 2007
United States	13,074	20,921	24,277	246,845	283,756	122	131	309	1,802	2,037	42	84	973	771	753
New England Connecticut Maine <sup>§</sup> Massachusetts New Hampshire Rhode Island <sup>§</sup> Vermont <sup>§</sup>	641 309 42 224 1 65 —	680 210 50 311 39 61 12	1,517 1,093 67 661 73 98 32	9,048 2,183 729 4,754 542 834 6	9,014 2,204 711 4,393 533 925 248	 N N     N	0 0 0 0 0 0	1 0 0 1 0 0	1 N N 1 N	1 N N 1 N		4 0 1 1 1 0 1	16 2 5 11 5 3 4	24 2  7 2 11	81 42 7 14 12 6
<b>Mid. Atlantic</b> New Jersey New York (Upstate) New York City Pennsylvania	2,466 139 555 1,222 550	2,730 387 563 924 787	4,703 522 2,044 2,919 1,754	33,517 3,528 6,724 12,402 10,863	37,394 5,956 6,020 13,941 11,477	N N N N	0 0 0 0	0 0 0 0	N N N N	N N N N N N	5 1 4	11 1 4 1 6	117 7 20 10 103	112 3 30 17 62	88 5 20 22 41
<b>E.N. Central</b> Illinois Indiana Michigan Ohio Wisconsin	902 — 337 293 44 228	3,394 1,010 385 709 866 381	4,863 2,209 652 1,002 2,119 610	38,105 8,762 5,274 10,432 8,268 5,369	47,617 13,454 5,774 10,654 12,355 5,380	N N   N	1 0 0 0 0	3 0 2 1 0	9 N 6 3 N	11 N 9 2 N	3 —  2 1	20 2 4 5 7	134 13 41 11 60 59	170 14 16 43 56 41	167 24 9 36 48 50
W.N. Central lowa Kansas Minnesota Missouri Nebraska <sup>6</sup> North Dakota South Dakota	810 120 216 385 28 2 59	1,201 162 148 258 463 88 32 52	1,462 251 393 318 551 183 65 81	15,531 2,302 1,730 2,920 6,358 1,098 382 741	16,784 2,287 2,150 3,612 6,217 1,370 489 659	N N     N N N N N N N N N N N N N N N	0 0 0 0 0 0 0	77 0 0 77 1 0 0 0	N N   N N N N N N	3 N 3 N 3 N N N N	6 2 	15 3 2 3 2 2 0 2	124 61 16 34 13 24 6 16	123 30 16 32 17 16 1 1	98 17 13 23 19 6 1 19
S. Atlantic Delaware District of Columbia Florida Georgia Maryland <sup>§</sup> North Carolina South Carolina <sup>§</sup> Virginia <sup>§</sup> West Virginia	5,151 39 92 1,046 5 389 	3,952 64 113 1,262 521 461 257 503 490 59	6,417 140 200 1,556 1,552 675 4,656 3,030 1,062 95	48,820 942 1,452 17,821 95 5,685 7,008 7,723 7,309 785	52,615 965 1,507 11,912 11,304 4,446 8,303 6,830 6,526 822	Z Z Z Z Z Z Z Z	0 0 0 0 0 0 0 0 0 0	1 0 0 1 0 0 0 0	2 N N N N N N N	2    N N 2 N N N N	17 — 7 1  2 	20 0 8 5 0 1 1 1	69 4 2 35 17 3 18 15 5 5	180 4 3 83 63 3 9 8 4 3	173 2 3 88 38 5 8 12 16 1
<b>E.S. Central</b> Alabama <sup>§</sup> Kentucky Mississippi Tennessee <sup>§</sup>	901 26 222 — 653	1,478 482 199 268 497	2,287 605 357 1,048 719	19,827 5,659 2,772 4,109 7,287	22,698 6,889 1,541 6,243 8,025	N N N N	0 0 0 0	0 0 0 0	N N N N	N N N N N	5 2 3	4 1 0 1	65 14 40 11 18	30 15 4 3 8	39 17 10 8 4
<b>W.S. Central</b> Arkansas <sup>§</sup> Louisiana Oklahoma Texas <sup>§</sup>	570 180 109 281	2,584 207 328 239 1,739	3,791 455 851 418 3,405	35,389 3,843 2,946 3,243 25,357	30,630 2,381 4,887 3,712 19,650	N   N N	0 0 0 0	1 0 1 0	1 N 1 N	N   N N	1 1 — —	6 0 1 1 3	28 8 4 11 16	49 3 3 11 32	45 3 14 10 18
Mountain Arizona Colorado Idaho <sup>§</sup> Montana <sup>§</sup> Nevada <sup>§</sup> New Mexico <sup>§</sup> Utah Wyoming <sup>§</sup>	211 40 53 	1,396 449 308 57 48 183 162 124 20	1,834 672 488 233 363 291 394 216 35	8,564 756 1,261 1,007 758 1,706 1,490 1,575 11	19,507 6,157 4,909 1,041 778 2,526 2,398 1,357 341	92 92 N N 	88 84 0 0 1 0 1 0	171 169 0 0 6 2 7 1	1,249 1,230 N N 11 5 3	1,345 1,308 N N 12 9 16 —	5 2 1 1 - 1	9 1 2 1 0 2 1 0	571 6 26 72 7 6 9 488 8	70 11 15 15 9 2 6 8 4	46 6 16 1 3 
Pacific Alaska California Hawaii Oregon <sup>§</sup> Washington	1,422 71 1,093  258 	3,303 92 2,708 109 184 131	4,055 137 3,464 134 403 621	38,044 1,054 32,824 1,172 2,886 108	47,497 1,295 37,295 1,537 2,593 4,777	30 N 30 N N N	37 0 37 0 0	217 0 217 0 0 0	540 N 540 N N N	675 N 675 N N N	  	2 0 0 2 0	20 2 0 4 16 0	13 1 	16 — — 16 —
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	5  154 	0 9 111 3	32  34 612 9	42 	21 210 2,250 58	N  N	0 0 0 0	0 0 0 0	N  N	N 	N  N	0 	0 0 0 0	N  N	N 

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2008, and April 7, 2007 (<u>14th Week</u>)\*\_\_\_\_\_

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. \* Incidence data for reporting years 2007 and 2008 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly. Chamydia refers to genital infections caused by *Chlamydia trachomatis*. S Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

			Giardiasi	s			G	onorrhea	1		Hae		<i>is influen.</i> es, all sere	<i>zae</i> , invasi otypes†	ive
	Current		vious	C	<u></u>	C		evious	<b>^</b>	0	C		vious	C	<b>C</b>
Reporting area	Current week	<u>52 w</u> Med	<u>eeks</u> Max	Cum 2008	Cum 2007	Current week	Med	weeks Max	Cum 2008	Cum 2007	Current week	Med	veeks Max	Cum 2008	Cum 2007
United States	172	298	1,088	3,140	3,874	3,492	6,597	7,949	71,448	91,851	29	44	135	737	748
New England Connecticut Maine <sup>§</sup> Massachusetts New Hampshire	3 3 —	22 6 3 7 1	54 18 10 29 4	168 69 32 	286 77 41 130 3	114 71 1 36 1	101 41 2 51 2	227 199 8 127 6	1,261 462 24 654 27	1,446 497 20 735 40	 	3 0 0 0	8 7 3 6 2	15 2 4 	53 15 4 29 5
Rhode Island <sup>§</sup> Vermont <sup>§</sup>	_	1 3	15 8	20 29	35	5	6 1	14 5	94	139 15	_	0 0	2 1	2 3	_
<b>Mid. Atlantic</b> New Jersey New York (Upstate) New York City Pennsylvania	38 — 28 2 8	58 7 23 16 14	118 15 100 29 30	553 21 236 123 173	701 92 211 238 160	483 43 101 178 161	661 114 125 165 232	1,004 141 518 503 551	7,411 1,266 1,518 1,827 2,800	9,565 1,651 1,517 3,039 3,358	7 3 _2 _2	9 1 2 1 3	27 7 20 6 11	146 24 36 26 60	166 26 39 38 63
E.N. Central Illinois Indiana Michigan Ohio Wisconsin	22 — N 1 18 3	46 13 0 11 15 7	91 33 0 22 37 21	464 90 N 98 213 63	627 180 N 179 184 84	359 — 163 95 24 77	1,299 378 159 285 356 121	1,820 772 308 541 914 214	13,683 2,676 2,224 4,031 3,138 1,614	19,531 4,771 2,303 4,740 5,807 1,910	4 — 4 —	6 2 1 0 2 0	23 7 19 3 6 1	111 29 24 5 51 2	94 33 8 10 37 6
W.N. Central lowa Kansas Minnesota Missouri Nebraska <sup>§</sup> North Dakota South Dakota	14 4 1 5 4	22 4 3 0 8 3 0 1	581 23 11 575 23 8 3 6	364 64 33 115 96 37 7 12	247 53 31 4 114 27 2 16	220 12 52 131 16 - 9	363 29 40 65 186 26 2 5	446 56 102 90 255 57 6 11	4,014 346 421 723 2,082 344 28 70	5,351 556 642 923 2,801 324 27 78	2 1 	3 0 0 1 0 0	24 1 2 21 6 3 2 0	58 1 5 10 30 9 3 	37 4 12 16 4 1
S. Atlantic Delaware District of Columbia Florida Georgia Maryland <sup>§</sup> North Carolina South Carolina <sup>§</sup> Virginia <sup>§</sup>	44 	54 1 23 12 4 0 2 10 0	96 6 47 44 18 0 6 40 8	636 11 16 274 198 48 N 29 47 13	669 8 16 288 151 67 N 18 114 7	1,456 13 29 363 4 84 	1,577 24 45 485 190 129 181 201 124 17	2,521 44 71 619 621 235 1,825 1,825 1,361 486 38	17,105 329 502 6,285 42 1,595 3,094 2,743 2,309 206	20,813 379 618 5,129 4,583 1,467 4,081 2,741 1,589 226	6  -   2   2   1 	11 0 3 2 0 1 1 0	30 1 2 10 8 6 9 4 23 3	212 2 4 57 54 43 23 14 9 6	190 5 2 56 44 32 15 15 15 6
E.S. Central Alabama <sup>s</sup> Kentucky Mississippi Tennessee <sup>s</sup>	2  N 2	10 4 0 0 4	23 11 0 0 16	91 54 N N 37	121 72 N N 49	328 12 90  226	565 206 80 112 174	868 282 161 401 261	7,183 2,311 1,060 1,620 2,192	8,297 2,919 499 2,178 2,701	 	2 0 0 0 2	8 3 1 2 6	35 5 4 26	39 10 2 25
<b>W.S. Central</b> Arkansas <sup>§</sup> Louisiana Oklahoma Texas <sup>§</sup>	4 3 	6 2 3 0	21 9 14 9 0	52 24 11 17 N	83 33 28 22 N	209 67 50 92	1,006 80 181 84 641	1,347 138 384 172 962	12,148 1,271 1,619 1,258 8,000	12,936 1,127 2,929 1,575 7,305	5 1 4	2 0 1 0	15 2 2 8 3	34 1 2 30 1	30 1 4 24 1
Mountain Arizona Colorado Idaho <sup>§</sup> Montana <sup>§</sup> Nevada <sup>§</sup> Nev Mexico <sup>§</sup> Utah Wyoming <sup>§</sup>	10 5 4 1 —	31 3 10 3 2 3 2 7 1	68 11 26 19 8 8 5 33 3 3	226 29 56 34 20 24 15 39 9	353 52 122 27 19 29 35 58 11	69 16 43 — 1 — 9	255 98 60 5 1 45 29 14 1	335 127 91 19 48 85 64 39 5	1,503 214 332 48 22 450 281 156 —	3,543 1,263 929 69 29 607 423 205 18	5 3 2       	5 2 1 0 0 1 1 0	13 11 4 1 1 4 6 1	102 59 8 1 5 9 19 —	93 41 21 3 
Pacific Alaska California Hawaii Oregon <sup>§</sup> Washington	35 1 20  4 10	61 2 42 1 9 8	228 5 84 4 19 137	586 21 410 3 105 47	787 16 573 20 115 63	254 9 216  29	663 10 574 12 24 17	800 24 693 23 63 142	7,140 105 6,503 123 392 17	10,369 140 8,802 180 287 960		2 0 0 1 0	7 4 5 1 5 3	24 4 1 3 16	46 4 11 3 28
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands		0  0 5 0	0 	  5		1 2 	0 2 4 1	1 13 23 2	2  15 65 	2  19 100 17	  N	0  0 0	0  1 1 0	  N	  N

Med: Median.

Max: Maximum.

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2008, and April 7, 2007 (14th Week)\*

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Me \* Incidence data for reporting years 2007 and 2008 are provisional. Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I. Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

<u>(14th week)^</u>			Hepat	itis (viral,	acute), by	type <sup>†</sup>									
			А					В					egionellos	is	
	Current	Prev 52 w		Cum	Cum	Current		ious eeks	Cum	Cum	Current		vious /eeks	Cum	Cum
Reporting area	week	Med	Max	2008	2007	week	Med	Max	2008	2007	week	Med	Max	2008	2007
United States	26	52	146	590	701	34	80	230	756	1,115	16	48	94	463	401
New England	2	2	6	19	19	_	1	6	11	18	1	2	14	17	14
Connecticut Maine <sup>§</sup>	2	0 0	3 1	7 2	4	_	0 0	2 2	6 3	8 1	1	0 0	4 2	4	_2
Massachusetts		0	4	_	9	—	0	1	—	1	—	0	2	_	11
New Hampshire Rhode Island <sup>§</sup>	_	0	3 2	1 9	4 2	_	0 0	1 3	1 1	4 3	_	0 0	2 6	2 8	_
Vermont <sup>§</sup>	_	Ő	1	_	_	_	Ő	1	_	1	_	Ő	2	3	1
Mid. Atlantic	5	9	21	81	104	6	7	17	71	154	3	14	37	97	108
New Jersey New York (Upstate)	2	2 1	6 6	14 19	36 19	4	1 2	4 7	1 15	42 16	1	1 4	11 15	9 22	19 27
New York City	_	3	9	20	35	_	2	7	5	41	_	2	11	7	22
Pennsylvania	3	2	6	28	14	2	3	14	50	55	2	5	21	59	40
E.N. Central Illinois	_2	5 1	13 5	68 13	86 36	3	8 1	15 6	88 8	137 40	1	11 2	30 12	112 13	96 22
Indiana		0	4	4	4	_	0	8	5	5	_	1	7	6	5
Michigan Ohio	1	2 1	7 3	39 9	21 19	1 2	2 2	6 7	34 38	39 42	1	3 4	11 17	33 60	28 35
Wisconsin	_	0	2	3	6	_	0	1	3	11	_	0	1	_	6
W.N. Central	1	4 1	24 5	74 23	32 6	_	2 0	8 2	19 3	48 9	_	2 0	9 2	21 4	13 2
lowa Kansas	_	0	3	23 5		_	0	2	3	9 4	_	0	1	_	_
Minnesota Missouri	1	0 1	23 3	9 15	18 3	_	0 1	5 5		4 24	_	0 1	6 3	2 8	2 6
Nebraska <sup>§</sup>	_	1	4	21	3	_	0	1	2	4	_	0	2	6	2
North Dakota South Dakota	_	0	0 1	1	2	_	0 0	1 1	_	3	_	0 0	0 1	1	1
South Dakota	6	10	21	88	125	7	18	54	214	280	3	8	31	99	95
Delaware		0	1	1	_	_	0	2		200		0	2	1	1
District of Columbia Florida	6	0 3	5 8		8 44	6	0 6	0 12	93	1 87	2	0 3	2 12	6 44	40
Georgia	_	1	4	14	19	—	2	6	29	40	_	1	3	15	10
Maryland <sup>§</sup> North Carolina	_	1 0	5 9	12 9	19 6	1	2 0	7 16	22 24	28 49	1	1 0	5 7	17 5	22 9
South Carolina <sup>§</sup>	_	0	4	2	4	_	1	6	18	20	_	0	2	2	4
Virginia <sup>s</sup> West Virginia	_	1 0	5 2	8 1	25	_	2 0	15 23	21 7	39 13	_	1 0	6 5	6 3	6 3
E.S. Central	_	2	5	8	25	3	7	15	83	84	_	2	6	21	20
Alabama§	—	0	4	1	5	—	2	6	25	31	_	0	1	2	2
Kentucky Mississippi	_	0	2 1	3	5 4	1	2 0	7 3	26 10	7 10	_	1 0	3 0	11	9
Tennessee§	—	1	3	4	11	2	2	8	22	36	_	1	4	8	9
W.S. Central	—	5	46	59	55	9	18	112	160	183	_	2	12	12	9
Arkansas <sup>§</sup> Louisiana	_	0 0	1 3	1	4 8	_	1	4 6	3 12	20 23	_	0 0	3 2	1	1
Oklahoma Texas§	_	0 4	8 45	3 55	43	2 7	1 12	38 94	17 128	8 132	_	0 2	2 12	 11	7
Mountain	2	4	45 10	55 44	43 66	3	3	94 8	33	65	1	2	6	30	, 21
Arizona	2	2	10	22	51		1	4	7	31	_	1	5	15	6
Colorado Idaho§	_	0	2 2	3 8	6 1	2	0 0	3 1	5 3	9 3	_	0 0	2 1	1 1	4 1
Montana§	_	0	2	_	_	—	0	1	—	_	_	0	1	2	1
Nevada <sup>§</sup> New Mexico <sup>§</sup>	_	0	1 2	7	4 1	1	1 0	3 2	11 2	15 4	1	0 0	2 1	3 1	2 2
Utah	_	0	2	2	2	_	0	2	5	3	_	0	3	7	3
Wyoming§	_	0	1	2	1	_	0	1	_		_	0	1	_	2
<b>Pacific</b> Alaska	8	12 0	44 1	149 1	189 1	3	9 0	30 2	77 2	146 2	7	3 0	16 0	54	25
California	6	9	34	118	176	2	6	19	56	117	7	2	13	46	20
Hawaii Oregon§	_	0 1	2 3	2 11	2 5	1	0 1	2 3	1 9	18	_	0 0	1 2	1 4	_
Washington	2	1	8	17	5	_	1	10	9	9	_	Ő	2	3	5
American Samoa		0	0	—	_	_	0	13	_	—	Ν	0	0	Ν	Ν
C.N.M.I. Guam	_	0	0	_	_	_	0	1	_	1	_	0	0	_	_
Puerto Rico	_	0	4	2	28	_	1	5	4	19	—	0	0	_	_
U.S. Virgin Islands		0	0	_	_	_	0	0	_	_	_	0	0	_	

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2008, and April 7, 2007 (14th Week)\*

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. \* Incidence data for reporting years 2007 and 2008 are provisional. \* Data for acute hepatitis C, viral are available in Table I. § Contains data reported through the National Electronic Disease Surveillance System (NEDSS). Med: Median. Max: Maximum.

(14th Week)*		L	.yme disea	ase			N	lalaria			Mei		cal disea	se, invasiv Ips	/e <sup>†</sup>
			vious				Prev					Prev	/ious	•	
Reporting area	Current week	52 w Med	eeks Max	Cum 2008	Cum 2007	Current week	52 w Med	eeks Max	Cum 2008	Cum 2007	Current week	52 w Med	veeks Max	Cum 2008	Cum 2007
United States	41	325	1,317	1,338	2,055	7	25	110	163	242	13	19	52	324	348
New England	_	44	302	57	168	_	1	23	1	10	_	0	3	2	12
Connecticut Maine <sup>§</sup>	_	12 6	214 61	33	29 12	_	0 0	16 2	_	3	_	0 0	1 1	1 1	2 2
Massachusetts New Hampshire	_	0 8	31 88	20	60 61	_	0 0	3 4	1	6 1	_	0 0	2 1	_	5
Rhode Island§	_	0	79	—	—	_	0	7	_	_	_	0	1	_	1
Vermont <sup>§</sup>		1	13	4	6	_	0	2	_		_	0	1		2
Mid. Atlantic New Jersey	29 7	169 40	678 189	807 137	1,058 339	1	7 1	18 4	34	61 10	1	2 0	7 1	37 1	38 7
New York (Úpstate)	6	54	224	91	152	—	1	8	4	9	—	1	3	15	8
New York City Pennsylvania	16	5 51	27 324	4 575	45 522	1	4 1	9 4	22 8	36 6	1	0 1	4 5	5 16	6 17
E.N. Central	_	11	169	21	75	3	2	7	35	39	1	3	8	53	58
Illinois Indiana	_	1 0	16 7	1	6 1	_	1 0	6 2	15 1	18 1	_	1 0	3 4	13 9	22 6
Michigan	_	0	5	5	3	1	0	2	6	7	_	0	2	11	10
Ohio Wisconsin	_	0 10	4 149	3 11	2 63	_2	0 0	3 1	11 2	7 6	1	1 0	3 2	14 6	13 7
W.N. Central	_	4	714	5	23	_	0	8	6	12	_	1	8	37	27
lowa	_	1	11	4	7	—	0	1	_	2	—	0	3	8	7
Kansas Minnesota	_	0 0	2 714	_	1 15	_	0 0	1 8	1	7	_	0 0	1 7	1 15	2 7
Missouri Nebraska <sup>ş</sup>	_	0 0	4 1	1	_	_	0 0	1 2	1 4	1 2	_	0 0	3 2	8 4	8 1
North Dakota	_	0	2	_	_	_	0	1	-		_	0	1	_	1
South Dakota	_	0	0	_	_	—	0	1	—	—	—	0	1	1	1
S. Atlantic Delaware	8 4	64 12	215 34	392 105	686 117	1	5 0	14 1	45	48 1	4 1	3 0	11 1	43 1	44
District of Columbia	2	0	7	29	2	_	0	1		1	_	0	0	_	
Florida Georgia	1	1 0	11 3	9 1	7	_	1	7 3	15 12	12 5	3	1 0	7 3	19 4	13 6
Maryland§	1	34 0	133	217	465 6	1	1 0	5 4	15	15	—	0	2	4	11
North Carolina South Carolina§	_	0	8 4	2 2	6 4	_	0	4	2 1	4	_	0	4 3	3 9	4 4
Virginia <sup>§</sup> West Virginia	_	17 0	62 9	26 1	81 4	_	0 0	7 1	_	10	_	0 0	2 1	2 1	6
E.S. Central	_	0	5	1	6	_	0	3	2	7	_	1	3	20	16
Alabama§	_	0	3	_	1	—	0	1	1	1	—	0	2	1	3
Kentucky Mississippi	_	0 0	2 1	_	_	_	0 0	1	1	1	_	0 0	2 2	4 5	2 4
Tennessee§	_	Ō	4	1	5	—	0	2	—	4	—	0	2	10	7
W.S. Central Arkansas <sup>§</sup>	—	1 0	8 1	5	14	_	2 0	55 1	8	21	_	2 0	11 2	31 2	38 5
Louisiana	_	0	0	_	2	_	0	2	_	10	_	0	23	8	12
Oklahoma Texas <sup>§</sup>	_	0	0 8	5	12	_	0 1	2 54	1 7	1 10	_	0 1	4 6	6 15	7 14
Mountain		1	3	3	2	_	1	5	6	16	_	1	4	21	30
Arizona	_	0	1	1	—	—	0	1	1	4	_	0	2	3	7
Colorado Idaho <sup>§</sup>	_	0	1 2	2	_	_	0	2 2	2	9	_	0 0	2 2	4 2	9 2
Montana§	_	0	2	—	1	—	0	1	_	1	—	0	1	2	1
Nevada <sup>§</sup> New Mexico <sup>§</sup>	_	0 0	2 2	_	1	_	0 0	3 1	3	1	_	0 0	2 1	4 3	3 1
Utah Wyoming <sup>§</sup>	_	0 0	2 1	_	_	_	0 0	3 0	_	1	_	0 0	2 1	2 1	6 1
Pacific	4	3	11	47	23	2	3	9	26	28	7	4	20	80	85
Alaska	—	0	2	—	2	_	0	0	_	2	_	0	1	_	1
California Hawaii	4 N	2 0	9 0	46 N	21 N	1	2 0	8 1	19 1	19 1	5	3 0	12 2	61	63 3
Oregon <sup>§</sup>	_	0	1	1	_		0	2	3	5	1	1	3	10	8
Washington American Samoa	N	0 0	7 0	N	N	1	0 0	3 0	3	1	1	0 0	8 0	9	10
C.N.M.I.	_	_	_	—	_	_	_	_	_	_	_	_	_	_	_
Guam Puerto Rico	N	0 0	0 0	N	N	_	0 0	1 1	_	1	_	0 0	0 1	_	3
U.S. Virgin Islands	N	0	0	N	Ν	_	0	0	_	_	_	0	0	_	

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2008, and April 7, 2007 (14th Week)\*

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. \* Incidence data for reporting years 2007 and 2008 are provisional. \* Data for meningococcal disease, invasive caused by serogroups A, C, Y, & W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I. \* Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

(14th Week)*										• •					
			Pertussi	S				ies, anim	al		R			otted fever	
	Current		vious reeks	Cum	Cum	Current		vious /eeks	Cum	Cum	Current		vious /eeks	Cum	Cum
Reporting area	week	Med	Max	2008	2007	week	Med	Max	2008	2007	week	Med	Max	2008	2007
United States	66	166	641	1,307	2,527	43	95	176	849	1,182	—	34	147	58	133
New England Connecticut	_	19 0	45 5	32	404 19	3	9 4	22 10	65 37	117 51	_	0 0	1 0	_	1
Maine <sup>†</sup>	_	1	5	14	29	2	1	5	9	21	N	0	0	N	Ν
Massachusetts New Hampshire	_	13 1	33 5	6	321 18	N	0 1	0 4	N 7	N 9	_	0 0	1	_	1
Rhode Island <sup>†</sup>	_	0	8	8	2	N	0	0	N	N	—	0	0	—	—
Vermont <sup>†</sup> Mid. Atlantic		0 22	6 38	4 192	15 410	1 13	2 24	13 56	12 173	36 299	_	0 1	0 7	4	
New Jersey	_	3	7	2	65	_	0	0	_	_	_	0	3	—	1
New York (Upstate) New York City	4	8 2	24 7	63 15	201 44	13	9 0	20 5	87 5	91 18	_	0 0	1 3	1	6
Pennsylvania	8	7	22	112	100	—	11	44	81	190	—	Ō	3	3	5
E.N. Central Illinois	14	23 2	186 8	428 13	493 62	N	2 0	39 0	1 N	5 N	_	1 1	4 3	2 1	4 2
Indiana	_	0	12	12	3	_	0	1	_	_	_	0	2	_	_
Michigan Ohio	1 13	3 11	16 176	38 365	100 219	_	1 1	28 11	1	4 1	_	0 0	1 2	1	1 1
Wisconsin	—	0	16	_	109	Ν	0	0	Ν	Ν	_	0	0	_	_
W.N. Central lowa	8	12 2	134 8	121 20	179 49	_	4 0	13 3	15 2	43 5	_	5 0	37 4	11	15 1
Kansas	4	2	5	17	49	_	1	7	—	26	_	0	2	_	3
Minnesota Missouri	1	0 2	131 16	67	35 19	_	0 0	6 3	9	3 2	_	0 5	4 29	 11	11
Nebraska <sup>†</sup> North Dakota	3	1 0	12 4	15	6 1	_	0 0	0 5	2	6	_	0 0	2 0	_	_
South Dakota	_	0	7	2	20	_	ŏ	2	2	1	_	0	1		—
S. Atlantic Delaware	4	14 0	52 2	137	277	26	41 0	63 0	517	611	—	14 0	111 2	27	70
District of Columbia	_	0	1	1 2	1 2	_	0	0	_	_	_	0	1	1	5
Florida Georgia	2	3 0	9 3	33 2	86 13	_	0 5	13 31	32 87	124 54	_	0 0	3 6	1 3	3 4
Maryland <sup>†</sup>		2	5	19	45	12	9	18	110	93	_	1	6	7	10
North Carolina South Carolina <sup>†</sup>	1 1	4 1	38 22	40 18	69 25	14	9 0	19 11	121	121 33	_	4 0	96 7	11	36 4
Virginia† West Virginia	_	2 0	11 12	22	32 4	_	12 0	31 11	141 26	163 23	_	2 0	11 3	3 1	7 1
E.S. Central	3	6	35	52	73	1	3	7	31	34	_	5	16	6	27
Alabama <sup>†</sup> Kentucky	_	1 0	6 4	15 6	22 3	1	0 0	0 3	5	6	_	1 0	10 2	3	10
Mississippi	_	3	32	20	14	_	0	1	1	_	_	0	3	1	1
Tennessee <sup>†</sup>	3	1	5	11	34	_	3	6	25	28	_	2	10	2	16
W.S.Central Arkansas <sup>†</sup>	1	20 1	112 17	46 9	127 15	_	1 1	23 3	13 12	18 8	_	1 0	30 15	6	2
Louisiana Oklahoma	1	0 0	2 26	2	6	_	0 0	0 22	1	 10	_	0 0	2 20	2	1
Texas <sup>†</sup>	_	16	102	35	106	_	ŏ	0	_		—	1	7	4	1
<b>Mountain</b> Arizona	14	19 2	40 10	170 15	346 106	N	2 0	8 0	10 N	1 N	_	0	4	1	1
Colorado	1	5	14	28	88	_	0	Ō			_	Ō	2	_	
Idaho† Montana†	1 7	0 1	4 11	7 53	11 11	_	0 0	4 3	_	_	_	0 0	1 1	_	1
Nevada <sup>†</sup> New Mexico <sup>†</sup>	_	0 1	6 7	2	8 13	—	0	2	8	_	—	0	0 1	1	_
Utah	5	5	27	63	96	_	0	2	—	1	_	0	0	_	_
Wyoming <sup>†</sup>		0	2	_	13	—	0	4	2		_	0	2	_	_
<b>Pacific</b> Alaska	10 1	16 1	243 6	129 19	218 9	_	4 0	10 3	24 9	54 24	N	0 0	2 0	1 N	1 N
California Hawaii	_	8 0	32 2	23 2	151 8	—	3 0	8 0	15	30	N	0 0	2 0	1 N	1 N
Oregon <sup>†</sup>	1	2	14	29	18	_	0	3	_	_	_	0	1	_	_
Washington	8	3	209	56	32	N	0	0			N	0	0	N	N
American Samoa C.N.M.I.	_	0	0	_	_	N	0	0	N	N		0	0	N 	N
Guam Puerto Rico	_	0 0	0 1	_	_	_	0 0	0 5	8	 15	N N	0 0	0 0	N N	N N
U.S. Virgin Islands	_	0	0	_	_	Ν	0	0	N	N	N	0	0	N	N

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2008, and April 7, 2007 (14th Week)\*

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. \* Incidence data for reporting years 2007 and 2008 are provisional. Contains data reported through the National Electronic Disease Surveillance System (NEDSS). Med: Median. Max: Maximum.

(14th Week)*	Salmonellosis					Shiga	toxin-pro	ducing E	. coli (STE	<b>C)</b> <sup>†</sup>	Shigellosis					
			/ious	_			Prev	/ious				Pre	vious			
Reporting area	Current week	52 w Med	eeks Max	Cum 2008	Cum 2007	Current week	52 w Med	veeks Max	Cum 2008	Cum 2007	Current week	52 v Med	veeks Max	Cum 2008	Cum 2007	
United States	311	864	1,931	6,117	8,311	77	77	230	701	550	202	359	1,078	3,443	2,823	
New England	_	31 0	90 84	150 84	737 430	_	3 0	11 6	18 6	80 45	—	2 0	11 8	16 8	94 44	
Connecticut Maine <sup>§</sup>	_	2	14	84 28	26	_	0	4	6 4	8	_	0	4	8 1	8	
Massachusetts New Hampshire	_	19 3	58 10	— 11	224 26	_	1 0	10 4	5	19 6	_	1 0	8 1	1	39 2	
Rhode Island <sup>§</sup> Vermont <sup>§</sup>	_	1 1	15 5	17 10	19 12	_	0 0	2 3	1 2	2	_	0 0	9 1	5 1	1	
Mid. Atlantic	22	108	190	667	1,149		9	195	276	78	18	20	154	302	142	
New Jersey New York (Upstate)	 15	19 26	48 63	29 191	233 269		1 3	7 192	255	22 20	13	4	13 19	50 90	24 25	
New York City		25	52	197	278	49	1	5	4	8	2	7	18	130	75	
Pennsylvania	7	34	69 055	250	369		2	11	17	28	3	2	141	32	18	
E.N. Central Illinois	17	104 29	255 188	638 163	1,103 412	5	9 1	35 13	48 3	70 12	28	57 15	134 29	627 186	276 146	
Indiana Michigan	3	10 19	34 43	48 141	94 165	_	2 2	12 8	5 13	2 12	_	5 1	82 7	210 11	13 12	
Ohio Wisconsin	14	25 12	64 50	212 74	228 204	5	2	9 11	21 6	30 14	28	19 4	104 13	191 29	62 43	
Wisconsin W.N. Central	22	49	103	458	531	5	12	38	68	55	9	26	80	200	486	
lowa Kansas	3	9 7	18 20	69 45	87 82	1	3 0	13 4	17 4	10 5	_	2 0	6 3	17 4	18 8	
Minnesota	2	13	39 29	127	121 156	1	3	15	14 26	20 11	1	4 17	10 72	35	72 365	
Missouri Nebraska§	11 5	14 5	13	142 52	36	3	2	12 6	20 4	9	6	0	3	85	5	
North Dakota South Dakota	1	0 3	9 11	6 17	8 41	_	0 0	1 5	3	_	2	0 1	5 30	16 43	6 12	
S. Atlantic	104	228	435	1,878	2,163	8	14	38	121	116	62	82	153	858	918	
Delaware District of Columbia	1	3 0	8 4	21 12	23 8	1	0 0	2 1	2 1	4	_	0 0	2 4	1 8	4 3	
Florida Georgia	53 19	87 36	181 81	913 340	910 321	3	3 1	18 8	46 10	31 17	21 24	34 30	75 86	266 379	584 255	
Maryland§	7	15	44	114	163	1	1	5	17	18	1	2	7	15	23	
North Carolina South Carolina§	10 14	23 18	228 51	187 162	335 173	3	1 0	24 3	12 11	17 2	16	1 6	12 20	25 145	15 13	
Virginia <sup>§</sup> West Virginia	_	22 4	50 25	96 33	201 29	_	3 0	9 3	17 5	26 1	_	3 0	14 62	19	20 1	
E.S. Central	19	59	144	412	516	_	4	26	45	26	20	49	177	439	238	
Alabama <sup>§</sup> Kentucky	2 3	16 10	50 23	132 67	146 103	_	1 1	19 12	25 4	5 9	9	13 8	43 35	120 42	94 25	
Mississippi Tennessee <sup>§</sup>	5 9	13 17	57 34	87 126	101 166	_	0	1 12	2 14	1 11	5 6	18 7	111 32	139 138	60 59	
W.S. Central	9 44	96	819	506	485	2	2 5	12	35	32	44	49	653	638	224	
Arkansas <sup>§</sup> Louisiana	9	13 16	50 44	70 54	70 109	1	0	3	6	7	10	2	11 22	59 44	18 80	
Oklahoma	6	9	43	70	64	1	0	3	3	4	3	3	9	27	12	
Texas <sup>§</sup> Mountain	29 42	52 52	772 83	312 534	242 538		3 9	11 42	26 58	18 49	31 10	34 17	631 40	508 137	114 182	
Arizona	8	17	39	171	187	1	2	8	20	15	3	10	30	69	87	
Colorado Idaho§	29 3	10 3	47 10	165 31	133 28	2 1	1 2	17 16	3 19	12 4	2 1	2 0	6 2	7 3	27 3	
Montana <sup>§</sup> Nevada <sup>§</sup>	1	1 5	10 12	14 44	25 58	_	0 0	3 3	3 2	4	4	0 1	2 10	 44	6 11	
New Mexico <sup>§</sup>	_	5	13	46	53	—	1	3	7	11	_	1	6	8	30	
Utah Wyoming <sup>§</sup>	_	5 1	17 5	50 13	39 15	_	1 0	9 0	4	3	_	0 0	5 5	3 3	5 13	
Pacific	41	114	391	874	1,089	4	9	38	32	44	11	27	70	226	263	
Alaska California	26	1 85	5 230	8 679	23 857	1	0 5	1 33	18	 26	6	0 22	1 61	193	6 216	
Hawaii Oregon <sup>§</sup>	2	5 6	14 16	42 63	59 67	_	0 1	4 11	2 3	3 7	_	0 1	3 6	7 10	11 12	
Washington	13	11	152	82	83	3	1	17	9	8	5	2	21	16	18	
American Samoa C.N.M.I.	_	0	1	1	_	_	0	0	_	_	_	0	1	1	1	
Guam	_	0	5	3	2	_	0	0	_	_	_	0	3	5	5	
Puerto Rico U.S. Virgin Islands	_	14 0	55 0	35	193	_	0 0	0 0	_	_	_	0 0	2 0	_	11	

 TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2008, and April 7, 2007

 (14th Week)\*

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: N \* Incidence data for reporting years 2007 and 2008 are provisional. Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped. Contains data reported through the National Electronic Disease Surveillance System (NEDSS). Med: Median. Max: Maximum.

	Str	entococca	Idisease	nvasive, gr		<i>Streptococcus pneumoniae</i> , invasive disease, nondrug resistant <sup>†</sup> Age <5 years						
		Prev		invasive, gi			Pre	vious	a13		-	
Reporting area	Current week	52 w Med	eeks Max	Cum 2008	Cum 2007	Current week	t 52 v	veeks Max	Cum 2008	Cum 2007		
United States	78	94	197	1,621	1,699	26	32	147	454	513		
New England	_	4	28	37	109		1	4	6	44		
Connecticut	—	0	22	10	2	_	0	1	—	7		
Maine <sup>§</sup> Massachusetts	_	0 1	3 12	9	7 77	_	0 0	1 4	1	34		
New Hampshire	—	0	4	10	13	1	0	1	5	_		
Rhode Island <sup>§</sup> Vermont <sup>§</sup>	_	0 0	3 2	3 5	10	_	0 0	1	_	2 1		
Mid. Atlantic	23	17	40	319	349	4	6	38	54	70		
New Jersey New York (Upstate)	12	3 6	11 20	35 115	70 87	4	1 2	6 14	12 28	19 31		
New York City		4	20	48	87	4	1	35	20 14	20		
Pennsylvania	11	4	16	121	105	N	0	0	Ν	N		
E.N. Central	14	16	56 12	356 87	330 114	4	5 1	20 6	97 18	77 13		
Indiana	1	4 2	11	44	32	_	0	12	12	4		
Michigan Ohio	2 10	4 4	10 14	60 100	72 93	3	1	5 5	24 20	31 23		
Wisconsin	10	4	38	65	93 19	3 1	0	5 9	20 23	6		
W.N. Central	4	6	39	149	112	1	2	22	40	30		
lowa Kansas	_	0 0	0 6	 25	 14	1	0 0	0 2	5	1		
Minnesota	_	0	35	55	48	_	1	21	13	14		
Missouri Nebraska <sup>§</sup>	3 1	2 0	10 3	37 16	33 5	—	0 0	2 3	16 2	12 2		
North Dakota	_	0	3	7	9	_	0	0	_	1		
South Dakota	—	0	2	9	3	—	0	1	4	—		
<b>S. Atlantic</b> Delaware	17	23 0	49 3	359 6	377 1	6	5 0	10 0	72	105		
District of Columbia	_	0	4	11	4	_	0	1	2	_		
Florida Georgia	7 3	6 4	16 13	86 75	77 84	3	1 0	4 4	20	18 32		
Maryland§	2	4	9	69	69	3	1	5	26	26		
North Carolina South Carolina§	3 2	2 1	22 7	46 21	44 34	<u>N</u>	0 1	0 4	N 16	N 9		
Virginia§		2	12	33	58	_	0	3	5	18		
WestVirginia		0	3	12	6	—	0	1	3	2		
<b>E.S. Central</b> Alabama <sup>§</sup>	4 N	4 0	13 0	52 N	69 N	N	2 0	11 0	28 N	27 N		
Kentucky	1	1	2	12	19	N	0	0	N	N		
Mississippi Tennessee§	N 3	0 3	0 13	N 40	N 50	_	0 2	3 9	7 21	2 25		
W.S. Central	8	7	68	143	101	6	4	61	76	81		
Arkansas§	_	0	1	2	10	_	0	2	3	6		
Louisiana Oklahoma	1	0 1	2 9	3 45	12 33	3	0 1	2 5	29	20 18		
Texas <sup>§</sup>	7	5	59	93	46	3	3	56	44	37		
Mountain	8	9	19	169	216	4	4	11	81	75		
Arizona Colorado	5	4	9 9	68 40	73 56	3	2	8 4	49 16	39 17		
ldaho <sup>§</sup> Montana <sup>§</sup>	N	0 0	2 0	7 N	5 N	1	0 0	1 1	2	_		
Nevada§		0	1	2	2	N	0	0	Ν	N		
New Mexico <sup>§</sup> Utah	1	2 1	5 5	33 19	37 41	_	0	3 2	9 5	16 3		
Utan Wyoming <sup>§</sup>		0	5 1	19	2	_	0	2	5	3		
Pacific	_	3	7	37	36	_	0	1	_	4		
Alaska California	_	0 0	3 0	10	5	N N	0 0	0 0	N N	N N		
Hawaii	_	2	5	27	31	_	0	1	_	4		
Oregon <sup>§</sup> Washington	N N	0 0	0 0	N N	N N	N N	0 0	0 0	N N	N N		
American Samoa	12	0	4	12		N	0	0	N	N		
C.N.M.I.	_	_	_	—	_		_	_	—			
Guam Puerto Rico	N	0 0	0 0	N	N	N	0 0	0 0	N	N		
U.S. Virgin Islands		0	0			N	0	0	N	N		

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2008, and April 7, 2007 (14th Week)\*

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. \* Incidence data for reporting years 2007 and 2008 are provisional. Includes cases of invasive pneumococcal disease, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available (NNDSS event code 11717). \* Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

(14th Week)*	Streptococcus pneumoniae, invasive disease, drug resistant <sup>+</sup>															
			All ages		ionnae, mva	Age <5 years					Syphilis, primary and secondary					
	_	Prev		_			Previous						vious	_		
Reporting area	Current week	52 w Med	eeks Max	Cum 2008	Cum 2007	Current week	52 w Med	veeks Max	Cum 2008	Cum 2007	Current week	<u>52 v</u> Med	veeks Max	Cum 2008	Cum 2007	
United States	38	44	97	901	941	7	8	23	131	184	120	221	286	2,604	2,609	
New England	_	1	6	11	55	_	0	2	2	5	3	6	14	67	51	
Connecticut	_	0	4	—	35	—	0	1	—	4	_	0	6	3	7	
Maine <sup>§</sup> Massachusetts	_	0 0	2 0	6	4	_	0 0	1 0	1	_	3	0 3	2 10	1 58	1 33	
New Hampshire	_	0 0	0 2	2	8	_	0 0	0 1	_	1	_	0 0	3	3 2	4 5	
Rhode Island <sup>§</sup> Vermont <sup>§</sup>	_	0	2	2	8	_	0	1	1		_	0	5 5		5	
Mid. Atlantic	5	2	6	48	61	2	0	2	10	14	29	32	45	443	425	
New Jersey New York (Upstate)	2	0 1	0 4	 13	 21	_	0 0	0 1	2	7	3 2	4 3	10 10	61 29	56 30	
New York City	_	0	0	—	—	_	0	0	_	_	19	18	29	284	270	
Pennsylvania	3	1	5	35	40	2	0	2	8	7	5	5	12	69	69	
E.N. Central Illinois	10	13 2	46 13	261 43	253 52	1	2 0	14 6	37 9	39 17	29	15 6	29 14	218 27	225 107	
Indiana	_	3	28	72	36	_	0	11	10	3	1	1	6	36	14	
Michigan Ohio	 10	0 6	1 17	3 143	165	1	0 1	1 3	1 17	19	25 3	2 4	12 15	54 88	33 55	
Wisconsin	_	0	0	_	_	_	0	Ō	—	_	_	1	3	13	16	
W.N. Central	1	2	49 0	73	71	—	0	2	2	9	8	7	14	108	66	
lowa Kansas	_	0 0	0 5	31	42	_	0 0	0 1	1	2	3	0 0	2 5	1 9	2 5	
Minnesota		0	46		—	—	0	1		5	—	1	4	24	15	
Missouri Nebraska§	1	1 0	8 1	42	25 1	_	0 0	1 0	1	_	5	5 0	11 1	72 2	44	
North Dakota South Dakota	_	0	0 1	_	3	—	0 0	0 1	_	2	_	0	1 3	_	_	
Soull Dakola S. Atlantic	— 19	19	45	380	409	4	4	11	 59	2 98	26	49	152		529	
Delaware		0	1	1	2	-	0	1		1	_	0	3	1	2	
District of Columbia Florida	9	0 11	3 27	11 208	4 227	2	0 2	0 7	 36	 54	1 11	2 17	10 35	25 219	50 156	
Georgia	10	5	17	136	159	2	1	5	18	38	_	7	131	11	61	
Maryland <sup>§</sup> North Carolina	N	0 0	2 0	3 N	N	N	0 0	1 0	1 N	N	4	6 5	15 18	89 83	77 98	
South Carolina <sup>§</sup>	_	0	0	_	—	_	0	0	_	_	4	1	11	22	25	
Virginia <sup>§</sup> West Virginia	N	0 1	0 12	N 21	N 17	N	0 0	0 2	N 4	N 5	6	4 0	16 1	75	57 3	
E.S. Central	2	4	12	102	50	_	1	4	13	11	12	20	31	273	192	
Alabama <sup>§</sup>	N 1	0 0	0 3	N 19	N 11	N	0 0	0 2	N 4	N 1	6	8 1	17 4	115 20	66 23	
Kentucky Mississippi		0	0	19	—	_	0	0	_	_	_	2	15	20 26	30	
Tennessee§	1	3	12	83	39	_	0	3	9	10	6	8	15	112	73	
W.S. Central Arkansas <sup>§</sup>	1	1 0	5 1	20 4	32 1	_	0 0	2 1	5 2	2	6	40 2	56 10	480 23	403 31	
Louisiana	_	1	4	16	31	_	0	2	3	2	6	11	22	88	92	
Oklahoma Texas§	N	0	0	N	N	N	0 0	0 0	N		_	1 26	5 46	17 352	21 259	
Mountain	_	1	5	6	10	_	0	2	2	6	1	9	28	52	114	
Arizona	_	0	0	_	_	_	Ō	0	_	_	_	5	20	2	52	
Colorado Idaho§	N	0 0	0 0	N	N	N	0 0	0 0	N	N	1	1 0	7 1	22 1	14 1	
Montana <sup>§</sup>	_	0	0	—	—	_	0	0	_	_	—	0	3		1	
Nevada <sup>§</sup> New Mexico <sup>§</sup>	N	0 0	0 1	N		N	0 0	0 0	N	N	_	2 1	6 3	19 8	26 15	
Utah Wyoming <sup>§</sup>	_	0 0	5 2	6	7 3	_	0 0	2 1	2	5 1	_	0 0	2 1	_	4 1	
Pacific		0	0	_			0	1	1	_	6	42	62	438	604	
Alaska	Ν	0	0	Ν	Ν	Ν	0	0	N	Ν		0	1	—	2	
California Hawaii	N	0 0	0	N	N	N	0 0	0 1	N 1		_2	38 0	58 2	377 7	564 1	
Oregon <sup>§</sup>	N	0	0	N	N	N	0	0	N	N	_	0	2	5	4	
Washington	N	0	0	N	N	N	0	0	N	N	4	3	13	49	33	
American Samoa C.N.M.I.	N	0	0			N	0	1	N	N	_	0	4	_	_	
Guam	_	0	0	—	—	—	0	0	—	—		0	0		_	
Puerto Rico U.S. Virgin Islands	_	0 0	0 0	_	_	_	0 0	0 0	_	_	1	2 0	10 0	34	34	
-																

Max: Maximum.

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2008, and April 7, 2007 (14th Week)\*

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median.

<sup>1</sup> Incidence data for reporting years 2007 and 2008 are provisional.
 <sup>1</sup> Incidence data for reporting years 2007 and 2008 are provisional.
 <sup>1</sup> Incidence data for reporting years 2007 and 2008 are provisional.
 <sup>2</sup> Solution of the second second

(14th week)								West Nile virus disease <sup>†</sup>								
			ella (chick	enpox)				roinvasiv	/e				neuroinva	asive§		
	Current		/ious	C	<b>C</b>	Current		vious	<b>C</b> 1	<b>C</b>	Commont		vious	C	<b>C</b>	
Reporting area	week	 Med	eeks Max	Cum 2008	Cum 2007	week	Med	eeks Max	Cum 2008	Cum 2007	Current week	Med	veeks Max	Cum 2008	Cum 2007	
United States	749	607	1,350	8,188	13,006	_	1	141	_	4	_	2	299	_	1	
New England	5	12	47	149	202	_	0	2	_	_	_	0	2	_	_	
Connecticut Maine <sup>1</sup>	—	0	1 0	—	1	—	0 0	2 0	—	—	—	0 0	1 0	_	_	
Massachusetts	_	0	0	_	_	_	0	2	_	_	_	0	2	_	_	
New Hampshire	3	6	18	70	104	—	0	0	—	—	—	0	0	—	—	
Rhode Island <sup>®</sup> Vermont <sup>®</sup>	2	0 6	0 38	 79	97	_	0 0	0 0	_	_	_	0 0	1 0	_	_	
Mid. Atlantic	67	62	137	674	1,811	_	0	3	_	_	_	0	3	_	_	
New Jersey	N	0	0	N	Ń	_	0	1	_	_	_	0	õ	_	_	
New York (Upstate) New York City	N N	0	0	N N	N N	—	0 0	1 3	—	—	_	0 0	1 3	_	_	
Pennsylvania	67	62	137	674	1,811	_	0	1	_	_	_	0	1	_	_	
E.N. Central	91	155	358	1,753	3,977	_	0	18	_	_	_	0	12	_	1	
Illinois	8	3	19	105	65	—	0	13	—	_	_	0	8	_	—	
Indiana Michigan	28	0 65	222 154	778	1,579	_	0 0	4 5	_	_	_	0 0	2 0	_	_	
Ohio	54	63	208	869	1,889	—	0	4	—	—	—	0	3	—	1	
Wisconsin	1	6	80	1	444	—	0	2	_	—	_	0	2	_	_	
W.N. Central Iowa	13 N	24 0	92 0	404 N	667 N	_	0 0	41 4	_	_	_	1 0	117 3	_	_	
Kansas		6	36	196	304	_	0	3	_	_	_	0	7	_	_	
Minnesota		0	0			—	0	9	—	_	_	0	12	_	_	
Missouri Nebraska <sup>1</sup>	13 N	12 0	78 0	194 N	253 N	_	0 0	9 5	_	_	_	0 0	3 15	_	_	
North Dakota	_	0	1	1	84	_	0	11	_	_	_	0	49	_	_	
South Dakota	_	1	14	13	26	—	0	9	_	—	_	0	32	_	_	
S. Atlantic Delaware	91	94 1	182 4	1,389 5	1,789 11	_	0 0	12 1	_	_	_	0 0	6 0	_	_	
District of Columbia	_	0	8	8		_	ŏ	Ó	_	_	_	Ő	Ő	_	_	
Florida	47 N	26	87 0	631 N	385	_	0 0	1	_	_	_	0 0	0	_	_	
Georgia Maryland <sup>1</sup>	N	0	0	N	N N	_	0	8 2	_	_	_	0	5 2	_	_	
North Carolina	N	0	0	N	N	_	0	1	_	_	_	0	1	_	_	
South Carolina <sup>1</sup> Virginia <sup>1</sup>	12	14 19	51 80	242 245	506 453	_	0 0	2 1	_	_	_	0 0	1	_	_	
West Virginia	32	17	66	258	434	_	õ	Ö	_	_	_	õ	Ö	_	_	
E.S. Central	21	14	82	347	154	—	0	11	—	4	—	0	14	—	—	
Alabama <sup>1</sup> Kentucky	21 N	14 0	82 0	345 N	152 N	_	0	2 1	_	_	_	0 0	1 0	_	_	
Mississippi		0	1	2	2	_	0	7	_	3	_	0	12	_	_	
Tennessee <sup>1</sup>	N	0	0	N	Ν	_	0	1	_	1	_	0	2	_	_	
W.S.Central Arkansas <sup>1</sup>	386 2	172 13	839 46	2,915 197	3,366 208	—	0 0	34 5	—	—	_	0 0	18 2	_	_	
Louisiana		13	40	20	208 53	_	0	5	_	_	_	0	2	_	_	
Oklahoma	N	0	0	N	N	—	0	11	—	—	_	0	7	—	—	
Texas <sup>1</sup>	384	159	822	2,698	3,105	_	0	18		_		0	10	_		
<b>Mountain</b> Arizona	73	35 0	130 0	546	1,020	_	0 0	36 8	_	_	_	1 0	143 10	_	_	
Colorado	15	13	62	173	381	—	Ō	17	—	—	—	0	65	—	_	
Idaho <sup>11</sup> Montana <sup>11</sup>	N 12	0 6	0 40	N 125	N 126	_	0	3 10	_	_	_	0 0	22 30	_	_	
Nevada <sup>1</sup>	N N	0	40	125 N	N	_	0	1	_	_	_	0	3	_	_	
New Mexico <sup>1</sup>		4	37	52	145	—	0	8	—	—	—	0	6	—		
Utah Wyoming <sup>¶</sup>	46	7 0	72 9	195 1	358 10	_	0 0	8 4	_	_	_	0 0	8 33	_	_	
Pacific	2	0	4	11	20	_	0	18	_	_	_	0	23	_	_	
Alaska	2	0	4	11	20	—	0	0	—	—	_	0	0	—	—	
California Hawaii	_	0	0	_	_	_	0 0	17 0	_	_	_	0 0	21 0	_	_	
Oregon <sup>1</sup>	Ν	0	Ō	Ν	N	_	0	3	_	_	_	0	4	_	_	
Washington	N	0	0	N	N	_	0	0	_	—	_	0	0	_	_	
American Samoa C.N.M.I.	N	0	0	N	N	_	0	0	_	_	_	0	0	_	_	
Guam	_	3	19	18	86	_	0	0	_	_	_	0	0	_	_	
Puerto Rico	_	11	37	55	216	_	0	0	_	_	_	0	0	_	_	
U.S. Virgin Islands		0	0	—	_	_	0	0				0	0	_		

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending April 5, 2008, and April 7, 2007 (14th Week)\*

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. \* Incidence data for reporting years 2007 and 2008 are provisional. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California sergoroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I. Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm. Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

#### TABLE III. Deaths in 122 U.S. cities,\* week ending April 5, 2008 (14th Week)

IABLE III. Deaths	All causes, by age (years)				week)	All ca	uses, by	/ age (yea	ars)						
	All			,			P&I <sup>†</sup>		All						P&I <sup>†</sup>
Reporting Area	Ages	<u>≥</u> 65	45-64	25-44	1-24	<1	Total	Reporting Area	Ages	≥65	45-64	25-44	1-24	<1	Total
New England	572	409	120	18	9 4	16	74 18	S. Atlantic	1,304 140	801	328	93	32	49	80
Boston, MA Bridgeport, CT	145 37	94 24	37 13	4	4	6	5	Atlanta, GA Baltimore, MD	140	70 91	29 32	13 14	6 3	22 6	7 19
Cambridge, MA	12	12		_	_	_	1	Charlotte, NC	141	98	31	7	1	4	17
Fall River, MA	29	23	5	1	_	—	5	Jacksonville, FL	206	133	53	10	7	2	10
Hartford, CT	53	34	13	3	2	1	5	Miami, FL	111	63	31	10	5	2	6
Lowell, MA Lynn, MA	33 7	22 5	7 1	1	1	3	3 1	Norfolk, VA Richmond, VA	58 67	41 30	14 24	11	1	3 1	3 2
New Bedford, MA	21	17	4	_	_	_	4	Savannah, GA	65	45	13	4	1	2	2
New Haven, CT	49	34	10	_	1	4	6	St. Petersburg, FL	56	37	10	7	1	1	3
Providence, RI	60	49	10	1	—	—	7	Tampa, FL	196	128	53	9	2	4	7
Somerville, MA Springfield, MA	3 39	3 23	9	5	1	1	1 4	Washington, D.C.	103 15	53 12	37 1	7 1	4 1	2	1 3
Waterbury, CT	24	18	5		_	1	2	Wilmington, DE							
Worcester, MA	60	51	6	3	_	_	12	E.S. Central	948 232	655 160	209 51	47	23 6	14 3	101
Mid. Atlantic	2,419	1,660	530	135	38	53	171	Birmingham, AL Chattanooga, TN	73	49	14	12 6	3	1	30 11
Albany, NY	49	35	6	5	_	3	5	Knoxville, TN	106	71	25	8	1	1	8
Allentown, PA	37	30	5	2	_		1	Lexington, KY	42	26	8	4	2	2	3
Buffalo, NY	78	52	17	7	_	2	6	Memphis, TN	175	133	37	2	2	1	17
Camden, NJ Elizabeth, NJ	22 19	11 15	5 4	2	1	3	2 5	Mobile, AL Montgomery, AL	82 64	57 36	17 21	3 6	3 1	2	3 13
Erie, PA	62	49	10	3	_	_	8	Nashville, TN	174	123	36	6	5	4	16
Jersey City, NJ	41	26	12	3		_	5	W.S. Central	1,683	1,089	409	94	37	54	127
New York City, NY	1,151	806	236	57	20	30	58	Austin, TX	92	68	18	3	1	2	12
Newark, NJ Paterson, NJ	64 23	33 14	21 6	4 2	1	4	4 3	Baton Rouge, LA	33	18	4	2	2	7	_
Philadelphia, PA	458	277	126	36	12	7	30	Corpus Christi, TX	77	51	22	2	1	1	9
Pittsburgh, PA§	U	U	Ŭ	Ŭ	Ŭ	Ů	Ŭ	Dallas, TX	178	107	41	15	3	12	7
Reading, PA	36	27	6	3	_	—	1	El Paso, TX Fort Worth, TX	75 127	51 89	18 29	2 2	3 1	1 6	4 11
Rochester, NY	122	93	22	4	2	1	19	Houston, TX	450	263	131	37	9	10	32
Schenectady, NY Scranton, PA	33 36	25 25	8 10	1	_	_	5	Little Rock, AR	98	71	19	6	2	—	2
Syracuse, NY	129	100	22	3	1	3	18	New Orleans, LA <sup>1</sup>	U	U	U	U	U	U	U
Trenton, NJ	28	20	7	1		_	—	San Antonio, TX Shreveport, LA	301 122	204 80	70 30	12 7	5 2	10 3	24 14
Utica, NY	10	7	2	1	_	—	1	Tulsa, OK	130	87	27	6	8	2	12
Yonkers, NY	21	15	5	1		_	_	Mountain	1,215	835	252	75	23	30	111
E.N. Central Akron, OH	2,200 57	1,493 33	523 19	113 2	33 1	38 2	206 3	Albuquerque, NM	134	96	22	12	3	1	9
Canton, OH	47	39	8		_		6	Boise, ID	47	38	7	1	_	1	4
Chicago, IL	328	191	87	38	6	6	23	Colorado Springs, CO Denver, CO	64 130	40 86	18 28	6 6	2	8	5 11
Cincinnati, OH	78	49	17	3	1	8	12	Las Vegas, NV	287	203	20 63	15	4	2	23
Cleveland, OH Columbus, OH	252 253	176 165	58 64	12 13	3 3	3 8	16 25	Ogden, UT	35	27	7		_	1	1
Dayton, OH	255 146	105	38	13		_	25 16	Phoenix, AZ	175	100	41	19	5	10	11
Detroit, MI	185	105	58	16	3	3	13	Pueblo, CO	34	23 84	8	3	3	4	5
Evansville, IN	38	32	5	_	1	—	6	Salt Lake City, UT Tucson, AZ	113 196	138	14 44	8 5	6	4	16 26
Fort Wayne, IN Gary, IN	66 13	50 8	14 4	1 1	1	—	2 2	Pacific			329	83	35		
Grand Rapids, MI	65	49	10	3	2	1	7	Berkeley, CA	1,698 17	1,225 11	329 4	2		26	195 1
Indianapolis, IN	204	134	50	13	5	2	26	Fresno, CA	110	77	21	6	5	1	7
Lansing, MI	50	36	11	2	1	—	4	Glendale, CA	21	18	1	2	_		6
Milwaukee, WI Peoria, IL	85 59	61 42	19 13	3 1	2 3	_	13 11	Honolulu, HI Long Beach, CA	80 59	55 41	11 12	8 3	2 2	4 1	13 14
Rockford, IL	58	42	9	1		1	7	Los Angeles, CA	256	176	62	12	5	1	36
South Bend, IN	58	39	16	_	_	3	2	Pasadena, CA	24	17	6	1	_	_	4
Toledo, OH	76	60	13	2	1		7	Portland, OR	119	87	21	5	4	2	11
Youngstown, OH	82	70	10	1	_	1	5	Sacramento, CA	192	146	35	7	1	3 4	28
W.N. Central	711	474	164	47	11	13	73	San Diego, CA San Francisco, CA	176 121	132 82	31 23	6 9	3 6	4	18 12
Des Moines, IA	53	37	9	6	1	_	2	San Jose, CA	192	138	41	7	1	5	18
Duluth, MN Kansas City, KS	32 27	23 20	8 5	1 2	_	_	2 3	Santa Cruz, CA	24	20	4	_	—	_	3
Kansas City, MO	110	70	30	6	1	2	10	Seattle, WA	117	90	18	3	3	3	8
Lincoln, NE	36	29	5	2	_	—	9	Spokane, WA Tacoma, WA	75 115	58 77	9 30	7 5	1 2	1	11 5
Minneapolis, MN	68	45	17	3	_	3	11								
Omaha, NE St. Louis, MO	113 154	82 87	18 45	4 13	5 4	4 4	14 14	Total	12,750**	8,641	2,864	705	241	293	1,138
St. Paul, MN	50	37	43	5	-	-	3								
Wichita, KS	68	44	19	5	_	_	5								

U: Unavailable.

U: Unavailable. —:No reported cases. Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included. <sup>†</sup> Pneumonia and influenza.

<sup>1</sup>Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks. <sup>1</sup>Because of Hurricane Katrina, weekly reporting of deaths has been temporarily disrupted. \*\*Total includes unknown ages.

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TABLE IV. Provisional cases of selected notifiable	disease,*
United States, quarter ending March 29, 2008 (13th	n Week)

United States, quarter	ending I			th Week)	
			uberculosis vious		
	Current	4 qu	arters	Cum	Cum
Reporting area United States	quarter 1,157	Min 1,157	Max 3,085	2008 1,157	2007 2,557
New England Connecticut Maine Massachusetts New Hampshire Rhode Island	24 21 	24 21 0 0 2 0	44 29 8 0 4 8	24 21 — 3	56 30 3 
Vermont Mid. Atlantic New Jersey New York (Upstate) New York City Pennsylvania	402 58 48 206 90	0 402 58 47 206 72	1 539 152 99 250 90	402 58 48 206 90	1 379 80 48 205 46
E.N. Central Illinois Indiana Michigan Ohio Wisconsin	110 55  3 47 5	110 55 0 3 47 5	295 137 0 74 71 29	110 55 — 3 47 5	232 121 7 38 52 14
W.N. Central Iowa Kansas Minnesota Missouri Nebraska North Dakota South Dakota	76 13  29 20 12  2	76 1 29 20 7 0 2	132 13 18 73 32 12 0 6	76 13 	100 7 19 45 26 1 2
S. Atlantic Delaware District of Columbia Florida Georgia Maryland North Carolina South Carolina Virginia West Virginia	180 — 18 39 40 42 — — 33 8	180 0 39 40 42 0 0 33 6	705 7 18 288 177 75 117 12 125 8	180 	676 5 11 213 274 55 61 16 37 4
E.S. Central Alabama Kentucky Mississisppi Tennessee	93 33 2 17 41	93 33 2 17 41	226 50 42 46 88	93 33 2 17 41	112 41 17 22 32
<b>W.S. Central</b> Arkansas Louisiana Oklahoma Texas	116 8 20 88	116 8 0 20 88	472 33 0 44 416	116 8  20 88	401 21  39 341
Mountain Arizona Colorado Idaho Montana Nevada New Mexico Utah Wyoming	32 17 3 — 9 3	32 17 0 0 0 4 3 0	196 158 9 0 0 0 17 12 0	32 17 3 — 9 3 —	75 14 17 — 16 14 14
Pacific Alaska California Hawaii Oregon Washington	124 11 94 19 —	124 11 94 19 0 0	815 15 704 37 0 70	124 11 94 19 	526 10 419 32  65
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	 	0 0 0 0	3 	 	6

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Min: Minimum. Max: Maximum. \* AIDS and HIV/AIDS data are not updated for this quarter because of upgrading of the national HIV/AIDS surveillance data management system.

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