Centers for Disease Control and Prevention

Weekly / Vol. 59 / No. 34

Morbidity and Mortality Weekly Report

September 3, 2010

Multiple-Serotype Salmonella Gastroenteritis Outbreak After a Reception — Connecticut, 2009

In September 2009, the Connecticut Department of Public Health (DPH) identified an outbreak of Salmonella gastroenteritis among attendees at a reception. A case-control study and environmental and laboratory investigations were conducted. Nine case-patients and 14 control subjects were identified. Potato salad consumption was strongly associated with illness (odds ratio [OR] = 84.0). During the investigation, food service workers were observed to have bare-handed contact with ready-to-eat food. Five case-patients and one asymptomatic food service worker had stool samples positive for Salmonella species. Two Salmonella serotypes were identified, Salmonella enterica serovar Schwarzengrund and Salmonella enterica serovar Typhimurium variant O:5-, including coinfection in one case-patient and one food service worker. The isolates of each respective serotype (S. Schwarzengrund and S. Typhimurium variant O:5-) had indistinguishable pulsed-field gel electrophoresis (PFGE) patterns. Potato salad was the likely source of the outbreak but the contamination mechanism is unclear. Control measures included exclusion of the food service worker with Salmonella-positive stool from the restaurant until two consecutive stool samples yielded no bacterial growth. Standard public health laboratory practices in Connecticut and testing techniques used specifically during this investigation led to the rapid identification of the two serotypes. Multiple-serotype Salmonella outbreaks might occur more frequently than recognized; knowledge of all Salmonella serotypes involved in an outbreak might help implicate the outbreak source, define the scope of the outbreak, and determine the selection of appropriate control measures.

On September 18, 2009, a physician notified the DPH Epidemiology and Emerging Infections Program of a laboratoryconfirmed *Salmonella* infection in a person who had attended a reception at a banquet hall on September 6. Preliminary information indicated that other attendees became symptomatic with gastrointestinal illness after the reception. Food served at the reception was prepared at an off-site licensed restaurant, delivered to the banquet hall by restaurant staff, and set up as a self-serve buffet. DPH and the local health department conducted an investigation to determine the source and extent of the illnesses and to recommend control measures.

A case-control study was conducted among attendees. A case was defined as diarrhea (three or more loose stools during a 24-hour period) in a reception attendee within 5 days after the reception. A control subject was defined as an attendee who did not experience gastrointestinal illness. Because no guest list existed, contact information for ill attendees was provided by the reception host; control subjects and additional casepatients were recruited by asking known attendees to identify and provide contact information for other attendees. Contact information was obtained for 25 (17%) of the approximately 150 attendees. DPH conducted telephone interviews during September 21–25 regarding illness history and food consumed at the reception; an itemized list of foods served at the reception was used to obtain food consumption histories. Of the 25 interviewed attendees, nine (36%) met the case definition, 14 qualified as control subjects, and two were excluded because they reported gastrointestinal illness that did not meet the case

INSIDE

- 1098 Use of a Self-Assessment Questionnaire for Food Safety Education in the Home Kitchen — Los Angeles County, California, 2006–2008
- 1102 Updated Recommendations for Prevention of Invasive Pneumococcal Disease Among Adults Using the 23-Valent Pneumococcal Polysaccharide Vaccine (PPSV23)
- 1107 Announcements
- 1108 QuickStats



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Centers for Disease Control and Prevention www.cdc.gov/mmwr



definition. Of the nine case-patients, eight (89%) had abdominal cramping, seven (78%) had subjective fever, six (67%) had muscle aches, and four (44%) had bloody stools (Table). Median age was 31 years (range: 25–51 years); five (56%) were male. The median incubation period* was 13.5 hours (range: 9.5–95.5 hours); median illness duration was 8.5 days (range: 0.5–14 days). A case-control analysis revealed that case-patients were significantly more likely than control subjects to have consumed potato salad (88% versus 8%, respectively; OR = 84.0; 95% confidence interval = 3.3-4,077; p<0.001).

During September 21–October 1, the local health department and the DPH Food Protection Program conducted an environmental investigation of the restaurant in which the food served at the reception had been prepared. Of the four persons who worked at the restaurant, two were directly involved in food preparation for the reception. All four were interviewed, and none reported experiencing gastrointestinal illness. During the investigation, food service workers were observed to have bare-handed contact with ready-toeat food and did not practice adequate hand washing. Preparation procedures of items served at the reception, including the potato salad, were reviewed, and environmental samples of food contact surfaces and spices used in preparation of the reception food were collected for testing. The environmental and spice samples were obtained >3 weeks after the outbreak occurred and after the facility had been cleaned; *Salmonella* was not detected in these samples. No leftover potato salad was available for testing.

The stool sample from the index case-patient was collected on September 14 and processed at a private laboratory; the clinical isolate was then sent to the DPH laboratory for confirmation. Stool specimens from five additional case-patients and all four food service workers were collected during September 21–October 7 and tested at the DPH laboratory. The specimens were first plated to selective media to test for the presence of *Salmonella*, *Shigella*, *Campylobacter*, and *Escherichia coli* O157. After incubation, presumptive *Salmonella* colonies

The *MMWR* series of publications is published by the Office of Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333. Suggested citation: Centers for Disease Control and Prevention. [Article title]. MMWR 2010;59:[inclusive page numbers].

Centers for Disease Control and Prevention

Thomas R. Frieden, MD, MPH, Director

Harold W. Jaffe, MD, MA, Associate Director for Science

James W. Stephens, PhD, Office of the Associate Director for Science

Stephen B. Thacker, MD, MSc, Deputy Director for Surveillance, Epidemiology, and Laboratory Services

MMWR Editorial and Production Staff

Christine G. Casey, MD, (Acting) Editor, MMWR Series

Sheryl B. Lyss, MD, MPH, (Acting) Deputy Editor, MMWR Series Robert A. Gunn, MD, MPH, Associate Editor, MMWR Series Teresa F. Rutledge, Managing Editor, MMWR Series Douglas W. Weatherwax, Lead Technical Writer-Editor Donald G. Meadows, MA, Jude C. Rutledge, Writer-Editors Martha F. Boyd, *Lead Visual Information Specialist* Malbea A. LaPete, Stephen R. Spriggs, Terraye M. Starr *Visual Information Specialists* Quang M. Doan, MBA, Phyllis H. King *Information Technology Specialists*

MMWR Editorial Board

William L. Roper, MD, MPH, Chapel Hill, NC, Chairman

Virginia A. Caine, MD, Indianapolis, IN Jonathan E. Fielding, MD, MPH, MBA, Los Angeles, CA David W. Fleming, MD, Seattle, WA William E. Halperin, MD, DrPH, MPH, Newark, NJ King K. Holmes, MD, PhD, Seattle, WA Deborah Holtzman, PhD, Atlanta, GA John K. Iglehart, Bethesda, MD Dennis G. Maki, MD, Madison, WI Patricia Quinlisk, MD, MPH, Des Moines, IA Patrick L. Remington, MD, MPH, Madison, WI Barbara K. Rimer, DrPH, Chapel Hill, NC John V. Rullan, MD, MPH, San Juan, PR William Schaffner, MD, Nashville, TN Anne Schuchat, MD, Atlanta, GA Dixie E. Snider, MD, MPH, Atlanta, GA John W. Ward, MD, Atlanta, GA

^{*} Meal service began at approximately 6 p.m. The incubation period was calculated using 7:30 p.m. as the likely time by which all case-patients had eaten food.

				Ca	se-patient				
Characteristic	1	2	3†	4	5	6	7	8	9
Age (yrs)	25	51	27	31	N/A§	N/A	31	34	34
Incubation (hrs) [¶]	9.5	11.5	12.5	12.5	13.5	24.5	40.5	64.5	95.5
Signs and symptoms	;								
Diarrhea**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Abdominal cramping	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Fever (subjective)	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes
Muscle aches	No	Yes	Yes	Yes	N/A	Yes	Yes	No	Yes
Bloody stools	No	No	Yes	Yes	No	Yes	Yes	No	No
Duration of illness	14 days	7 days	10 days	10 days	2 days	14 days	5 days	<1 day	N/A
Pathogen ^{††}	Salmonella Schwarzengrund	Not tested	Salmonella Typhimurium variant O:5–	Salmonella Typhimurium variant O:5– and Salmonella Schwarzengrund	Negative at DPH	Salmonella Typhimurium variant O:5–	Salmonella Schwarzengrund	Not tested	Negative at private laboratory

TABLE. Demographic and clinical characteristics of Salmonella gastroenteritis outbreak case-patients* at a reception — Connecticut, 2009

* Does not include food service workers; stool specimen from one food service worker tested positive for Salmonella enterica serovar Typhimurium variant O:5- and Salmonella Schwarzengrund at the Connecticut Department of Public Health (DPH) laboratory.

⁺ Index case-patient; clinical isolate, but not stool specimen, was available for testing.

 $^{\$}$ N/A = information not available.

¹ Meal service began at approximately 6 p.m. Incubation period calculated using 7:30 p.m. as the likely time by which all case-patients had eaten food.

** Three or more loose stools during a 24-hour period in a reception attendee within 5 days after the reception.

⁺⁺ Pathogens were identified by Connecticut DPH laboratory by serotyping and pulsed-field gel electrophoresis.

were serotyped[†] and subtyped genetically by PFGE. Serotyping and PFGE testing were not sequential.[§]

The isolate from the index case-patient was serotyped as S. Typhimurium variant O:5–. Initial serotyping steps performed on Salmonella isolates obtained from stool specimens revealed a preliminary antigen result consistent with the S. Typhimurium variant O:5– already identified for the index case-patient. Consequently, investigators assumed that S. Typhimurium variant O:5– was the only outbreak serotype. Next, while final serotyping was pending, Salmonella isolates were submitted for PFGE. Testing of the first five isolates yielded two distinct PFGE patterns (PFGE XbaI patterns JPXX01.0456 and JM6X01.0036[¶]). One PFGE pattern appeared to be consistent with *S*. Typhimurium; the other appeared to be consistent with *S*. Schwarzengrund. The results of serotyping verified the presence of both *S*. Typhimurium variant O:5– and *S*. Schwarzengrund.

The identification of both S. Typhimurium variant O:5- and S. Schwarzengrund in reception attendees raised the possibility that two different Salmonella serotypes might be involved in the outbreak. Therefore, laboratory staff systematically collected multiple single-colony picks from original media to screen for the presence of an additional Salmonella serotype. After all testing was complete, including isolation, serotyping, and PFGE, two of the six casepatients with specimens at the DPH laboratory were determined to be infected with S. Typhimurium variant O:5-, another two with S. Schwarzengrund, and one with both; no pathogens were isolated from the stool specimen of the sixth case-patient. A seventh case-patient's stool specimen was tested at a private laboratory; no Salmonella was detected. Of the four food service worker specimens tested, one yielded both S. Schwarzengrund and S. Typhimurium variant O:5- and the other three were negative. All respective S. Schwarzengrund isolates and S. Typhimurium variant O:5- isolates had indistinguishable PFGE patterns.

[†] Salmonella serotypes are based on the immunoreactivity of two surface structures, the O antigen and the H antigen. Serotyping was performed according to the Kauffmann-White Scheme. Additional information available at http://www.cdc.gov/ncidod/dbmd/ phlisdata/salmtab/2006/salmonellaannualsummary2006.pdf.

[§] Salmonella isolates were first screened for O antigens by using the slide agglutination method, a process that usually takes <1 minute to perform. Screening for H antigens was done by a tube agglutination test, a process that can take days to complete. While the H antigen test was pending, a fresh culture generated from a single-colony pick from the selective media underwent PFGE testing; single-colony picks from different persons' samples were run on the same PFGE gel. Because H antigen and PFGE testing ran concurrently, the PFGE results were typically available before H antigen testing was complete, and therefore, before the final serotype was known.

PFGE pattern names were assigned by CDC's PulseNet database.

What is already known on this topic?

Salmonella commonly causes foodborne illness; however, Salmonella outbreaks involving multiple serotypes are reported less commonly.

What does this report add?

Epidemiologic and laboratory data demonstrate that an outbreak of *Salmonella* infection with two different serotypes occurred among guests who attended a reception; rapid identification of the multiple serotypes was facilitated by confirmatory testing at the state laboratory, specifically the use of stool samples for subsequent serotyping and pulsed-field gel electrophoreses testing.

What are the implications for public health practice?

Multiple-serotype *Salmonella* outbreaks might occur more frequently than recognized; if resources permit, health departments can better characterize the epidemiology of *Salmonella* outbreaks by performing serotyping and PFGE, and by testing multiple singlecolony picks when multiple *Salmonella* serotypes are suspected.

On September 25, the food service worker with positive stool findings was reinterviewed and reaffirmed the absence of recent gastrointestinal illness, including around the time of the reception. This food service worker had been responsible for transporting food to the banquet hall and ensuring that the food was maintained at the correct temperature before serving, but reported not having prepared, consumed, nor served any of the food.

Control measures implemented by the local health department included exclusion of the *Salmonella*-positive food service worker from the restaurant for approximately 2 weeks until two consecutive stool cultures obtained \geq 24 hours apart had no bacterial growth. Health department staff members provided information about employee health policies and employee hygiene to the restaurant owners and reviewed the information with them.

Reported by

L Mank, MS, M Mandour, Connecticut Dept of Public Health Laboratory; T Rabatsky-Ehr, MPH, Q Phan, MPH, J Krasnitski, MPH, J Brockmeyer, MPH, L Bushnell, C Applewhite, M Cartter, MD, Connecticut Dept of Public Health. J Kattan, MD, EIS Officer, CDC.

Editorial Note

Epidemiologic and laboratory data demonstrate that an outbreak of *Salmonella* infection with two different serotypes occurred among guests who attended a reception; potato salad was the likely source of this outbreak, but the contamination mechanism is unclear. Likewise, whether the food service worker might have unknowingly contaminated a food item or whether the food service worker also was infected through the same source as the case-patients remains unclear.

Salmonella is the most common bacterial cause of foodborne disease outbreaks in the United States (1). However, outbreaks of *Salmonella* infection with multiple serotypes are reported less commonly in the literature (2-4). Standard public health laboratory practices in Connecticut,** as well as testing techniques used specifically in the context of this outbreak investigation, led to the rapid identification of two distinct serotypes. Connecticut requires all identified Salmonella isolates to be submitted to the DPH laboratory, where serotyping and PFGE are routinely performed; private laboratories in Connecticut do not have the capacity to perform full serotyping and PFGE testing. Initiating PFGE testing before finalization of serotyping led to more rapid recognition of the two different serotypes; complete serotyping can take days, whereas PFGE testing can take as little as 1 day after pure isolate is available for analysis.

Systematically screening and testing multiple single-colony picks on each original culture plate, a time-intensive practice that is usually not part of routine laboratory protocol, facilitated identifying both outbreak serotypes. This approach particularly aided discovery of coinfection with two *Salmonella* serotypes in one case-patient and the food service worker. The recognition of coinfection helped investigators conclude that a multiple-serotype outbreak had occurred. Furthermore, testing multiple colonies is dependent upon availability of stool specimens; had all of the case-patients' stool been first tested at a private laboratory, such that only single clinical isolates were available for testing at the DPH

^{**} Connecticut is a participant in the Foodborne Diseases Active Surveillance Network (FoodNet), the principle foodborne disease component of CDC's Emerging Infections Program (EIP). FoodNet is a collaborative project between CDC, 10 EIP sites, the U.S. Department of Agriculture, and the Food and Drug Administration. As part of FoodNet, Connecticut conducts active, laboratory-based surveillance of foodborne bacterial and parasitic pathogens. Additional information is available at http://www.cdc. gov/foodnet.

laboratory, coinfection in the case-patient would not have been discovered.

Not all states require that all Salmonella isolates be submitted to the public health laboratory for serotyping and PFGE. Additionally, in an outbreak setting, some states with resource limitations might only perform comprehensive testing on a very limited number of case-patient specimens. If the outbreak described in this report had taken place in a state without a requirement for submission of Salmonella isolates to the public health laboratory or in a state in which the number of specimens tested was strictly limited, the discovery of both Salmonella serotypes might not have occurred. In those public health laboratories that perform both serotype and PFGE testing, but do not do so simultaneously, multiple-serotype infections would not be identified as quickly as they were in this outbreak.

Although not specifically illustrated by the findings in this report, not knowing about all Salmonella serotypes involved in an outbreak might hinder the epidemiologic investigation and the public health response. Certain Salmonella serotypes are known to be likely associated with particular food types or animal sources. Consequently, knowledge of multiple serotypes involved in an outbreak can help focus the investigation on potential outbreak sources. Databases, such as PulseNet,^{††} can identify and link infected persons to a particular outbreak, thereby defining the scope. In a recent outbreak, PulseNet matched two different Salmonella serotypes to an outbreak linked to peppers used in making salami (4). If an outbreak were detected through PulseNet, not knowing all involved serotypes might result in cases not being associated with the outbreak. If only cases with a single serotype were included in such responses, sampled cases might not be representative of all cases. Furthermore, identifying a greater number of cases associated with multiple serotypes in an outbreak might increase the statistical power of the study to implicate a food vehicle or other outbreak source through epidemiologic analysis. Implementation of appropriate control measures relies on knowing the implicated source and the scope of the outbreak, particularly if multiple serotypes are involved.

The findings in this report are subject to at least three limitations. First, lack of a comprehensive guest list prohibited a cohort analysis. Second, recruitment of control subjects through known attendees might have introduced selection bias; attendees who knew each other might have had similar food preferences, potentially increasing the likelihood that case-patient and control subject food histories were similar. However, such a tendency would bias the results toward showing no association. Finally, the time lag between the reception and collection of environmental samples limited their usefulness.

Multiple-serotype Salmonella outbreaks might occur more frequently than recognized. Health departments should be aware of the possible occurrence of such outbreaks to better characterize their epidemiology. This outbreak demonstrates the importance of capacity to perform Salmonella serotyping and PFGE testing at public health laboratories. In outbreak settings, obtaining stool samples and performing comprehensive serotyping and PFGE at public health laboratories facilitate detection of multiple Salmonella serotypes. When more than one Salmonella serotype is suspected in an outbreak, screening and testing multiple single-colony picks could be considered, if resources permit, as an important technique for identifying multiple serotypes, including coinfection, among cases.

Acknowledgments

This report is based, in part, on contributions by local health department staff; K Desy, MPH, K Purviance, MPH, L Sosa, MD, Connecticut Dept of Public Health; A Kinney, D Barden, J Fontana, PhD, Connecticut Dept of Public Health Laboratory; J Hadler, MD, Connecticut Emerging Infections Program; and J Magri, MD, and I Williams, PhD, CDC.

References

- CDC. Surveillance for foodborne disease outbreaks—United States, 2006. MMWR 2009;58;609–15.
- Taylor JL, Dwyer DM, Groves C, et al. Simultaneous outbreak of *Salmonella enteritidis* and *Salmonella* Schwarzengrund in a nursing home: association of *S. enteritidis* with bacteremia and hospitalization. J Infect Dis 1993;167:781–2.
- 3. Sotir MJ, Ewald G, Kimura AC, et al. Outbreak of *Salmonella* Wandsworth and Typhimurium infections in infants and toddlers traced to a commercial vegetable-coated snack food. Pediatr Infect Dis J 2009;28:1041–6.
- 4. CDC. Investigation update: multistate outbreak of human *Salmonella* Montevideo infections. Atlanta, GA: US Department of Health and Human Services, CDC; 2010. Available at http://www.cdc.gov/salmonella/montevideo/index.html. Accessed July 16, 2010.

^{††} PulseNet is a national network of laboratories in which participants submit PFGE results on certain types of bacterial isolates; the database is available on demand to participants, allowing for rapid comparison of PFGE patterns. Additional information is available at http://www.cdc.gov/pulsenet.

Use of a Self-Assessment Questionnaire for Food Safety Education in the Home Kitchen — Los Angeles County, California, 2006–2008

Foodborne diseases remain an important cause of morbidity in the United States among all age groups (1,2). A potentially important contributor to this morbidity is improper food handling and preparation practices in kitchens at restaurants and in private homes (1,2). In 1998, the Los Angeles County Department of Public Health (LACDPH) established numeric scores for restaurant inspections and posted grades for these inspections publicly; by the end of 1998 this initiative was credited with helping to reduce by 13.1% (compared with 1997) the number of hospitalizations for foodborne infections from nontyphoidal Salmonella, Campylobacter, and Escherichia coli in the region (3). In the spring of 2006, the LACDPH Environmental Health Program launched the Home Kitchen Self-Inspection Program, a voluntary self-inspection and education program, to promote safer food hygiene practices at home. This report describes the implementation of this program and the results from its web-based selfassessment questionnaire, the Food Safety Quiz, for the initial program period of 2006–2008. Overall, approximately 13,000 adults completed the quiz; 34% received an A rating, 27% a B, 25% a C, and 14% received a numeric score because they scored lower than 70% on the self-assessment. Use of interactive, online learning tools such as the Food Safety Quiz can be used to promote home food safety in the community. Further research is needed to evaluate and improve the program content and to assess its effect on changing food handling and preparation practices in the home kitchen.

The Home Kitchen Self-Inspection Program includes a Food Safety Quiz* that is based on emerging evidence that the use of online, interactive learning tools are conducive to problem-based learning, improve self-efficacy and self-mastery of selected skills, and offer convenience and flexibility to the learner (4). The content of the questions was guided by food safety education principles[†] from the U.S.

Department of Agriculture: clean, separate, cook, and chill. The framework of the quiz was based on adult learning theories (4) and emphasized such food handling practices as the need to clean and sanitize cutting boards after handling poultry, the safe handling of raw eggs, and appropriate methods for the refrigeration of cooked and uncooked foods. The quiz provided valuable instruction to respondents about better ways to maintain home food safety.

The quiz, available only in English, queried respondents regarding food handling and preparation practices at home, assigning a letter grade at completion using a scoring algorithm (i.e., A [90%–100%], B [80%-89%], C [70%-79%], or an actual score if the rating was below 70%) that was adapted from, but not identical to, the algorithm used for restaurant grading. Although quiz questions were based on food hygiene standards used routinely to evaluate food safety in full-service restaurants, the questionnaire limited queries about physical structure (e.g., damaged floor tiles and cracked walls) and excluded questions on the food handler certification requirements; instead, the quiz rating algorithm specifically focused on food hygiene practices that are considered by the LACDPH Environmental Health Program to be the most relevant to home kitchens and focused on cleaning and chilling as two areas of food safety that county residents might often overlook when cooking at home.

The quiz included 57 questions; 45 were formatted as equally weighted yes/no questions, simulating an inspection checklist that could be completed within 10 minutes. The remaining 12 questions inquired about demographic information. To receive the final score/self-inspection rating, all questions had to be completed. Respondents who received an A rating were mailed a placard with this grade as recognition for their good food handling practices. During March–May, the first 3 months after launch, the quiz was marketed to the public using printed materials and public service announcements in the local media, including television and radio, and at public events.

^{*}Available at http://publichealth.lacounty.gov/phcommon/public/ eh/fsquiz.

[†]Available at http://www.fsis.usda.gov/be_foodsafe/bfs_messages/ index.asp.

What is already known on this topic?

In 1998, the Los Angeles County Department of Public Health launched an initiative that publicly posted newly implemented restaurant grades; that year, the initiative was credited with helping to reduce by 13.1% (compared with 1997) the number of hospitalizations for foodborne infections from nontyphoidal *Salmonella, Campylobacter,* and *Escherichia coli* in the region.

What is added by this report?

According to a new self-assessment food safety quiz that graded home kitchens similarly to restaurants, 34% of respondent's home kitchens would have received an A rating, 27% a B, 25% a C, and 14% would have received a numeric score because they scored lower than 70% on the self-assessment.

What are the implications for public health practice?

Innovative tools that educate the public about home kitchen safety can complement established restaurant hygiene rating programs and aid other prevention efforts to further reduce foodborne illnesses.

During 2006–2008, a total of 27,129 visits to the website were recorded; 19,205 (71%) respondents reported Los Angeles County postal codes, § for which 13,274 unique respondents completed the quiz. Most respondents were female (68%), ranged in age from 18 to 59 years (78%), spoke English at home (86%), and reported being the primary cook (81%); 17% of respondents believed that they had ever become ill from eating at home (Table 1).

When queried regarding food handling and preparation practices, approximately 27% reported not storing partially cooked foods that would not be used immediately in the refrigerator before final cooking, 28% said they did not remove all jewelry from hands and/or did not keep fingernails trimmed when cooking, and 26% reported that their kitchen shelves and cabinets were not clean and free from dust (Table 2). Approximately 36% of respondents said that they did not have a properly working thermometer inside the refrigerator. Approximately 9% reported that they had flies inside the home; 6% reported cockroaches; and 5% reported rodents inside their homes.

If home kitchens were graded similarly to restaurants and were required to post letter grades in the kitchen based on results from the quiz, 34% of TABLE 1. Characteristics of respondents (N = 13,274) to the Home Kitchen Self-Inspection Program Food Safety Quiz — Los Angeles County, California, 2006–2008

Characteristic	No.	(%)*
Sex		
Male	4,285	(32)
Female	8,989	(68)
Age group (yrs)		
<18	127	(1)
18–39	4,846	(37)
40–59	5,420	(41)
≥60	1,149	(9)
Not reported	1,732	(13)
Language spoken at home		
English	11,412	(86)
Spanish	491	(4)
Tagalog	114	(1)
Other	1,257	(10)
Other [†]		
Primary cook at home	10,747	(81)
Restaurant ratings influenced decisions to eat at restaurants	11,804	(89)
Respondent believed he/she had become ill from eating at home	2,259	(17)
Ever reported a foodborne illness	1,511	(11)

* Percentages might not sum to 100 because of rounding.

[†]Not mutually exclusive; respondents could list more than one response.

respondents would have received an A rating, 27% a B, 25% a C; 14% would have received a numeric score because they scored lower than 70%.

Reported by

T Kuo, MD, H Dela Cruz, MS, M Redelings, MPH, LV Smith, DrPH, R Reporter, MD, PA Simon, MD, JE Fielding, MD, SM Teutsch, MD, Los Angeles County Dept of Public Health, Los Angeles, California.

Editorial Note

Home kitchen-related foodborne diseases are vastly underreported (1,2). The findings in this report show that even among interested and motivated persons, food handling and preparation deficiencies occur frequently in the home setting. Only approximately one third of respondents completing the quiz would have received an A rating.

Although the percentages of home kitchens assigned A or B ratings (61%) was considerably lower than for full-service restaurants (98%) during 2006– 2008 (LACDPH, unpublished data, 2009), these observations would not be directly comparable to restaurants because the self-assessment and grading of home kitchens were exclusively based on respondent self-reports and were intended to promote learning. Restaurants, by contrast, were physically inspected by

[§] Duplicates (i.e., persons who attempted the online self-assessment more than once) were identified through an algorithm and eliminated. The algorithm accounted for consistency among postal code, date when quiz was taken, and demographic information.

	Ma	les	Fem	ales	То	tal
Home kitchen practice	No.	(%)	No.	(%)	No.	(%)
When cooking big portions of food to serve later, respondent did not rapidly cool and store it in refrigerator	2,652	(62)	5,815	(65)	8,467	(64)
Respondent did not have a properly working thermometer inside refrigerator	1,653	(39)	3,054	(34)	4,707	(36)
Respondent did not store raw meats below all other food in refrigerator [†]	1,393	(33)	2,865	(33)	4,258	(33)
Respondent did not remove all jewelry from hands before preparing food and/or did not keep fingernails trimmed	925	(22)	2,739	(31)	3,664	(28)
espondent did not store partially cooked foods that would not be used immediately in refrigerator before final cooking	1,141	(27)	2,465	(27)	3,606	(27)
itchen shelves and cabinets were not clean and free from dust	1,028	(24)	2,391	(27)	3,419	(26)
ood in refrigerator was not well-spaced so that cool air can circulate freely	949	(22)	2,055	(23)	3,004	(23)
lies inside the home	468	(11)	732	(8)	1,200	(9)
Cockroaches inside the home	314	(7)	522	(6)	836	(6)
odents inside the home (not including pet rodents in cages)	277	(7)	414	(5)	691	(5)

TABLE 2. Number and percentage of respondents (N = 13,274) reporting unsafe kitchen practices,* by sex — Home Kitchen Self-Inspection Program Food Safety Quiz, Los Angeles County, California, 2006–2008

* As determined by the Los Angeles County Department of Public Health, based on the California Health and Safety Code (available at http://www.publichealth. lacounty.gov/eh/docs/specialized/cacode.pdf).

[†] Denominator used to derive the percentage is 12,932, which excludes the 342 respondents who reported that they did not prepare raw meats in their home.

trained food safety professionals and were required to have at least one certified food handler on staff.

During 1999-2007, foodborne diseases caused a reported 2,590 hospitalizations and 17 deaths in Los Angeles County; approximately 600 hospitalizations occurred in 2007 (5-7). These numbers are considered underestimates because not all foodborne illnesses leading to hospitalization or death are confirmed by laboratory testing (8). In 2006, the most common locations for reported foodborne outbreaks in Los Angeles County were restaurants (16 [43%]), followed by foods that were brought or catered to a work place (five [14%]) or eaten at home (five [14%]) (6). The initial decline in hospitalizations related to foodborne illnesses after the public posting of restaurant grades in Los Angeles County in 1998 (3) stalled after 2002 (5). This pattern suggests that addressing other sources of infection (e.g., the food supply, hazards in the food processing and distribution chain, the workplace, and in particular, the home kitchen) might be important to further reduce foodborne illness (6,8). The Home Kitchen Self-Inspection Program was developed by the LACDPH to further help address this public health problem.

The findings in this report are subject to at least two limitations. First, although approximately 13,000 respondents completed the quiz, the sample of respondents is unlikely to be representative of all county residents for several reasons. Because the questionnaire was available only in English, non-English speaking ethnic minorities could not have participated. Respondents enrolled in this self-assessment exercise based on their interest in food safety. Only persons with computers and access to the Internet were able to participate in the program. Second, the relationship between these practices and conditions and actual home kitchen conditions remains unknown.

The Home Kitchen Self-Inspection Program is the largest effort to date to use a web-based, selfassessment questionnaire as a population learning tool to provide feedback and education about home kitchen safety. LACDPH is applying the information gleaned from the quiz (e.g., implementation barriers, responses about home kitchen practices, and program data biases) to explore ways to improve the program, including 1) increasing the specificity of the question items so that they are more relevant to the home kitchen environment, 2) further tailoring the quiz to ethnically diverse or harder-to-reach communities, and 3) conducting a program evaluation to validate the program's benefits to consumer learning and food handling practices at home. Innovative tools that educate the public about home kitchen safety can complement established restaurant hygiene rating programs and aid other prevention efforts to further reduce foodborne illnesses.

References

- 1. Scott E. Food safety and foodborne disease in 21st century homes. Can J Infect Dis 2003;14:277–80.
- Redmond EC, Griffith CJ. Consumer food handling in the home: a review of food safety studies. J Food Protection 2003;66:130–61.
- 3. Simon PA, Leslie P, Run G, et al. Impact of restaurant hygiene grade cards on foodborne-disease hospitalizations in Los Angeles County. J Environ Health 2005;67:32–6.
- 4. Bouhnik D, Marcus T. Interaction in distance-learning courses. J Am Soc Information Sci Tech 2006;57:299–305.
- California Office of Statewide Health Planning and Development. Hospital dataset. Available at http://www.oshpd.ca.gov/hid/ dataflow/hospdata.html. Accessed August 31, 2010.
- Acute Communicable Disease Control Program. 2006 annual morbidity report. Los Angeles, California: Los Angeles County Department of Public Health; 2006:169–74. Available at http://www.lapublichealth.org/acd/reports/annual/2006%20 annual%20web%20posting.pdf. Accessed August 31, 2010.
- Los Angeles County Department of Public Health. Mortality dataset: 1999–2007. Available at http://publichealth.lacounty. gov/dca/dcareportspubs.htm. Accessed August 31, 2010.
- 8. Mead PS, Slutsker L, Dietz V, et al. Food-related illness and death in the United States. Emerg Infect Dis 1999;5:607–25.

Updated Recommendations for Prevention of Invasive Pneumococcal Disease Among Adults Using the 23-Valent Pneumococcal Polysaccharide Vaccine (PPSV23)

Invasive disease from Streptococcus pneumoniae (pneumococcus) is a major cause of illness and death in the United States, with an estimated 43,500 cases and 5,000 deaths among persons of all ages in 2009 (1). This report provides updated recommendations from the Advisory Committee on Immunization Practices (ACIP) for prevention of invasive pneumococcal disease (IPD) (i.e., bacteremia, meningitis, or infection of other normally sterile sites [2]) through use of the 23-valent pneumococcal polysaccharide vaccine (PPSV23) among all adults aged ≥65 years and those adults aged 19-64 years with underlying medical conditions that put them at greater risk for serious pneumococcal infection. The new recommendations include the following changes from 1997 ACIP recommendations (2): 1) the indications for which PPSV23 vaccination is recommended now include smoking and asthma, and 2) routine use of PPSV23 is no longer recommended for Alaska Natives or American Indians aged <65 years unless they have medical or other indications for PPSV23. ACIP recommendations for revaccination with PPSV23 among the adult patient groups at greatest risk for IPD (i.e., persons with functional or anatomic asplenia and persons with immunocompromising conditions) remain unchanged (2). ACIP recommendations for prevention of pneumococcal disease among infants and youths aged ≤18 years using the 13-valent pneumococcal conjugate vaccine (PCV13) and PPSV23 are published separately (3).

Changes in IPD Incidence

Indirect vaccine effects (i.e., herd effects) have reduced pneumococcal infections among unvaccinated persons of all ages, including those aged \geq 65 years, since introduction of the routine infant 7-valent pneumococcal conjugate vaccine (PCV7) immunization program in 2000 (4). Data from Active Bacterial Core surveillance (ABCs)* indicate that, by 2007, the overall incidence rate of IPD among persons of all ages had decreased by 45% (from 24.4. to 13.5 per 100,000 population), compared with 1998–1999 before PCV7 was introduced (4). Among persons aged 18–49 years, 50–64 years, and ≥65 years, rates of IPD decreased 40%, 18%, and 37%, respectively. The decreases resulted from reductions of 87% to 92% in cases of infection with serotypes covered in PCV7 (4). Despite the major direct and indirect PCV7 effects, IPD remains an important cause of illness and death. An estimated 43,500 cases and 5,000 deaths occurred among persons of all ages in 2009; approximately 84% of IPD cases and nearly all deaths occurred in adults (1).

Additional indirect effects can be expected to occur when the PCV13 immunization program, initiated in 2010, is fully implemented, although the magnitude of these effects is difficult to predict (3). In 2008, the serotypes covered in PCV13 caused 53%, 49%, and 44% of IPD cases among persons aged 18–49 years, 50–64 years, and ≥65 years, respectively; serotypes covered in PPSV23 caused 78%, 76%, and 66% of IPD cases among persons in these age groups (Figure).

Risk Factors for IPD Among Adults

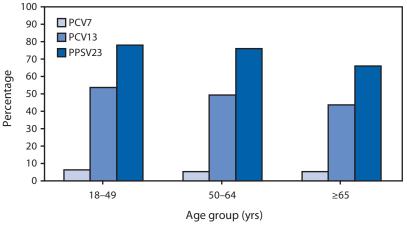
Rates of pneumococcal infection in the United States vary among demographic groups, with higher rates among infants, young children, and older persons. The presence of certain underlying medical conditions increases the risk for pneumococcal disease and its complications (2). The risk for IPD is greatest among persons who have congenital or acquired immunodeficiency, abnormal innate immune response, human immunodeficiency virus (HIV) infection, or functional or anatomic asplenia (e.g., sickle cell disease or congenital or surgical asplenia) (Table). Alaska Native children and children among certain American Indian populations also have higher rates of IPD. Among Alaska Native and American Indian adults, the majority of IPD cases occur in persons with underlying medical conditions or other risk factors (e.g., heavy alcohol use or smoking) that are associated with increased risk for IPD in the general population (5).

^{*} Additional information available at http://www.cdc.gov/abcs/index. html.

From 1998–1999 to 2006–2007, the percentage of adult IPD patients with underlying medical conditions increased from 52% to 59% among those aged 18–64 years and from 69% to 81% among those aged \geq 65 years. This trend suggests that adults with high-risk conditions might not have benefited as much from the indirect protective effects of childhood PCV7 immunization as persons who are relatively healthy (4).

Asthma. An estimated 7.3% of U.S. adults have active asthma.[†] A case-control study conducted in Tennessee, which identified cases through active, population-based and laboratory-based surveillance and verified history of asthma from the Tennessee Medicaid database, showed that among adults aged 18–49 years, IPD was more common among persons with asthma than persons without asthma (adjusted odds ratio [AOR] = 2.4; 95% confidence interval [CI] = 1.8-3.3). Among persons with high-risk asthma,[§] the risk for IPD was nearly twice that for persons with low-risk asthma (6). In contrast, in a study conducted among a cohort of older veterans (average age: 53 years), persons with asthma did not have higher rates of hospitalization for pneumococcal pneumonia compared with persons in a group without asthma or chronic obstructive pulmonary disease (COPD) who were matched to the asthma patients by age, sex, and region (7). However, in the same study, hospitalization rates for pneumococcal pneumonia among persons with COPD were higher compared with persons in the control group. Because distinguishing between COPD and asthma becomes more difficult with advancing age, misclassification of persons in this study is a possibility.

Cigarette smoking. Population-based surveillance studies conducted before introduction of PCV7 consistently reported that smokers accounted for approximately half of otherwise healthy adults with IPD (8). During 2001–2003, 53% of IPD patients aged 18–64 years were current cigarette smokers (CDC, ABCs unpublished data). In a multicenter, population-based, case-control study in which IPD patients were identified through ABCs, the risk for FIGURE. Percentage of invasive pneumococcal disease cases caused by serotypes covered in three different pneumococcal vaccine formulations (PCV7, PCV13, and PCV23) among adults aged ≥18 years, by age group — Active Bacterial Core surveillance, United States, 2008



Abbreviations: PCV7 = 7-valent pneumococcal conjugate vaccine. PCV13 = 13-valent pneumococcal conjugate vaccine. PPSV23 = 23-valent pneumococcal polysaccharide vaccine.

IPD among immunocompetent cigarette smokers aged 18–64 years was four times the risk for controls who had never smoked (AOR = 4.1; CI = 2.4–7.3) (9). Significant dose-response relationships with risk for IPD also were observed for number of cigarettes smoked and pack-years of smoking (9). Subsequent studies confirmed that smoking also increases the risk for IPD among other groups, including immunocompromised persons (10).

PPSV23 Efficacy and Effectiveness

Evaluations of PPSV23 efficacy and effectiveness among persons in recommended target groups have yielded contradictory conclusions for prevention of nonbacteremic pneumococcal pneumonia; however, most study results are consistent with protection against IPD among generally healthy young adults and among the general population of older persons. Observational studies have suggested effectiveness estimates ranging from approximately 50% to 80% for prevention of IPD among immunocompetent older adults and adults with various underlying illnesses, supporting the recommendations for using PPSV23 to prevent IPD (11). However, effectiveness has not been demonstrated among immunocompromised persons or very old persons. A recent metaanalysis of 15 randomized controlled trials (RCTs) and seven nonrandomized observational studies of PPSV23 efficacy and effectiveness suggested an overall efficacy of 74% against IPD (CI = 56%-85%), based on pooled results of 10 of the RCTs (12). Analysis

[†]Additional information available at http://www.cdc.gov/asthma/ nhis/07/data.htm.

[§] Defined as persons with asthma that required at least one of the following: 1) admission for asthma to a hospital or visit to an emergency department; 2) receipt of a prescription for a course of corticosteroids as rescue therapy or a long-term course (120 days or more) of oral corticosteroids; or 3) three or more prescriptions for β -agonists in the year preceding enrollment in the study.

Risk group	Underlying medical condition or other indication
Immunocompetent persons	Chronic heart disease (excluding hypertension)* Chronic lung disease [†]
	Diabetes mellitus
	Cerebrospinal fluid leaks
	Cochlear implant
	Alcoholism
	Chronic liver disease, including cirrhosis
	Cigarette smoking
Persons with functional or anatomic	Sickle cell disease and other hemoglobinopathies
asplenia [§]	Congenital or acquired asplenia, splenic dysfunction, or splenectomy
Immunocompromised persons [§]	Congenital or acquired immunodeficiencies [¶]
	HIV infection
	Chronic renal failure
	Nephrotic syndrome
	Leukemias
	Lymphomas
	Hodgkin disease
	Generalized malignancy
	Diseases requiring treatment with immunosuppressive drugs, including long-term systemic corticosteroids or radiation therapy
	Solid organ transplantation
	Multiple myeloma

TABLE. Underlying medical conditions or other indications for administration of 23-valent pneumococcal polysaccharide vaccine (PPSV23) among adults aged 19–64 years, by risk group — Advisory Committee on Immunization Practices, (ACIP) 2010

* Including congestive heart failure and cardiomyopathies.

[†] Including chronic obstructive pulmonary disease, emphysema, and asthma.

[§] A second dose of PPSV23 is recommended 5 years after the first dose for persons with functional or anatomic asplenia and for immunocompromised persons.

[¶] Includes B- (humoral) or T-lymphocyte deficiency, complement deficiencies (particularly C1, C2, C3, and C4 deficiencies), and phagocytic disorders (excluding chronic granulomatous disease).

of the results from the seven observational studies yielded a pooled vaccine effectiveness estimate of 52% (CI = 39%-63%). In contrast, a recent meta-analysis that included six RCTs estimated the combined PPSV23 efficacy against pneumococcal bacteremia at only 10%, with a very wide CI (CI = -77%-54%) (*13*). The large difference in findings from these two meta-analyses might be related to inclusion of different trials.

Recommendations for Use of PPSV23

At its June and October 2008 meetings, ACIP approved new and revised recommendations for the use of PPSV23 to prevent IPD among adults aged <65 years. ACIP concluded that asthma is an independent risk factor for IPD and should be included in the group of chronic pulmonary diseases (e.g., COPD and emphysema) that are indications for PPSV23 (Table); thus, ACIP recommended that persons aged 19–64 years who have asthma should receive a single dose of PPSV23 (Box). ACIP also concluded that adults who smoke cigarettes are at significantly increased risk for

IPD and recommended that persons aged 19–64 years who smoke cigarettes should receive a single dose of PPSV23 and smoking cessation guidance (Box).

ACIP also revised its recommendation for use of PPSV23 among American Indians and Alaska Natives. Routine use of PPSV23 is no longer recommended for persons aged <65 years in these populations unless they have a medical condition or other indication for PPSV23. However, in certain situations, public health authorities may recommend PPSV23 for Alaska Natives and American Indians aged 50–64 years who are living in areas where the risk for IPD is increased.

All persons should be vaccinated with PPSV23 at age 65 years. Those who received PPSV23 before age 65 years for any indication should receive another dose of the vaccine at age 65 years or later if at least 5 years have passed since their previous dose. Those who receive PPSV23 at or after age 65 years should receive only a single dose.

Revaccination. ACIP recommendations for revaccination remain unchanged from the 1997

BOX. Updated recommendations for administration of 23-valent pneumococcal polysaccharide vaccine (PPSV23) among adults aged ≥19 years — Advisory Committee on Immunization Practices (ACIP), United States

- PPSV23 should be administered to adults aged 19–64 years with chronic or immunosuppressing medical conditions, including those who have asthma.
- Adults aged 19–64 years who smoke cigarettes should receive PPSV23 and smoking cessation guidance.
- Routine PPSV23 use is no longer recommended for Alaska Natives or American Indians aged <65 years unless they have medical indications for PPSV23. However, in certain situations, public health authorities may recommend PPSV23 for Alaska Natives and American Indians aged 50–64 years who are living in areas where the risk for invasive pneumococcal disease is increased.
- All persons should be vaccinated with PPSV23 at age 65 years. Those who received PPSV23 before age 65 years for any indication should receive another dose of the vaccine at age 65 years or later if at least 5 years have passed since their previous dose. Those who receive PPSV23 at or after age 65 years should receive only a single dose.
- ACIP does not recommend routine revaccination for most persons for whom PPSV23 is indicated. A second dose of PPSV23 is recommended 5 years after the first dose for persons aged 19–64 years with functional or anatomic asplenia and for persons with immunocompromising conditions. ACIP does not recommend multiple revaccinations because of uncertainty regarding clinical benefit and safety.

recommendations (2). For most persons for whom PPSV23 is indicated, ACIP does not recommend routine revaccination. A second dose of PPSV23 is recommended 5 years after the first dose for persons aged 19–64 years with functional or anatomic asplenia and for persons with immunocompromising conditions (Table). ACIP does not recommend multiple revaccinations because of insufficient data regarding

clinical benefit, particularly the degree and duration of protection, and safety.

Smoking cessation. Quitting smoking reduces the risk for pneumococcal disease. One study found that the risk for IPD was reduced by approximately 14% each year after quitting smoking and returned to a risk similar to that for persons who had never smoked in approximately 13 years (9). ACIP emphasizes that smoking cessation guidance should be part of the therapeutic plan for smokers regardless of immunization status. Professional organizations such as the Infectious Disease Society of America and American Thoracic Society also recommend smoking cessation counseling and pneumococcal vaccination for smokers who are hospitalized with community-acquired pneumonia (14). Clinical practice guidelines from the U.S. Public Health Service for treating tobacco use and dependence are available at http://surgeongeneral. gov/tobacco/treating_tobacco_use08.pdf.

Reported by

JP Nuorti, MD, DSc, CG Whitney, MD, Div of Bacterial Diseases, National Center for Immunization and Respiratory Diseases, CDC, for the ACIP Pneumococcal Vaccines Working Group.

References

- 1. CDC. Active Bacterial Core Surveillance (ABCs) Report: Emerging Infections Program Network. *Streptococcus pneumoniae*, provisional-2009. Atlanta, GA: US Department of Health and Human Services, CDC; 2010. Available at http://www.cdc.gov/abcs/reports-findings/survreports/ spneu09.pdf.
- CDC. Prevention of pneumococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1997;46(No. RR-8).
- 3. CDC. Licensure of a 13-valent pneumococcal conjugate vaccine (PCV13) and recommendations for use among children—Advisory Committee on Immunization Practices (ACIP), 2010. MMWR 2010;59:258–61.
- Pilishvili T, Lexau C, Farley MM, et al. Sustained reductions in invasive pneumococcal disease in the era of conjugate vaccine. J Infect Dis 2010;201:32–41.
- Singleton RJ, Butler JC, Bulkow LR, et al. Invasive pneumococcal disease epidemiology and effectiveness of 23-valent pneumococcal polysaccharide vaccine in Alaska Native adults. Vaccine 2007;25:2288–95.
- 6. Talbot TR, Hartert TV, Mitchel E, et al. Asthma as a risk factor for invasive pneumococcal disease. N Engl J Med 2005;352:2082–90.
- 7. Lee TA, Weaver FM, Weiss KB. Impact of pneumococcal vaccination on pneumonia rates in patients with COPD and asthma. J Gen Intern Med 2007;22:62–7.
- 8. Plouffe JF, Breiman RF, Facklam RR. Bacteremia with *Streptococcus pneumoniae*: implications for therapy and prevention. Franklin County Pneumonia Study Group. JAMA 1996;275:194–8.

- 9. Nuorti JP, Butler JC, Farley MM, et al. Cigarette smoking and invasive pneumococcal disease. Active Bacterial Core Surveillance Team. N Engl J Med 2000;342:681–9.
- Breiman RF, Keller DW, Phelan MA, et al. Evaluation of effectiveness of the 23-valent pneumococcal capsular polysaccharide vaccine for HIV-infected patients. Arch Intern Med 2000;160:2633–8.
- World Health Organization. 23-valent pneumococcal polysaccharide vaccine. WHO position paper. Wkly Epidemiol Rec 2008;83:373–84.
- 12. Moberley SA, Holden J, Tatham DP, Andrews RM. Vaccines for preventing pneumococcal infection in adults. Cochrane Database Syst Rev 2008;(1):CD000422.
- Huss A, Scott P, Stuck AE, Trotter C, Egger M. Efficacy of pneumococcal vaccination in adults: a meta-analysis. CMAJ 2009;180:48–58.
- 14. Mandell LA, Wunderink RG, Anzueto A, et al. Infectious Diseases Society of America/American Thoracic Society consensus guidelines on the management of community-acquired pneumonia in adults. Clin Infect Dis 2007;44(Suppl 2):S27–72.

Announcements

Clinical Vaccinology Course — November 5–7, 2010

CDC and six other national organizations are collaborating with the National Foundation for Infectious Diseases (NFID), Emory University School of Medicine, and the Emory Vaccine Center to sponsor a Clinical Vaccinology Course November 5-7, 2010, at the Hyatt Regency Bethesda in Bethesda, Maryland. Through lectures and interactive case presentations, the course will focus on new developments and concerns related to the use of vaccines in pediatric, adolescent, and adult populations. Infectious disease experts, including pediatricians, internists, family physicians, and public health professionals, will present the latest information on newly available vaccines and vaccines under development as well as established vaccines whose continued administration is essential to improving disease prevention efforts.

This course is designed specifically for physicians, nurses, physician assistants, pharmacists, vaccine program administrators, and other health-care professionals involved with or interested in the clinical use of vaccines. The course also will be of interest to health-care professionals involved in the prevention and control of infectious diseases, such as federal, state, and local public health officials. Course participants should have a knowledge of or interest in vaccines and vaccine-preventable diseases.

Continuing education credits will be offered. Information regarding the preliminary program, registration, and hotel accommodations is available online (http://www.nfid.org), by e-mail (idcourse@nfid.org), by fax (301-907-0878), by telephone (301-656-0003, ext. 19), or by mail (NFID, 4733 Bethesda Avenue, Suite 750, Bethesda, MD 20814-5228).

Preventive Medicine Residency and Fellowship Application Deadline — September 15, 2010

CDC's Preventive Medicine Residency and Fellowship (PMR/F) programs are accepting applications from physicians for the residency and from veterinarians, dentists, nurses, physician assistants, and international medical graduates for the fellowship. Applicants with public health and applied epidemiologic practice experience who seek to become preventive medicine and population health specialists and public health leaders may apply.

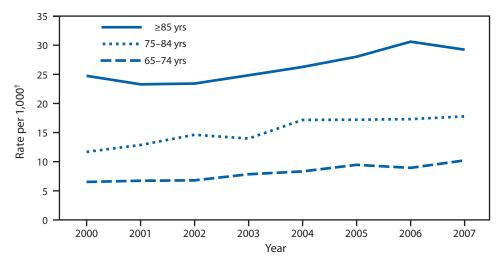
PMR/F programs prepare clinicians for leadership roles in public health at federal, state, and local levels through instruction and supervised practical experiences focused on translating epidemiology to public health practice, management, and policy and program development. Residents and fellows spend the practicum year at CDC or at a state or local health department.

PMR/F alumni occupy leadership positions at CDC, at state and local health departments, and in academia and private-sector agencies. Completion of the residency, which is accredited by the Accreditation Council for Graduate Medical Education for 12 months of practicum training, qualifies graduates to apply for certification by the American Board of Preventive Medicine in Public Health and General Preventive Medicine.

Applications are being accepted for the class that begins in June 2011. The application must be submitted online by September 15, 2010, and supporting documents must be postmarked for delivery to the PMR/F office by September 22, 2010. Additional information regarding the programs, eligibility criteria, and application process is available online (http://www.cdc.gov/prevmed), by telephone (404-498-6140), or by e-mail (pmrcdd@cdc.gov).

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Hospitalization Rates for Patients Aged ≥65 Years with Septicemia or Sepsis,* by Age Group — National Hospital Discharge Survey, United States, 2000–2007



*Septicemia or sepsis hospitalizations are those with a diagnosis code of 038, 995.91, or 995.92, based on the International Classification of Diseases, Ninth Revision, Clinical Modification, in any of seven diagnoses fields of the National Hospital Discharge Survey.

⁺ Inpatient hospitalization rates for 2000–2007 were calculated using U.S. Census Bureau 2000–based postcensal civilian population estimates. Persons might have multiple inpatient septicemia or sepsis hospitalizations, all of which are reflected in the estimates.

Septicemia and sepsis are bloodstream infections. From 2000 to 2007, the rate of hospitalization for septicemia or sepsis for persons aged 65–74 years increased 57%, from 6.5 per 1,000 to 10.2, and the rate for persons aged 75–84 years increased 52%, from 11.7 per 1,000 to 17.8. During 2000–2007, persons aged \geq 85 years had higher rates of hospitalization for septicemia or sepsis than persons aged 65–84 years. From 2000 to 2007, rates for persons aged \geq 85 years increased 18%, from 24.7 per 1,000 to 29.2.

SOURCE: National Hospital Discharge Survey, annual files, 2000–2007. Available at http://www.cdc.gov/nchs/nhds.htm.

Notifiable Diseases and Mortality Tables

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending August 28, 2010 (34th week)*

	Current	Cum	5-year weekly			cases re revious		1	. States reporting cases
Disease	week	2010	average [†]	2009	2008	2007	2006	2005	during current week (No.)
Anthrax	_	_	0	1		1	1		
Botulism, total	_	55	4	118	145	144	165	135	
foodborne	_	5	1	10	17	32	20	19	
infant	_	38	2	83	109	85	97	85	
other (wound and unspecified)	_	12	1	25	19	27	48	31	
Brucellosis	1	81	3	115	80	131	121	120	CA (1)
Chancroid	1	32	0	28	25	23	33	17	NC (1)
Cholera	_	2	0	10	5	7	9	8	
Cyclosporiasis [§]	1	125	3	141	139	93	137	543	NY (1)
Diphtheria	_	_	_	_				_	
Domestic arboviral diseases [§] , [¶] :									
California serogroup virus disease	_	19	4	55	62	55	67	80	
Eastern equine encephalitis virus disease	_	9	1	4	4	4	8	21	
Powassan virus disease	_	2	0	6	2	7	1	1	
St. Louis encephalitis virus disease	_	2	1	12	13	9	10	13	
Western equine encephalitis virus disease	_	_		12		_			
Haemophilus influenzae, ^{**} invasive disease (age <5 yrs):	_		_					_	
serotype b	1	9	0	35	30	22	29	9	VA (1)
nonserotype b		127	3	236	244	199	175	135	V/\\!/
unknown serotype	2	147	3	178	163	180	179	217	NV(1) NC(1)
Hansen disease [§]	Z	29	2	178	80	100	66	87	NY (1), NC (1)
Hantavirus pulmonary syndrome [§]	_		2						
Hemolytic uremic syndrome, postdiarrheal [§]		14		20	18	32	40	26	
HIV infection, pediatric (age <13 yrs) ^{††}	1	114	8	242	330	292	288	221	CA (1)
Influenza-associated pediatric mortality [§] , ^{§§}	_		1					380	
	2	56	1	358	90	77	43	45	
Listeriosis	12	492	23	851	759	808	884	896	NY (1), PA (1), NC (2), GA (1), FL (2), KY (1), TX (1), CO (1),
Measles ^{¶¶}	2	10	1	71	140	42		~ ~	CA (2)
	3	46	1	71	140	43	55	66	CA (3)
Meningococcal disease, invasive***: A, C, Y, and W-135		170		201	220	225	210	207	NU / (1)
	1	172	4	301	330	325	318	297	NV (1)
serogroup B	—	76	2	174	188	167	193	156	
other serogroup		7	0	23	38	35	32	27	
unknown serogroup	5	259	8	482	616	550	651	765	NYC (1), PA (1), MI (1), TX (1), CA (1)
Mumps Novel influenza A virus infections ^{†††}	6	2,283	13	1,991	454	800		314	NY (3), MD (1), CA (2)
	_	1	0	43,774	2	4	NN	NN	
Plague	_	1	0	8	3	7	17	8	
Poliomyelitis, paralytic	_	_	_	1	_	_		1	
Polio virus Infection, nonparalytic [§] Psittacosis [§]	_	_	_	_	_		NN	NN	
	_	4	0	9	8	12	21	16	
Q fever, total [§] , ^{§§§§}	1	75	3	114	120	171	169	136	
acute	1	57	1	94	106	_	_	_	NE (1)
chronic	_	18	0	20	14		_	_	
Rabies, human	_	_	_	4	2	1	3	2	
Rubella	_	6	0	3	16	12	11	11	
Rubella, congenital syndrome	—	_	—	2	_	_	1	1	
SARS-CoV [§] ,****	_	_	—	_	_	_	_	_	
Smallpox [§]	—	—	—	—	_	_	—	—	
Streptococcal toxic-shock syndrome	1	117	1	161	157	132	125	129	CT (1)
Syphilis, congenital (age <1 yr) ^{$++++$}	—	133	8	423	431	430	349	329	
Tetanus	—	2	1	18	19	28	41	27	
Toxic-shock syndrome (staphylococcal) ⁸	_	52	2	74	71	92	101	90	
Trichinellosis	—	2	0	13	39	5	15	16	
Tularemia	_	58	4	93	123	137	95	154	
Typhoid fever	4	246	11	397	449	434	353	324	OH (1), FL (1), CO (1), CA (1)
Vancomycin-intermediate Staphylococcus aureus	1	64	1	78	63	37	6	2	FL (1)
Vancomycin-resistant Staphylococcus aureus [§]	_	1	_	1	_	2	1	3	
Vibriosis (noncholera Vibrio species infections) [§]	23	435	17	789	588	549	NN	NN	OH (1), MD (1), VA (1), GA (1), FL (2), TN (2), AZ (1),
									WA (7), CA (6), HI (1)
Viral hemorrhagic fever ^{§§§§}	_	1	_	NN	NN	NN	NN	NN	
Yellow fever	_	_	_	_	_	_	_	_	

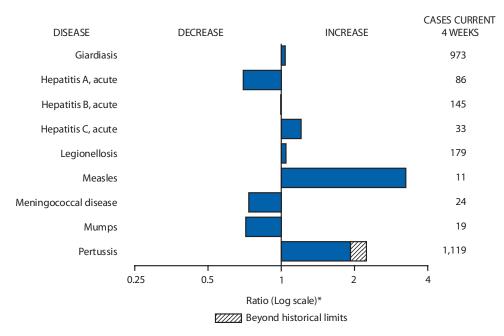
See Table I footnotes on next page.

TABLE I. (Continued) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending August 28, 2010 (34th week)*

---: No reported cases. N: Not reportable. NN: Not Nationally Notifiable Cum: Cumulative year-to-date counts.

- * Incidence data for reporting years 2009 and 2010 are provisional, whereas data for 2005 through 2008 are finalized.
- [†] 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/ncphi/disss/nndss/phs/files/5yearweeklyaverage.pdf.
- ⁵ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table except starting in 2007 for the domestic arboviral diseases, STD data, TB data, and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/ncphi/disss/nndss/phs/infdis.htm.
- [¶] 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.
- ** Data for H. influenzae (all ages, all serotypes) are available in Table II.
- ⁺⁺ 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.
- ^{\$5} Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since April 26, 2009, a total of 286 influenza-associated pediatric deaths associated with 2009 influenza A (H1N1) virus infection have been reported. Since August 30, 2009, a total of 281 influenza-associated pediatric deaths occurring during the 2009–10 influenza season have been reported. A total of 133 influenza-associated pediatric deaths occurring during the 2009–00 influenza season have been reported.
- ^{¶¶} The three measles cases reported for the current week were imported. *** Data for meningococcal disease (all serogroups) are available in Table II.
- ⁺⁺⁺ CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, three cases of novel influenza A virus infections, unrelated to the 2009 pandemic influenza A (H1N1) virus, were reported to CDC. The one case of novel influenza A virus infection reported to CDC during 2010 was identified as swine influenza A (H3N2) virus and is unrelated to pandemic influenza A (H1N1) virus. Total case count for 2009 was provided by the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD).
- ⁵⁵⁵ In 2009, 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.
- ^{¶¶¶} 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.
- ttt Updated weekly from reports to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.
- SSSS There was one case of viral hemorrhagic fever reported during week 12. The one case report was confirmed as lassa fever. See Table II for dengue hemorrhagic fever.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals August 28, 2010, 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 an	d 122 Cities Mortality Data Team
Patsy A.	Hall-Baker
Deborah A. Adams	Rosaline Dhara
Willie J. Anderson	Pearl C. Sharp
Michael S. Wodajo	Lenee Blanton

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending August 28, 2010, and August 29, 2009 (34th week)*

		Chlamydi	a trachomatis	infection		Cryptosporidiosis						
	Current	Previous	52 weeks	Cum	Cum	Current	Previous 5	2 weeks	Cum	Cum		
Reporting area	week	Med	Max	2010	2009	week	Med	Max	2010	2009		
Jnited States	13,226	22,794	26,156	750,153	824,675	147	122	267	4,361	4,548		
lew England	574	745	1,396	25,472	26,457	5	8	58	293	285		
Connecticut Maine [†]	 50	220 49	736 75	6,053 1,640	7,586 1,591	2	0 1	52 7	52 53	38 32		
Massachusetts	416	397	638	13,301	12,729		3	15	91	109		
New Hampshire	54	40	116	1,513	1,399	1	1	6	40	53		
Rhode Island [†]	46	66	116	2,162	2,395		0	8	9	7		
Vermont [†]	8	24	63	803	757	2	1	9	48	46		
Mid. Atlantic	3,358	3,182	4,619	109,749	103,123	22	15	38	510	529		
New Jersey New York (Upstate)	412 874	456 674	698 2,530	16,270 22,025	16,196 19,708	14	0 3	3 16	130	38 127		
New York City	1,430	1,188	2,144	41,103	38,416	—	1	5	47	60		
Pennsylvania	642	877	1,091	30,351	28,803	8	9	25	333	304		
E.N. Central	1,106	3,526	4,413	112,368	132,915	31	29	70	1,062	1,101		
Illinois	15	851	1,322	23,472	40,662	—	2	7	95	105		
Indiana Michigan	678	356 891	786 1,417	12,029 31,685	15,610 30,482	3	4 6	10 12	116 210	189 179		
Ohio	159	964	1,417	31,710	32,238	19	7	24	293	269		
Wisconsin	254	404	495	13,472	13,923	9	9	39	348	359		
W.N. Central	263	1,330	1,592	43,414	47,094	24	22	54	746	685		
lowa	16	183	293	6,356	6,431	3	4	18	200	153		
Kansas	32	188	381	6,108	7,247	7	2	7	93	67		
Minnesota Missouri	201	275 490	337 606	8,814 16,061	9,505	_	3 3	30 18	98 157	179 132		
Nebraska [†]	201	490 95	237	3,072	17,240 3,564	14	2	10	118	63		
North Dakota	_	34	93	1,083	1,114	—	0	18	16	7		
South Dakota	14	59	82	1,920	1,993	_	2	8	64	84		
5. Atlantic	2,988	4,486	5,681	147,381	168,525	14	19	51	652	683		
Delaware	72	87	156	2,747	3,101	—	0	2	3	5		
District of Columbia Florida	634	100 1,411	177 1,669	3,199 48,252	4,676 49,185	8	0 8	1 24	2 243	5 230		
Georgia		381	1,323	10,170	27,178	2	5	31	197	230		
Maryland [†]	_	452	1,031	14,425	14,955	2	1	3	23	31		
North Carolina	759	802	1,562	28,269	28,155	—	1	12	53	71		
South Carolina [†]	541	516	694	17,680	18,205	2	1	8	53	42		
Virginia [†] West Virginia	882 100	594 68	902 137	20,246 2,393	20,660 2,410	_	2 0	8 2	67 11	44 10		
E.S. Central	516		2,410	56,199	62,538	4	4	11	151	136		
Alabama [†]	510	1,712 470	661	16,012	18,133	4	1	5	56	43		
Kentucky	242	301	642	10,300	8,620	2	1	6	52	38		
Mississippi		385	780	11,387	15,886		0	3	7	12		
Tennessee [†]	274	581	732	18,500	19,899	2	1	5	36	43		
N.S. Central	1,703	2,905	4,578	97,728	108,100	5	8	39	222	322		
Arkansas [†] Louisiana	313	240 23	402 1,055	7,042 2,922	9,557 19,342	1	1	4 5	22 28	34 34		
Oklahoma	441	262	1,055	10,606	9,793	4	1	9	28 55	73		
Texas [†]	949	2,233	3,201	77,158	69,408	_	4	30	117	181		
Mountain	393	1,459	2,081	45,057	51,098	15	10	20	338	367		
Arizona	87	467	713	13,195	17,103	—	0	3	21	25		
Colorado	94	383	709	11,902	11,585	6	2	9	89	96		
ldaho [†] Montana [†]	21	64 58	191 75	1,985 1,922	2,452 1,990	1 1	2 1	6 4	57 33	56 38		
Nevada [†]	157	177	337	6,381	6,756	_	0	2	14	15		
New Mexico [†]	_	165	453	4,531	5,883	1	2	8	65	96		
Utah	23	117	175	3,884	4,071	6	1	4	47	26		
Wyoming [†]	11	38	70	1,257	1,258	—	0	2	12	15		
Pacific	2,325	3,472	5,350	112,785	124,825	27	12	27	387	440		
Alaska California	2,012	107 2,735	147 4,406	3,786 90,758	3,532 95,600	17	0 8	1 20	2 226	4 250		
Hawaii	2,012	112	158	3,687	4,056		0	20		250		
Oregon	—	58	468	1,367	7,104	4	2	7	101	137		
Washington	312	396	497	13,187	14,533	6	1	8	58	48		
Ferritories		-	-					-				
American Samoa	—	0	0	_	_	N	0	0	N	N		
C.N.M.I. Guam	_	4	 31	173	248	_	0	0	_	_		
Puerto Rico	_	95	266	3,388	5,213	N	0	0	N	N		
U.S. Virgin Islands		8	15	132	359	_	0	0	_			

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Uravailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
 * Incidence data for reporting years 2009 and 2010 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.
 † Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

	Dengue Virus Infection													
			Dengue Feve	r†		Dengue Hemorrhagic Fever [§]								
	Current	Previous	52 weeks	Cum	Cum	Current	Previous	52 weeks	Cum	Cum				
Reporting area	week	Med	Max	2010	2009	week	Med	Max	2010	2009				
United States	_	2	19	213	NN	_	0	1	2	NN				
New England	—	0	1	2	NN	—	0	0	—	NN				
Connecticut	_	0	0	- 1	NN	_	0	0	_	NN				
Maine [¶] Massachusetts	_	0 0	1 0		NN NN	_	0 0	0 0	_	NN NN				
New Hampshire	_	0	0	_	NN	_	0	0	_	NN				
Rhode Island [¶]	_	0	0	_	NN	_	0	0	—	NN				
Vermont [¶]	—	0	1	1	NN	—	0	0	—	NN				
Mid. Atlantic	—	0	7	60	NN	—	0	0	—	NN				
New Jersey	—	0	0	—	NN	—	0	0	—	NN				
New York (Upstate) New York City	_	0 0	0 5	 50	NN NN	_	0 0	0 0	_	NN NN				
Pennsylvania	_	Ő	2	10	NN	_	0	õ	_	NN				
E.N. Central	_	0	2	8	NN	_	0	0	_	NN				
Illinois	_	Ő	0	_	NN	_	0	Ő	_	NN				
Indiana	_	0	0	_	NN	_	0	0	_	NN				
Michigan	_	0	0	_	NN	—	0	0	—	NN				
Ohio Wisconsin	_	0 0	2 1	5 3	NN NN	_	0 0	0 0	_	NN NN				
	_													
W.N. Central lowa	_	0 0	2 1	9 1	NN NN	_	0 0	0 0	_	NN NN				
Kansas	_	0	0	_	NN	_	0	0	_	NN				
Minnesota	_	Ő	2	8	NN	_	Ő	Ő	_	NN				
Missouri	_	0	0	_	NN	_	0	0	_	NN				
Nebraska [¶]	_	0	0	_	NN	—	0	0	_	NN				
North Dakota South Dakota	_	0 0	0 0	_	NN NN	_	0 0	0 0	_	NN NN				
S. Atlantic Delaware	_	0 0	14 0	116	NN NN	_	0 0	1 0	1	NN NN				
District of Columbia	_	Ő	0	_	NN	_	0	Ő	_	NN				
Florida	_	0	13	99	NN	_	0	1	1	NN				
Georgia	—	0	2	6	NN	—	0	0	—	NN				
Maryland [¶] North Carolina	_	0	0		NN	—	0	0	_	NN				
South Carolina [¶]	_	0 0	1 3	1 8	NN NN	_	0 0	0 0	_	NN NN				
Virginia [¶]	_	õ	0	_	NN	_	Ő	õ	_	NN				
West Virginia	—	0	1	2	NN	—	0	0	—	NN				
E.S. Central	_	0	1	1	NN	_	0	0	_	NN				
Alabama [¶]	_	0	0	_	NN	_	0	0	_	NN				
Kentucky	_	0	0	_	NN	_	0	0	_	NN				
Mississippi Tennessee [¶]	_	0 0	0 1	1	NN NN	_	0 0	0 0	_	NN NN				
W.S. Central Arkansas [¶]	_	0 0	0 0	_	NN NN	_	0 0	1 1	1 1	NN NN				
Louisiana	_	õ	õ		NN	_	Ő	0	_	NN				
Oklahoma	—	0	0	_	NN	—	0	0	—	NN				
Texas [¶]	—	0	0	—	NN	—	0	0	—	NN				
Mountain	_	0	1	8	NN	_	0	0	_	NN				
Arizona	_	0	1	2	NN	_	0	0	_	NN				
Colorado Idaho¶	_	0	0 0	_	NN NN	_	0	0 0	_	NN NN				
Montana [¶]	_	0	1	2	NN	_	0	0	_	NN				
Nevada¶	_	0	1	3	NN	_	0	0	—	NN				
New Mexico [¶]	—	0	1	1	NN	—	0	0	—	NN				
Utah Wyoming¶	—	0 0	0 0	_	NN NN	_	0 0	0 0	_	NN NN				
Wyoming ¹	_					_			_					
Pacific Alaska		0 0	2 0	9	NN NN	_	0 0	0 0	_	NN NN				
California	_	0	1	4	NN	_	0	0	_	NN				
Hawaii	_	0	0	_	NN	_	Ő	Ő	_	NN				
Oregon	—	0	0		NN	—	0	0	—	NN				
Washington	—	0	2	5	NN	—	0	0	—	NN				
Territories		-					_							
American Samoa C.N.M.I.	_	0	0	_	NN NN	_	0	0	_	NN NN				
Guam	_	0	0	_	NN	_	0	0	_	NN				
	_	17	83	1,114	NN	_	0	3	27	NN				
Puerto Rico							0	5	27					

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 28, 2010, and August 29, 2009 (34th week)*

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Incidence data for reporting years 2009 and 2010 are provisional. * Dengue Fever includes cases that meet criteria for Dengue Fever with hemorrhage.

⁵ DHF includes cases that meet criteria for dengue shock syndrome (DSS), a more severe form of DHF.
¹ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 28, 2010, and August 29, 2009 (34th week)*

	Ehrlichiosis/Anaplasmosis [†]												_		
		Ehrli	chia chaffe	ensis			Anaplasm	a phagocy	tophilum			Unc	letermine	ł	
	Current	Previous	52 weeks	Cum	Cum	Current -	Previous !	52 weeks	Cum	Cum	Current	Previous 5	52 weeks	Cum	Cum
Reporting area	week	Med	Max	2010	2009	week	Med	Max	2010	2009	week	Med	Max	2010	2009
United States	6	11	181	401	666	5	14	309	421	650	_	2	35	67	136
New England	—	0	3	3	36	—	2	17	50	195	—	0	2	6	2
Connecticut Maine [§]	_	0	0 1	2	3	_	0 0	13 2	18 13	2 11	_	0 0	2 0	4	_
Massachusetts	_	0	0	_	9	—	0	4	_	82	_	0	0	_	_
New Hampshire Rhode Island [§]	_	0	1 2	1	3 20	_	0 0	3 7	8 11	15 85	_	0	1 0	2	1 1
Vermont [§]	—	0	0	—	1	—	0	0	_	_	—	0	0	—	_
Mid. Atlantic	—	1	15	33	117	3	4	17	125	198	—	0	2	2	38
New Jersey New York (Upstate)	_	0 1	6 15	19	70 29	3	0 3	2 17	1 122	59 134	_	0	0 1	2	4
New York City	—	0	3	13	7	_	0	1	2	4	—	0	0	_	1
Pennsylvania	—	0	5	1	11	—	0	1		1	—	0	2		33
E.N. Central Illinois	_	0 0	4 2	20 9	72 32	_	3 0	26 0	180	232 6	_	1 0	4 2	34 3	58 3
Indiana	_	0	0	_	—	_	0	0	_	_	_	0	2	17	31
Michigan Ohio	_	0	1 2	1 4	4 10	_	0 0	0 1		1	_	0	1 0	2	2
Wisconsin	_	0	3	6	26	_	3	26	179	225	_	0	3	12	22
W.N. Central	1	1	11	81	127	_	0	261	9	6	_	0	30	15	16
lowa	1	0	0	6	_	—	0 0	0	—		—	0	0 0	—	—
Kansas Minnesota	1	0 0	1 6		6 1	_	0	0 261	_	1 3	_	0	30	_	3
Missouri	—	1	10	74	118	—	0	3	9	2	—	0	4	15	13
Nebraska [§] North Dakota	_	0	1 0	1	2	_	0 0	1 0	_	_	_	0 0	0 0	_	_
South Dakota	_	Ő	0	_	_	_	0	Ő	_	_	_	Ő	0	_	_
S. Atlantic	3	4	19	183	181	1	0	7	43	13	_	0	1	3	2
Delaware District of Columbia	_	0	3 0	15	15	_	0 0	1 0	4	2	_	0	0 0	_	_
Florida	_	0	2	7	8	_	0	1	2	2	_	0	0	_	_
Georgia Maryland [§]	_	0 0	4 3	15 17	15 32		0 0	1 2	1 12	1 3	_	0 0	1 1	1 2	_
North Carolina	1	1	13	69	47	_	0	4	12	3	_	0	0		_
South Carolina [§]		0 1	2	3	8	—	0	0			_	0	0 0	—	
Virginia [§] West Virginia	2	0	13 0	57	55 1	_	0 0	2 0	8	2	_	0 0	1	_	2
E.S. Central	2	1	10	63	103	_	0	2	12	3	_	0	2	6	20
Alabama [§]	—	0	2	9	6	—	0	2	5	1	—	0	0	—	—
Kentucky Mississippi	_	0 0	2 1	9 2	9 6	_	0 0	0 1	- 1	_	_	0 0	0 0	_	_
Tennessee [§]	2	1	10	43	82	—	0	2	6	2	—	0	2	6	20
W.S. Central	_	0	141	17	28	1	0	23	2	1	_	0	1	1	_
Arkansas [§] Louisiana	_	0 0	34 1	2 1	4	_	0 0	6 0	_	_	_	0 0	0 0	_	_
Oklahoma	—	0	105	11	23	1	0	16	2	1	—	0	0		—
Texas [§]	_	0 0	2 0	3	1	_	0 0	1 0	_	_	_	0	1 1	1	_
Mountain Arizona	_	0	0	_	_	_	0	0	_	_	_	0	1	_	_
Colorado	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
ldaho ^ş Montana ^ş	_	0	0 0	_	_	_	0 0	0	_	_	_	0 0	0 0	_	_
Nevada [§]	_	0	0		_	_	0	0	_	_	_	Ő	0	_	_
New Mexico [§] Utah	_	0	0	_	_	_	0 0	0	_	_	_	0 0	0 0	_	_
Wyoming [§]	_	0	0	_	_	_	0	0	_	_	_	0	0	_	_
Pacific	_	0	1	1	2	_	0	0	_	2	_	0	1	_	_
Alaska	_	0	0			_	0	0	_		_	0	0	_	_
California Hawaii	_	0 0	1 0	1	2	_	0 0	0 0	_	2	_	0 0	1 0	_	_
Oregon	_	0	0	—	_	_	0	0	_	_	_	0	0	—	—
Washington	_	0	0	_	_	_	0	0	_	_	_	0	0	—	_
Territories American Samoa	_	0	0	_	_	_	0	0	_	_	_	0	0	_	_
C.N.M.I.	—	_	—	_	—	—	_	—		—	—	_	_	—	—
Guam Puerto Rico	_	0 0	0 0	_	_	_	0 0	0 0	_	_	_	0 0	0 0	_	_
U.S. Virgin Islands	_	0	0	_	_	_	0	0	_	_	_	0	0	_	_
	CNL III														

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Incidence data for reporting years 2009 and 2010 are provisional. † Cumulative total *E. ewingii* cases reported for year 2010 = 7. § Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 28, 2010, and August 29, 2009 (34th week)*

			Giardiasis	5				Gonorrhe	a		На	Haemophilus influenzae, invasive [†] All ages, all serotypes					
	Current	Previous	52 weeks	Cum	Cum	Current	Previous 5	2 weeks	Cum	Cum	Current	Previous 5	2 weeks	Cum	Cum		
Reporting area	week	Med	Max	2010	2009	week	Med	Max	2010	2009	week	Med	Max	2010	2009		
United States	273	336	666	10,940	11,666	3,097	5,341	6,656	174,562	200,014	23	58	171	1,934	2,006		
New England	5	31	65	952	1,040	73	100	196	3,347	3,143	—	3	21	110	133		
Connecticut Maine [§]	4	5 4	15 11	174 132	185 142	3	45 3	169 11	1,458 120	1,440 86	_	0 0	15 2	24 9	39 15		
Massachusetts		13	36	391	444	55	42	72	1,457	1,289	_	2	8	57	62		
New Hampshire	—	3	11	94	126	5	2	7	101	73	—	0	2	7	7		
Rhode Island [§] Vermont [§]	1	1	7 14	35 126	38 105	10	5 1	13 17	166 45	225 30	_	0 0	1 1	7 6	6 4		
Mid. Atlantic	53	60	112	1,876	2,136	693	666	941	22,413	20,350	7	11	34	386	393		
New Jersey	_	6	15	192	286	96	99	151	3,460	3,123	_	2	7	55	91		
New York (Upstate)	35	23	84	689	782	145	104	422	3,496	3,582	3	3	20	104	99		
New York City Pennsylvania	8 10	16 15	30 37	538 457	543 525	272 180	224 217	394 283	7,843 7,614	7,208 6,437	3 1	2	6 9	79 148	44 159		
E.N. Central	31	49	92	1,654	1,820	309	973	1,536	30,568	42,437	1	9	20	318	317		
Illinois	_	11	22	319	401	5	193	441	5,334	13,615	_	2	9	85	124		
Indiana		6	14	159	171		96	214	3,390	5,051	_	1	6	64	54		
Michigan Ohio	8 21	13 17	25 28	414 542	419 513	195 51	249 315	502 372	8,910 9,983	9,878 10,423	1	0 2	4 6	25 79	16 73		
Wisconsin	21	7	20	220	315	58	92	194	9,985 2,951	3,470	_	2	5	65	50		
W.N. Central	21	25	165	915	1,082	84	274	367	8,774	9,957	2	3	24	112	114		
lowa	5	5	10	188	201	5	31	53	1,058	1,132	_	0	1	1	_		
Kansas	7	4	8	149	105	6	39	83	1,270	1,721	2	0	1	12	13		
Minnesota Missouri	_	0 8	135 23	136 225	250 340	73	41 123	64 172	1,235 4,203	1,541 4,346	_	0	17 6	25 52	35 43		
Nebraska [§]	9	4	8	149	116		22	50	723	899	_	0	2	14	18		
North Dakota	—	0	8	16	8	—	2	11	76	84	—	0	4	8	5		
South Dakota		2	10	52	62		6	16	209	234		0	0				
S. Atlantic Delaware	79	75 0	143 4	2,466 21	2,320 18	810 12	1,299 19	1,651 34	42,772 638	50,022 603	10	14 0	27 1	519 5	540 3		
District of Columbia	_	1	4	23	42		39	86	1,234	1,831	_	0	1	2	2		
Florida	63	38	87	1,347	1,252	212	378	482	12,980	14,278	1	3	9	122	172		
Georgia Maryland [§]	4	13 6	51 12	485 176	474 177	_	141 128	494 237	3,584 4,184	9,058 4,024	2 2	3 1	9 6	128 40	103 64		
North Carolina	4 N	0	0	170 N	N	253	259	596	9,440	9,615	2	2	9	90	66		
South Carolina [§]	5	2	7	94	58	152	155	230	5,293	5,619	_	2	7	60	46		
Virginia ^s West Virginia	7	8 1	36 5	298 22	268 31	170 11	161	271 20	5,095 324	4,652 342	1 2	2 0	4 5	56 16	61 23		
5	_	5	22	150	261	140	8 477	698	524 15,331	542 17,999		3	12	117	130		
E.S. Central Alabama [§]	_	4	8	98	130		137	216	4,711	5,107	_	0	3	19	32		
Kentucky	Ν	0	0	N	Ν	74	77	156	2,675	2,523	_	0	2	23	18		
Mississippi	N	0	0	N	N		111	216	3,172	4,959	—	0	2	9	7		
Tennessee ⁹	3	2 9	18 18	52 231	131 323	66 524	151 772	195 1,227	4,773 25,915	5,410 31,548	2	2	10 20	66 91	73 86		
W.S. Central Arkansas [§]	2	2	9	76	90	133	72	139	23,913	2,941		2	3	12	15		
Louisiana	1	3	10	92	132		1	343	910	6,307	_	0	3	17	15		
Oklahoma		2	7	63	101	136	80	359	3,040	3,075	2	1	15	55	53		
Texas [§]	N 26	0 30	0	N 980	N	255	571 169	962 266	19,813	19,225	_	0 5	2 15	7 206	3 180		
Mountain Arizona	26 1	30	60 7	980	1,037 131	64 10	60	266 109	5,340 1,549	6,024 1,997	_	2	10	208	57		
Colorado	13	13	27	457	313	23	51	127	1,675	1,813	_	1	5	63	52		
Idaho [§]	2	4	9	126	115	—	2	6	53	71	—	0	2	12	3		
Montana [§] Nevada [§]	1 8	2 1	11 11	70 52	78 69	30	2 29	6 94	75 1,147	50	—	0 0	1 2	2 5	1 14		
New Mexico [§]	0 1	2	5	52	93	50	29	94 41	613	1,159 692	_	1	2 5	26	25		
Utah	_	4	13	99	197	1	6	15	204	194	_	0	4	16	25		
Wyoming§	_	1	5	24	41	_	1	4	24	48	_	0	2	5	3		
Pacific	55	53	133	1,716	1,647	400	579	788	20,102	18,534	1	2	9	75	113		
Alaska California	41	2 33	7 61	60 1,090	65 1,094	342	23 482	36 692	812 17,026	626 15,225	_	0 0	2 4	15 12	13 39		
Hawaii		0	4	1,090	1,094	4	13	24	456	418	_	0	2	3	26		
Oregon	4	9	15	286	245	_	3	43	106	715	1	1	5	41	32		
Washington	10	9	75	264	229	54	48	66	1,702	1,550	—	0	4	4	3		
Territories American Samoa		0	0				0	0				0	0				
American Samoa C.N.M.I.	_			_	_	_			_	_	_			_	_		
Guam	—	0	1	2	3	—	0	4	20	14	—	0	0	—			
Puerto Rico	_	1	8	17	117	_	4	14	164	173	_	0	1	1	3		
U.S. Virgin Islands	—	0	0	—	—	_	1	4	25	92	_	0	0	_	—		

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Incidence data for reporting years 2009 and 2010 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).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 28, 2010, and August 29, 2009 (34th week)*

						ŀ	lepatitis (viral, acut	e), by type	e					
			А					В					с		
	Current	Previous	52 weeks	Cum	Cum	Current -	Previous !	52 weeks	Cum	Cum	Current	Previous 5	52 weeks	Cum	Cum
Reporting area	week	Med	Max	2010	2009	week	Med	Max	2010	2009	week	Med	Max	2010	2009
United States	20	30	69	959	1,309	46	58	204	1,944	2,180	9	15	44	542	493
New England Connecticut	_	2 0	5 2	66 18	70 14	_	1 0	5 2	37 11	40 11	_	1 0	4 3	22 15	46 36
Maine [†]	_	0	1	7	1	_	0	2	11	9	_	0	1	_	1
Massachusetts New Hampshire	_	1 0	4	34 1	44 6	_	0 0	2 2	8 5	16 4	N	0	1 0	7 N	8 N
Rhode Island [†]	_	0	4	6	3	U	0	0	U	U	U	0	0	U	U
Vermont [†]	2	0 4	0 10	 128	2 183	_	0 5	1 10	2 201	239	2	0 2	0 6	— 71	1 68
Mid. Atlantic New Jersey		0	3	11	52	_	1	5	50	73		0	2	7	4
New York (Upstate) New York City	1	1	3 4	38 44	31 57	—	1 2	6 4	37 60	38 45	2	1	4 1	41	32 4
Pennsylvania	1	1	6	35	43	_	1	5	54	83	_	0	3	23	28
E.N. Central	5	4	10	124	210	3	8	15	281	307	_	2	8	101	65
Illinois Indiana	_	1 0	3 2	26 15	97 15	_	2 1	6 5	58 39	76 48	_	0 0	1 2	1 18	4 13
Michigan	_	1	4	37	48	—	2	6	75	98	_	1	6	70	22
Ohio Wisconsin	5	0	4 3	24 22	28 22	3	2 1	6 3	76 33	68 17	_	0 0	1	7 5	23 3
W.N. Central	1	1	12	44	80	_	2	15	80	92	_	0	11	21	9
lowa Kansas	—	0 0	3 2	5 9	26 7	—	0 0	2 2	11 4	26 5	_	0 0	4 0	1	3 1
Minnesota	_	0	12	13	14	_	0	13	4 6	17	_	0	9	9	2
Missouri Nebraska [†]	1	0 0	3 1	13 4	13 17	—	1 0	5 2	49 9	30 12	_	0 0	1 1	9 2	2
North Dakota	_	0	1	-	—	_	0	0		—	_	0	1		
South Dakota		0	0		3		0	1	1	2	_	0	0		1
S. Atlantic Delaware	5	8 0	14 1	238 5	275 3	27	16 0	40 2	570 18	596 22	4 U	4	7 0	115 U	111 U
District of Columbia	_	0	1	1	1		0	1	3	9	_	0	1	2	—
Florida Georgia	2	3 1	8 3	86 27	119 33	10 1	5 3	11 7	197 97	195 96	2	1	4 2	38 6	27 29
Maryland [†]		0	4	16	29	1	1	6	38	54		0	2	14	16
North Carolina South Carolina [†]	1 1	0 1	5 4	41 26	31 37	8	1 1	15 4	65 38	79 37	2	0	3 0	32	13 1
Virginia [†]	1	1	6	34	21	2	2	14	72	58	—	0	2	9	7
West Virginia E.S. Central	1	0 1	2 3	2 27	1 29	5 3	0 7	14 13	42 216	46 214	1	0 3	5 7	14 87	18 65
Alabama [†]		0	1	5	7	_	1	5	39	65	_	0	2	3	5
Kentucky Mississippi	1	0 0	2 1	12 1	6 8	1	2 0	7 3	74 20	49 19	 U	2 0	5 0	60 U	39 U
Tennessee [†]	_	Ő	2	9	8	2	3	6	83	81	1	Ő	4	24	21
W.S. Central Arkansas [†]	_	2 0	19 3	73	123	4	9 1	109 4	280 31	379	1	1 0	14	47	39
Louisiana	_	0	2	6	6 3	_	1	5	30	48 41	_	0	1 1	4	1 6
Oklahoma Texas [†]	—	0 2	3 18	 67	3 111	3 1	1 5	19 87	58 161	66 224	1	0	12 3	15 28	9 23
Mountain	2	2	9	105	110	3	2	87	84	93	_	1	5	32	36
Arizona	1	1	5	49	45	—	0	2	22	35	U	0	0	U	U
Colorado Idaho [†]	1	1 0	3	24 6	38 3	1	0	3 1	18 6	17 7	_	0 0	2 2	6 8	23 2
Montana [†]	—	0	1	4	5	_	0	1	1	—	_	0	0	_	1
Nevada [†] New Mexico [†]	_	0 0	2 1	10 3	7 7	2	1 0	3 1	29 3	21 5	_	0 0	1 2	3 7	2 5
Utah	—	0	2	6	3	—	0	1	5	4	—	0	1	8	3
Wyoming [†] Pacific	4	0 5	3 16	3 154	2 229	6	0 6	0 20	 195	4 220		0	0 6		 54
Alaska	_	0	1	1	2	_	0	1	2	220	U	0	2	U	U
California Hawaii	4	4 0	15 2	125 1	178 8	5	4 0	17 1	136	155 5	1 U	0 0	4 0	21 U	27 U
Oregon	_	0	2	13	10	_	1	4	28	28	_	0	3	10	15
Washington	—	0	2	14	31	1	1	4	29	30	—	0	6	15	12
Territories American Samoa	_	0	0	_	_	_	0	0	_	_	_	0	0	_	_
C.N.M.I.	_	_	—			_	_	—			_	_	_		
Guam Puerto Rico	_	0 0	6 1	13 3	4 20	_	0 0	6 5	29 10	42 21	_	0 0	6 0	25	33
U.S. Virgin Islands		0	0		_		0	0	_	_	—	0	0		
CNML: Commonwoolth	C														

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Incidence data for reporting years 2009 and 2010 are provisional. † Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

		Legionellosis						me diseas	e		Malaria					
	Current	Previous	52 weeks	Cum	Cum	Current	Previous	52 weeks	Cum	Cum	Current	Previous 5	52 weeks	Cum	Cum	
Reporting area	week	Med	Max	2010	2009	week	Med	Max	2010	2009	week	Med	Max	2010	2009	
United States	40	60	111	1,831	2,066	245	425	2,340	16,260	27,563	22	25	89	843	918	
New England	_	3	9	115	137	62	128	361	4,532	9,826	_	1	4	43	40	
Connecticut	_	0	3	23	37	2	43	179	1,624	3,397	—	0	1	1	5	
Maine [†] Massachusetts	_	0 1	1 7	6 67	6 69	60	12 41	76 127	411 1,456	550 4,318	_	0 1	1 3	5 30	2 25	
New Hampshire	_	0	3	7	9	_	22	57	786	1,066	_	0	1	1	3	
Rhode Island [†]	_	0	3	5	10	—	1	18	35	188	—	0	1	4	2	
Vermont [†]		0	2	7	6		4	26	220	307	_	0	1	2	3	
Mid. Atlantic New Jersey	15	16 2	44 13	445 47	750 133	136 1	199 45	626 159	8,005 1,882	11,818 4,043	3	7 0	17 5	223 1	257 68	
New York (Upstate)	8	5	19	153	225	95	55	577	1,969	2,574	3	1	4	47	35	
New York City	_	2	12	71	154	—	1	37	9	753	_	4	12	138	113	
Pennsylvania	7	6	16	174	238	40	75	344	4,145	4,448	_	1	3	37	41	
E.N. Central	10	12	36	412	426	1	23	114	1,023	2,406	—	2	9	90	128	
Illinois	_	2 1	11 6	73 57	67 36	_	1 1	9 7	52 48	115 68	_	1 0	7	29 7	54 19	
Indiana Michigan	_	3	6 14	57 91	30 88	_	1	14	48 72	68 68	_	0	2 4	19	19	
Ohio	10	5	12	153	183	_	0	5	19	29	_	0	5	31	28	
Wisconsin	—	1	11	38	52	1	18	101	832	2,126	—	0	1	4	8	
W.N. Central	1	2	19	73	79	—	3	1,395	87	183	—	1	11	41	41	
lowa	_	0	3	7	16	_	0	10	61	93 16	_	0	1	7	10	
Kansas Minnesota	_	0 0	2 16	6 23	5 8	_	0 0	1 1,380	5	16 68	_	0 0	2 11	7 3	5 13	
Missouri	_	Ő	4	22	39	_	Ő	1,500	3	3	_	0	3	10	8	
Nebraska [†]	1	0	2	7	9	—	0	2	9	2	—	0	2	12	4	
North Dakota	_	0 0	1 1	4	1 1	_	0 0	15 1	8	1	_	0 0	1	2	1	
South Dakota	7	11	25	335	319	37	62	155	1	3,042	12	6	2 36	234	1 248	
S. Atlantic Delaware		0	25	555 11	12	57	12	30	2,364 469	5,042 752	12	0	1	254	240	
District of Columbia	_	0	4	12	14	_	0	3	16	46	_	0	3	7	10	
Florida	4	4	10	118	101	3	2	11	55	42	7	2	6	86	67	
Georgia Mandand [†]	-	1	4	31	30	7	0	2	8	36	-	0 1	2	3	55	
Maryland [†] North Carolina	2	2	12 7	67 36	82 38		28 1	70 9	984 65	1,517 70	2 1	0	19 13	54 33	55 19	
South Carolina [†]	_	0	2	8	6	2	1	3	26	25	_	0	1	3	3	
Virginia [†]	1	1	6	43	32	18	14	79	663	491	2	1	5	45	34	
West Virginia	_	0	3	9	4	_	0	33	78	63	_	0	2	1	2	
E.S. Central	1	2	10	89	87	_	1	4	31	22	_	0	3	20	28	
Alabama [†] Kentucky	_	0 0	2 4	9 19	11 35	_	0 0	1 1	2	2 1	_	0 0	2 3	3 5	8 8	
Mississippi	_	0	3	8	4	_	0	0		_	_	0	2	2	3	
Tennessee [†]	1	1	6	53	37	—	1	4	29	19	—	0	2	10	9	
W.S. Central	2	3	14	82	71	—	3	44	45	117	2	1	31	53	43	
Arkansas [†]	_	0	2	11	5	_	0	0	—	—	—	0	1	1	3	
Louisiana Oklahoma	1	0	3 4	5 10	7 3	_	0 0	0 2	_	_		0 0	1 1	1	5 1	
Texas [†]	1	2	10	56	56	_	3	42	45	117	1	1	30	47	34	
Mountain	1	3	9	103	81	1	0	3	15	45	1	1	3	40	38	
Arizona	—	1	6	36	30	—	0	1	3	3	1	0	2	18	5	
Colorado	_	1	5	22	12	1	0	1	2	1	—	0	1	12	23	
Idaho [†] Montana [†]	_	0	1	3 4	3 5	_	0 0	1 0	5	13 3	_	0	1	1 2	2 4	
Nevada [†]	1	0	2	18	10	_	0	1	_	12	_	0	1	3	_	
New Mexico [†]	_	0	2	4	3	—	0	1	3	4	—	0	1	1	_	
Utah	—	0	3	12	17	_	0	1	2	7	—	0	1	3	4	
Wyoming [†]		0 5	2 19	4 177	1		0 4	1	150	2 104		0	0	 99		
Pacific Alaska	3	5	19	2	116 1	8	4	10 1	158 4	104	4	3 0	19 1	99 2	95 2	
California	3	3	19	150	89	7	3	9	111	65	4	2	13	69	70	
Hawaii	_	0	1	1	1	Ň	0	0	N	Ν	_	0	1	1	1	
Oregon	—	0	3	9	10	_	1	3	36	30	—	0	1	6	9	
Washington	—	0	4	15	15	1	0	3	7	5	—	0	5	21	13	
Territories		~	~			K I	^	~	N I			~	~			
American Samoa C.N.M.I.	_	0	0	_	_	N	0	0	N	N	_	0	0	_	_	
Guam	_	0	0	_	_	_	0	0	_	_	_	0	0	_	_	
Puerto Rico	_	0	1	_	1	Ν	0	0	Ν	Ν	_	0	1	1	3	
U.S. Virgin Islands	_	0	0	_	_	_	0	0	_	_	_	0	0	_		

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Incidence data for reporting years 2009 and 2010 are provisional. † Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 28, 2010, and August 29, 2009 (34th week)*

		Meningoco	ccal disea: All groups		2 [†]			Pertussis			Rabies, animal					
	Current	Previous	52 weeks	Cum	Cum	Current	Previous	52 weeks	Cum	Cum	Current	Previous 5	52 weeks	Cum	Cum	
Reporting area	week	Med	Max	2010	2009	week	Med	Max	2010	2009	week	Med	Max	2010	2009	
United States	6	16	43	514	653	247	290	1,756	10,396	10,276	52	72	147	2,261	3,491	
New England	_	0	2	13	24	—	8	17	251	464	2	4	24	159	223	
Connecticut Maine [§]	_	0	2 1	2 3	3 3	_	1 0	7 5	63 24	34 68	1	1	22 4	59 41	93 36	
Massachusetts	_	0	1	3	12	_	4	10	134	269	_	0	0	_	_	
New Hampshire Rhode Island [§]	_	0	1 0	_	1 4	_	0 0	3 8	7 19	59 25		0 0	5 5	10 14	25 29	
Vermont [§]	_	0	1	5	1	_	0	1	4	9	1	1	5	35	40	
Mid. Atlantic	2	1	4	44	72	38	21	61	772	805	7	18	41	687	402	
New Jersey New York (Upstate)	_	0	2 3	9 9	12 16	 14	3 7	8 27	67 296	165 129	7	0 9	0 22	358	 290	
New York City	1	0	2	11	10	2	0	11	290 44	58	_	9	12	105	12	
Pennsylvania	1	0	2	15	32	22	8	37	365	453	—	3	24	224	100	
E.N. Central	1	3	8	88	115	52	68	126	2,622	2,106	8	2 1	26	185	173	
Illinois Indiana	_	0	4 3	16 21	30 24	_	11 9	27 26	418 337	478 232	4	0	11 1	96	63 25	
Michigan	1	0	2	13	18	12	22	45	717	507	1	1	5	51	51	
Ohio Wisconsin	_	1 0	2 2	21 17	26 17	40	20 4	69 11	945 205	761 128	3	0 0	12 0	38	34	
W.N. Central	_	1	6	36	51	73	25	627	1,047	1,557	9	5	18	179	277	
lowa	_	0	3	8	7	_	5	24	241	157	_	0	2	7	25	
Kansas Minnesota	_	0	2 2	5 2	9 9	 66	3 0	9 601	94 335	174 319	2 4	1 0	4 9	46 24	59 39	
Missouri	_	0	2	15	18		8	25	209	756	-	1	6	52	45	
Nebraska [§]	—	0	2	5	5	7	2	10	115	107	3	1	6	40	65	
North Dakota South Dakota	_	0	1 2	1	1 2	_	0 1	30 5	30 23	17 27	_	0 0	7 4	10	4 40	
S. Atlantic	_	3	7	100	119	18	26	74	935	1,123	22	22	85	712	1,495	
Delaware	_	0	1	1	2	1	0	4	9	10	_	0	0	_	—	
District of Columbia Florida	_	0	0 5	44	40	12	0 5	1 28	4 211	3 358	_	0 0	0 72	72	161	
Georgia	_	0	2	9	22		3	15	137	178	_	0	13	_	280	
Maryland [§] North Carolina	_	0	1 2	4 14	6 22	_	2 1	8 32	69 124	99 147	_	6 0	15 15	220	269 336	
South Carolina [§]	_	0	1	9	11	3	5	19	232	184	_	0	0	_		
Virginia [§]	_	0	2 2	17 2	11 5	1 1	5 0	15 7	122 27	122	20	10 2	26	368	368	
West Virginia E.S. Central	_	1	4	25	23	8	14	25	483	22 605	2 1	2	6 7	52 118	81 104	
Alabama [§]	_	0	2	4	6	1	4	9	142	237	1	0	4	36		
Kentucky	—	0	2	11	4	3	4	13	158	179	—	0	4	13	35	
Mississippi Tennessee [§]	_	0	1 2	3 7	3 10	4	1 3	6 10	42 141	49 140	_	0 1	3 4	9 60	3 66	
W.S. Central	1	1	9	58	59	28	56	753	1,818	2,116	_	1	40	58	569	
Arkansas [§]	_	0	2	5	5	5	4	29	106	250	—	0	10	20	28	
Louisiana Oklahoma	_	0	4 7	12 14	11 5	2	1 0	4 41	20 28	123 36	_	0 0	0 30	38	21	
Texas [§]	1	0	7	27	38	21	49	681	1,664	1,707	—	0	30	_	520	
Mountain	1	1	6	42	49	11	21	41	705	652	2	1	8	43	72	
Arizona Colorado	_	0	2 4	11 13	12 14	3 6	6 3	14 13	232 125	155 175	_	0	5 0	_	_	
Idaho [§]	—	0	1	5	6	2	2	19	112	58		0	2	5	3	
Montana [§] Nevada [§]	1	0	1	1 8	5 4	_	1 0	8 7	33 18	19 19	1 1	0 0	4 1	10 3	20 4	
New Mexico [§]	_	0	1	3	3	_	1	6	47	45		0	3	9	20	
Utah Wyoming [§]	_	0	1	1	1	—	4 0	10 1	133	160	_	0 0	2 3	2 14	6	
Pacific	1	3	1 16	108	4 141	 19	34	186	5 1,763	21 848	1	3	12	14	19 176	
Alaska	_	0	2	108	4	_	0	6	25	32	_	0	2	11	10	
California	1	2	13	70	90	—	22	162	1,283	410	1	3	12	99	156	
Hawaii Oregon	_	0 1	1 3	1 24	5 29	1	0 5	5 15	25 224	28 190	_	0 0	0 2	10	10	
Washington	_	0	7	12	13	18	4	24	206	188	_	0	0		_	
Territories		~	-					~				2	~			
American Samoa C.N.M.I.	_	0	0	_	_	_	0	0	_	_	N	0	0	N	N	
Guam	_	0	0	_	—	_	0	2	_	_	_	0	0			
Puerto Rico	—	0	1	_		—	0	0	—	1		1 0	3	30	28	
U.S. Virgin Islands		0	0				0	0					0			

C.N.M.I: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Incidence data for reporting years 2009 and 2010 are provisional. † Data for meningococcal disease, invasive caused by serogroups A, C, Y, and 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).

		Sa	sis		Shig	ga toxin-pi	oducing E	E. coli (STEC	<u>;</u>)†	Shigellosis						
	Current	Previous	52 weeks	Cum	Cum	Current	Previous	52 weeks	Cum	Cum	Current	Previous 5	52 weeks	Cum	Cum	
Reporting area	week	Med	Max	2010	2009	week	Med	Max	2010	2009	week	Med	Max	2010	2009	
United States	947	885	1,555	27,621	29,935	74	80	198	2,749	2,946	178	253	528	8,489	10,837	
New England	4	29	335	1,427	1,667	_	3	37	134	186	1	5	42	204	256	
Connecticut	_	0	318	318	430	_	0	37	37	67	_	0	36	36	43	
Maine ^s	2	2	7	77	91	—	0	2	11	14	1	0	2	5	2	
Massachusetts New Hampshire		21 3	47 10	775 116	786 213	_	2 0	8 2	59 17	64 24	_	4 0	15 2	147 6	175 14	
Rhode Island [§]		2	17	97	95	_	0	26	2		_	0	7	9	17	
Vermont [§]	1	1	5	44	52	_	0	2	8	17	_	0	1	1	5	
Mid. Atlantic	97	96	202	3,302	3,569	9	8	25	318	279	22	34	66	1,085	2,071	
New Jersey	_	14	43	391	762	_	1	4	32	74	_	6	17	200	449	
New York (Upstate)	63	24	78	907	812	9	3	15	130	85	15	4	19	141	144	
New York City	3	25	53	827	817	_	1	4	44	40	1	7	15	196	307	
Pennsylvania	31	29	72	1,177	1,178	_	2	13	112	80	6	17	35	548	1,171	
E.N. Central	41	82	227	3,208	3,611	8	12	33	440	531	8	25	235	1,125	2,002	
Illinois Indiana	_	26 10	111 49	1,119 298	1,026 423	_	2 1	6 8	68 64	127 70	_	9 1	228 5	611 30	456 53	
Michigan	7	10	49	559	680	1	2	16	109	92	3	4	9	153	163	
Ohio	34	24	47	910	998	7	2	11	104	95	5	7	23	223	927	
Wisconsin	—	9	40	322	484	—	3	8	95	147	—	4	14	108	403	
W.N. Central	22	44	94	1,524	1,852	1	10	41	404	517	3	49	88	1,653	640	
lowa	3	7	36	341	298	_	2	15	112	120	1	1	5	38	45	
Kansas	11	7	20	278	269	1	1	6	46	45	2	4	14	176	159	
Minnesota	_	6	32	178	404	_	1	17	31	132	—	0	6	14	52	
Missouri Nebraska [§]	8	13 4	38 13	462 159	423 268	_	3 1	29 6	151 47	93 68	_	44 0	75 4	1,395 25	358 19	
North Dakota	_	0	39	25	35	_	0	7		4	_	0	5		3	
South Dakota	_	2	6	81	155	_	0	5	17	55	_	0	2	5	4	
S. Atlantic	487	265	523	8,018	7,884	20	13	30	440	432	59	40	85	1,473	1,674	
Delaware	2	3	9	95	72	_	0	2	4	10	_	2	10	36	72	
District of Columbia	_	1	4	45	64	_	0	1	5	2	_	0	4	20	17	
Florida	193	126	277	3,392	3,328	8	3	14	147	107	28	13	49	642	294	
Georgia Maryland [§]	93 23	40 15	105 45	1,340 602	1,474 506	2 3	1 2	15 6	66 55	49 56	15 3	12 3	25 10	445 79	443 299	
North Carolina	72	31	144	1,024	1,113	4	1	7	44	74	3	2	10	115	315	
South Carolina [§]	60	20	74	760	532	_	0	3	15	23	4	1	5	46	88	
Virginia [§]	40	18	68	636	643	3	2	15	90	93	6	2	15	89	140	
West Virginia	4	3	16	124	152	_	0	5	14	18	_	0	2	1	6	
E.S. Central	40	49	117	1,739	1,953	1	4	10	153	150	5	12	40	452	581	
Alabama ^s		14	40	421	534	—	1	4	31	38	_	3	10	95	108	
Kentucky	11	8	29	325	327	_	1 0	6 2	34	53	3	4	28 3	179	140	
Mississippi Tennessee [§]	29	12 14	44 42	450 543	576 516	1	2	2 8	10 78	6 53	2	1 5	11	27 151	31 302	
	66	107	547	2,851	3,300	3	5	68	155	191	39	46	251	1,427	2,046	
W.S. Central Arkansas [§]	29	107	36	400	3,300	_	1	5	36	26		40	9	34	2,040	
Louisiana	10	19	44	641	712	1	0	3	8	16	1	3	10	137	143	
Oklahoma	27	10	46	355	390	_	0	27	13	19	9	6	96	186	180	
Texas [§]	_	59	477	1,455	1,819	2	3	41	98	130	29	34	144	1,070	1,488	
Mountain	35	48	91	1,670	2,069	15	9	27	359	381	9	14	39	453	800	
Arizona	1	18	35	523	683	_	1	6	42	47	4	8	25	236	579	
Colorado	17	11	23	394	435	12	2	18	140	124	4	2	6	75	62	
ldaho [§] Montana [§]	5 2	3 2	9 7	103 66	127 84	3	1	7 7	46 28	54 26	1	0 0	3 1	18 5	6 11	
Nevada§	2	4	19	189	181	_	0	5	20	20	_	1	7	21	47	
New Mexico [§]	1	5	12	169	261	_	1	4	24	26	_	2	9	74	79	
Utah	—	5	17	196	230	—	1	11	48	74	—	0	4	24	15	
Wyoming [§]	_	1	9	30	68	—	0	2	11	9	—	0	2	_	1	
Pacific	155	115	299	3,882	4,030	17	10	46	346	279	32	20	64	617	767	
Alaska	_	1	5	57	51	_	0	1	1	1		0	2		1	
California	116	84	227	2,908	3,032	6	5	35	151	150	30	16	51	504	602	
Hawaii Oregon	12 5	4 8	62 48	104 365	175 305	1	0 2	4 11	14 59	4 43	_	0 1	3 4	10 36	29 38	
Washington	22	8 15	48 61	365 448	305 467	10	2	19	59 121	43 81	2	2	4 22	36 67	38 97	
Territories	~~	15	51	110	107	10	5		121	01	~	-		0,	21	
American Samoa	_	1	1	2	_	_	0	0	_	_		0	1	1	3	
C.N.M.I.	_	_	_	_	_	_	_	_	_	_	_	_	_	_		
Guam	—	0	2	4	7	—	0	0	_	—	—	0	3	1	5	
Puerto Rico	—	6	39	127	352	—	0	0	—	—	—	0	1	—	10	
U.S. Virgin Islands	_	0	0		_	_	0	0	_		_	0	0			

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Incidence data for reporting years 2009 and 2010 are provisional. † Includes *E. coli* 0157:H7; Shiga toxin-positive, serogroup non-0157; and Shiga toxin-positive, not serogrouped. § Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

				Spott	ed Fever Ricketts	iosis (including RM	1SF) [†]						
			Confirmed			Probable							
	<u> </u>	Previous 5	2 weeks	6	6	<u> </u>	Previous 5	2 weeks	6	6			
Reporting area	Current week	Med	Max	Cum 2010	Cum 2009	Current week	Med	Max	Cum 2010	Cum 2009			
United States	4	2	14	100	116	18	15	421	873	1,021			
New England	_	0	1	_	2	_	0	1	1	9			
Connecticut	—	0	0	—	—	—	0	0	—	—			
Maine [§]	—	0	0	—	_	_	0	1	1	4			
Massachusetts New Hampshire	_	0 0	0 0	_	1	_	0 0	1 1	_	5			
Rhode Island [§]	_	0	0	_	_	_	0	0	_	_			
Vermont [§]	_	0	1	_	1	_	0	0	_	_			
Mid. Atlantic	_	0	2	13	9	_	1	5	39	73			
New Jersey	—	0	0	—	2	—	0	3	—	48			
New York (Upstate)	—	0	1	1	—	—	0	3	10	10			
New York City Pennsylvania	_	0 0	1 2	1 11	7	_	0 0	4 1	19 10	5 10			
E.N. Central Illinois	1	0 0	1 1	4 2	8 1	_	0 0	7 5	52 19	70 43			
Indiana	1	Ő	1	2	3	_	0	5	25	8			
Michigan	—	0	1	—	3	—	0	2	3	1			
Ohio	—	0	0	—	_	—	0	2	5	15			
Wisconsin	—	0	0	—	1	—	0	1	—	3			
W.N. Central	—	0	2	8	16	1	2	19	173	218			
lowa Kansas	_	0 0	0 1	2	1 1	_	0 0	1 0	2	4			
Minnesota	_	0	1		1	_	0	1	_	1			
Missouri	_	0	1	5	6	_	2	18	166	209			
Nebraska§	—	0	1	1	7	1	0	1	4	4			
North Dakota South Dakota	_	0 0	0 0	_	_		0	1 0	1	_			
S. Atlantic Delaware	3	1 0	10 1	53 1	55	13	5 0	59 2	319 14	310 15			
District of Columbia	_	0	0	_	_	_	0	1					
Florida	_	0	1	2	_	1	0	1	7	4			
Georgia	_	0	6	33	45	_	0	0	_	_			
Maryland [§]		0	1	1	2		0	4	28	32			
North Carolina South Carolina [§]	2 1	0 0	3 0	11 1	5 3	10 1	1 0	48 2	178 10	200 15			
Virginia [§]	_	0	2	4	_	1	1	11	82	43			
West Virginia	_	0	0	_	_	_	0	1	_	1			
E.S. Central	_	0	2	11	7	2	3	28	235	204			
Alabama [§]	—	0	1	2	3	_	1	8	44	46			
Kentucky	—	0	2	6	1	_	0	0	_	_			
Mississippi Tennessee [§]	_	0 0	0 2	3	3	2	0 3	1 20	2 189	9 149			
W.S. Central		0	3	1	6	2	1	408	48	114			
Arkansas [§]	_	0	3 1		0		0	408	48 20	59			
Louisiana	_	Ő	O		_	_	0	1	20	2			
Oklahoma	—	0	2	—	5	1	0	287	16	39			
Texas [§]	_	0	1	1	1	1	0	11	10	14			
Mountain	—	0	2	3	12	_	0	3	5	23			
Arizona	—	0 0	2	1	6	_	0	2 0	1	11			
Colorado Idaho [§]	_	0	0 0	_	1	_	0 0	0 1	2	1			
Montana [§]	_	Ő	1	2	4	_	Ő	1	1	6			
Nevada [§]	_	0	0	_	_	_	0	0	_	1			
New Mexico [§]	_	0 0	0	_	—	_	0	1 0	1	1			
Utah Wyoming [§]	_	0	0 0	_	1	_	0 0	0	_	1 2			
Pacific	—	0	2	7	1		0	1	1				
Alaska	N	0	2	/ N	I N	N	0	0	N N	N			
California	—	0	2	6	1	_	0	0	_	_			
Hawaii	Ν	0	0	N	Ν	N	0	0	N	N			
Oregon	—	0	1	1	—	—	0	1	1	-			
Washington	—	0	0	-	—	—	0	0	—	—			
Territories American Samoa	Ν	0	0	Ν	Ν	Ν	0	0	Ν	Ν			
C.N.M.I.	IN	0			IN	IN	0		IN	IN			
Guam	Ν	0	0	Ν	Ν	Ν	0	0	Ν	Ν			
Puerto Rico	Ν	0	0	N	Ν	N	0	0	N	N			
U.S. Virgin Islands	—	0	0	_	—	—	0	0	—	_			

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 28, 2010, and August 29, 2009 (34th week)*

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Incidence data for reporting years 2009 and 2010 are provisional. * Illnesses with similar clinical presentation that result from Spotted fever group rickettsia infections are reported as Spotted fever rickettsioses. Rocky Mountain spotted fever (RMSF) caused by *Rickettsia rickettsii*, is the most common and well-known spotted fever. * Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 28, 2010, and August 29, 2009 (34th week)*

				Streptococ	cus pneumo	<i>nia</i> e,† invasi	ve disease		·							
			All ages					Age <5			Syphilis, primary and secondary					
	Current	Previous	52 weeks	Cum	Cum	Current	Previous !	52 weeks	Cum	Cum	Current -	Previous 5	2 weeks	Cum	Cum	
Reporting area	week	Med	Max	2010	2009	week	Med	Max	2010	2009	week	Med	Max	2010	2009	
United States	80	187	491	9,864	2,060	17	50	156	1,548	1,569	99	236	413	7,482	9,290	
New England	—	7	100	564	38	—	1	24	74	50	2	7	22	287	221	
Connecticut Maine [§]	_	0 1	93 6	255 86	10	_	0 0	22 2	24 7	4	1	1 0	10 3	54 16	42 2	
Massachusetts	—	0	5	53	3	—	1	4	35	35	_	5	15	174	155	
New Hampshire Rhode Island [§]	_	0	7 34	59 53	14	_	0	2 2	3 2	8 1	1	0	1 4	13 28	12 10	
Vermont [§]	_	1	6	58	11	_	0	1	3	2	_	Ő	2	20		
Mid. Atlantic	6	12	54	844	125	2	7	48	243	203	33	33	45	1,125	1,183	
New Jersey New York (Upstate)	2	1 3	8 12	76 114	 50	_	1 3	5 19	39 83	33 91	5 3	4 2	12 11	150 91	158 81	
New York City	2	4	25	314	7	1	1	24	82	66	19	18	31	647	722	
Pennsylvania	2	6	22	340	68	1	0	5	39	13	6	7	16	237	222	
E.N. Central Illinois	12	31 1	98 7	1,991 66	469	1	8 2	18 5	247 59	261 41	1	28 12	46 23	847 302	1,007 493	
Indiana	_	7	23	408	182	_	1	6	35	53	_	3	13	109	102	
Michigan Ohio	1 7	7 14	27 49	466 831	19 268	1	2 2	6 6	56 68	49 89	1	3 8	12 13	141 268	154 227	
Wisconsin	4	4	22	220	200	_	1	4	29	29	_	1	3	200	31	
W.N. Central	4	8	182	580	134	1	2	12	104	130	4	5	13	187	210	
lowa Kansas	1	0 1	0 7	 71		_	0 0	0 2	— 11	 14	_	0	2 3	9 11	16 19	
Minnesota	_	0	, 179	287	32	_	0	10	44	58	_	1	9	68	48	
Missouri	1	2	9	78	47	1	0	3	28	37	4	3	8	94	120	
Nebraska ^ş North Dakota	1 2	1 0	7 11	91 39	7	1	0 0	2 1	12 2	9 4	_	0 0	1 1	5	4 3	
South Dakota	—	0	3	14	2	—	0	2	7	8	—	0	0	_	_	
S. Atlantic	19	40	144	2,286	923	8	12	28	391	370	14	57	218	1,796	2,228	
Delaware District of Columbia	_	0 0	3 4	24 21	15 17	_	0 0	2 2	7	3	_	0 2	2 8	4 89	22 123	
Florida	7	18	89	1,055	541	3	3	18	145	134	1	19	32	635	701	
Georgia Maryland [§]	4 3	10 5	28 25	371 327	262 4	2 2	4	12 6	105 39	91 58	_	11 6	167 11	348 190	517 187	
North Carolina	—	0	0	—	_	—	0	0	_	_	9	8	31	247	372	
South Carolina [§] Virginia [§]	3	5 0	25 4	358 41	_	1	1	4 4	40 39	33 33	1 3	2 4	7 22	93 187	85 217	
West Virginia	2	1	21	89	84	_	0	4	16	18		0	2	3	4	
E.S. Central	6	16	50	869	201	_	2	8	84	94	6	18	39	563	772	
Alabama ^s Kentucky	1	0 2	0 16	131	 55	_	0 0	0 2	10	7	3	5 2	12 13	152 86	303 43	
Mississippi	—	1	6	40	34	_	0	2	9	17	—	4	17	122	144	
Tennessee [§]	5	12	44	698	112	_	2	7	65	70	3	6	17	203	282	
W.S. Central Arkansas [§]	24	17 2	90 9	1,260 118	84 40	4	6 0	41 3	202 11	233 32	18 1	35 4	71 14	1,032 107	1,895 150	
Louisiana	_	1	8	56	44	_	0	3	17	17	_	4	23	64	551	
Oklahoma Texas [§]	1 23	0 11	5 82	35 1,051	_	1 3	1 3	5 34	35 139	39 145	— 17	2 26	6 42	52 809	61 1,133	
Mountain	25	19	82	1,259	84	1	5	12	175	206	5	20	20	289	349	
Arizona	2	7	51	584	_	_	2	7	77	92	_	3	7	92	166	
Colorado Idaho [§]	6	6 0	20 2	372 11	_	1	1 0	4 2	48 5	30 7	1	2 0	5 1	76 2	62 3	
Montana [§]	_	0	2	13	_	_	0	1	1	_	_	0	1	1	_	
Nevada [§] New Mexico [§]	1	1 2	4 9	54 114	34	—	0 0	1 4	5 14	7 24	4	1	10 4	70 28	62 34	
Utah	_	2	9	102	41	_	1	4	22	45	_	0	4	20	54 19	
Wyoming§	—	0	1	9	9	_	0	1	3	1	-	0	0	_	3	
Pacific Alaska	—	4	14 9	211 80	2	—	0 0	7 5	28 18	22	16	40 0	64	1,356	1,425	
California	_	2	12	131	_	_	0	2	10	14	14	36	1 59	1 1,193	1,261	
Hawaii	—	0	1	_	2	_	0	1	_	8	-	0	3	24	24	
Oregon Washington	_	0	0	_	_	_	0 0	0	_	_	2	0 3	5 10	6 132	40 100	
Territories		0	5				0	÷			2	2		.52		
American Samoa	_	0	0	_	_	_	0	0	—	_	—	0	0	_	—	
C.N.M.I. Guam	_	0		_	_	_	0		_	_	_	0	0	_	_	
Puerto Rico	_	0	0	_	_	_	0	0	_	_	_	4	17	144	144	
U.S. Virgin Islands	—	0	0	_	_	_	0	0	_	_	_	0	0	_		

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Incidence data for reporting years 2009 and 2010 are provisional. * Includes drug resistant and susceptible cases of invasive *Streptococcus pneumoniae* disease among children <5 years and among all ages. Case definition: Isolation of *S. pneumoniae* from a normally sterile body site (e.g., blood or cerebrospinal fluid). \$ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 28, 2010, and August 29, 2009 (34th week)*

		Vanto	lla (ektele	8			NJ -			/est Nile viru	as uisease.	Name		~1	
			lla (chickei	npox) ^s				uroinvasive	5				uroinvasiv	e ¹	
Reporting area	Current week	Previous Med	52 weeks Max	Cum 2010	Cum 2009	Current - week	Previous Med	52 weeks Max	Cum 2010	Cum 2009	Current week	Previous 5 Med	Max	Cum 2010	Cum 2009
United States	87	325	546	9,434	14,698		0	45	96	255		1	30	81	2009
New England	1	15	36	457	726	_	0	1	1	_		0	0	_	_
Connecticut	_	б	20	212	348	—	0	0	_	—	—	0	0	_	_
Maine [§]	—	3	15	130	130	—	0	0	1	—	—	0	0	_	_
Massachusetts New Hampshire	1	0 2	1 8	85	3 145	_	0 0	1 0	1	_	_	0 0	0 0	_	_
Rhode Island [§]	_	1	12	18	24	_	0	0	_	_	_	0	0	_	_
Vermont [§]	_	0	10	12	76	_	0	0	_	_	_	0	0	_	_
Mid. Atlantic	11	33	66	1,072	1,432	_	0	6	17	3	_	0	2	5	1
New Jersey	—	9	30	392	299	—	0	2	3	2	—	0	0	—	_
New York (Upstate)	N	0	0	N	N	_	0	4	9	1	—	0	2	5	1
New York City Pennsylvania		0 22	0 52	680	1,133	_	0 0	2 1	4 1	_	_	0 0	0	_	_
					,	_					_			1	
E.N. Central Illinois	13 2	108 26	176 49	3,200 822	4,581 1,093	_	0 0	4 3	4	8 5	_	0 0	1 0	1	4
Indiana [§]	1	6	35	298	340	_	0	1	_	2	_	0	0	_	2
Michigan	1	35	62	976	1,323	_	Ő	2	3	_	_	0	1	1	_
Ohio	8	28	56	887	1,413	_	0	1	1		—	0	0	—	2
Wisconsin	1	7	24	217	412	_	0	0	_	1	—	0	0	_	_
W.N. Central		13	40	360	967	—	0	5	7	20	—	0	8	24	51
lowa Kansas [§]	N	0 4	0 18	N 96	N 411	_	0 0	0 1	_	3	_	0 0	1	1 2	4 7
Minnesota	_	4	0	90	411	_	0	1	2	1	_	0	1		1
Missouri	_	6	16	215	461		Ő	2	2	3	_	0	1	_	_
Nebraska [§]	N	0	0	N	N	_	0	1	3	7	_	0	6	8	28
North Dakota	—	0	26	28	57	_	0	0	—	_	—	0	1	4	1
South Dakota	_	0	7	21	38	_	0	1	—	6	_	0	2	9	10
S. Atlantic	23	37	99	1,459	1,844	—	0	4	6	11	—	0	2	3	—
Delaware [§] District of Columbia	_	0 0	4 4	11 15	10 24	_	0 0	0 0	_	2	_	0 0	0 0	_	_
Florida [§]	8	15	57	729	916	_	0	2	2	1	_	0	1	_	_
Georgia	N	0	0	N	N	_	0	1	1	2	_	0	1	3	_
Maryland§	N	0	0	N	N	_	0	1	3	—	—	0	1	_	—
North Carolina	N	0	0	N	N	—	0	0	_	_	—	0	0	_	—
South Carolina [§] Virginia [§]	7	0 11	35 34	75 333	93 499	—	0 0	2 1	_	3 3	_	0 0	0 0	_	_
West Virginia	8	8	26	296	302	_	0	0	_		_	0	0	_	_
E.S. Central	5	6	28	196	386	_	0	5	1	25	_	0	3	4	19
Alabama [§]	5	6	20	189	383	_	0	0	_		_	0	1	1	
Kentucky	N	0	0	N	Ν	_	0	1	_	2	_	0	0	_	_
Mississippi		0	2	7	3	_	0	3	1	21	—	0	2	3	16
Tennessee§	N	0	0	N	N	_	0	2	—	2	—	0	1	—	3
W.S. Central	24	58	285	1,943	3,705	_	0	12	9	83	—	0	6	3	27
Arkansas [§] Louisiana	_	3 1	32 8	122 40	373 99	—	0 0	1 2	1 5	6 9	_	0 0	0 2	2	9
Oklahoma	N	0	0	-+0 N	N	_	0	2		4	_	0	0		2
Texas [§]	24	49	272	1,781	3,233	_	0	12	3	64	_	0	4	1	16
Mountain	10	22	37	713	972	_	0	12	36	56	_	0	13	29	91
Arizona	_	0	0	_	_	_	0	8	35	11	—	0	8	19	5
Colorado [§]	8	8	20	283	365	—	0	7	1	23	_	0	7	9	51
ldaho ^s Montana [§]	N	0 3	0 17	N 153	N 119	_	0 0	2 0	_	7 2	_	0 0	4 1	_	19 2
Nevada [§]	N	0	0	N	N	_	0	0	_	7	_	0	0	_	5
New Mexico [§]	2	1	7	72	95	_	Ő	2	_	4	_	Ő	1	_	2
Utah	_	6	22	192	393	_	0	1	_	_	_	0	0	_	1
Wyoming [§]	_	0	3	13	—	—	0	1	—	2	_	0	2	1	6
Pacific	-	1	5	34	85	—	0	12	15	49	—	0	4	12	51
Alaska California	—	0	5	28	51	—	0 0	0	15	22	_	0 0	0	12	
Hawaii		0	0 2	6	 34	_	0	8 0	15	33		0	4 0	12	30
Oregon	N	0	0	N	N	_	0	1	_	_	_	0	1	_	9
Washington	N	0	Ő	N	N	_	Ő	6	_	16	_	Ő	1	_	12
Territories															
American Samoa	Ν	0	0	Ν	Ν	_	0	0	_	_	_	0	0	_	_
C.N.M.I.	—	_	_	_		—	_	_	—	—	—	_	_	—	—
Guam Puerto Rico	—	0 5	3 30	12 180	15 390	—	0 0	0 0	—	—	_	0 0	0 0	—	_
U.S. Virgin Islands	_	5	30 0	180	390	_	0	0	_	_	_	0	0	_	_
o.o. virgin Islanus	_	U	U		_		U	0	_			U	U	_	_

C.N.M.I.: Commonwealth of Northern Mariana Islands.

C.N.M.J.: Commonwealth of Northern Mariana Islands.
 U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
 * Incidence data for reporting years 2009 and 2010 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.
 [†] 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 serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.

§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

¹ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table, except starting in 2007 for the domestic arboviral diseases and influenzaassociated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/ncphi/disss/nndss/phs/infdis.htm.

TABLE III. Deaths in 122 U.S. cities,* week ending August 28, 2010 (34th week)

Reporting area New England Boston, MA Bridgeport, CT Cambridge, MA Fall River, MA Hartford, CT Lowell, MA Lynn, MA New Bedford, MA New Haven, CT Providence, RI Somerville, MA Springfield, MA Waterbury, CT Worcester, MA Mid. Atlantic Albany, NY	All Ages 496 142 26 15 21 55 55 7 7 23 38 59 2 21 14 48	≥65 332 90 19 10 15 42 18 3 18 20 41 2 13	45-64 110 32 6 2 5 10 6 1 4 13 13	25-44 32 10 2 1 2 1 3 	1-24 14 4 1 1 1 	<1 8 6 — — — —	P&l [†] Total 41 13 1 3 3 4	Reporting area S. Atlantic Atlanta, GA Baltimore, MD Charlotte, NC	All Ages 1,141 145 167	≥ 65 718 84 91	45–64 279 42	25–44 85 14	1–24 35 2	<1 24	P&I [†] Total
Boston, MA Bridgeport, CT Cambridge, MA Fall River, MA Hartford, CT Lowell, MA Lynn, MA New Haven, CT Providence, RI Somerville, MA Springfield, MA Waterbury, CT Worcester, MA Mid. Atlantic	142 26 15 21 55 25 7 23 38 59 2 21 14 48	90 19 10 15 42 18 3 18 20 41 2	32 6 2 5 10 6 1 4 13	10 2 1 2 1 3 	4 1 1 	6 	13 1 3 3	Atlanta, GA Baltimore, MD Charlotte, NC	145 167	84					73
Bridgeport, CT Cambridge, MA Fall River, MA Hartford, CT Lowell, MA Lynn, MA New Bedford, MA New Haven, CT Providence, RI Somerville, MA Springfield, MA Waterbury, CT Worcester, MA Mid. Atlantic	26 15 21 55 25 7 23 38 59 2 21 14 48	19 10 15 42 18 3 18 20 41 2	6 2 5 10 6 1 4 13	 1 2 1 3	1 — 1 —	 	1 3 3	Baltimore, MD Charlotte, NC	167		42	1/	2		, 5
Cambridge, MA Fall River, MA Hartford, CT Lowell, MA Lynn, MA New Bedford, MA New Haven, CT Providence, RI Somerville, MA Springfield, MA Waterbury, CT Worcester, MA Mid. Atlantic	15 21 55 25 7 23 38 59 2 21 14 48	10 15 42 18 3 18 20 41 2	2 5 10 6 1 4 13	2 1 2 1 3	1 		3 3	Charlotte, NC		01		14	2	3	12
Fall River, MA Hartford, CT Lowell, MA Lynn, MA New Bedford, MA New Haven, CT Providence, RI Somerville, MA Springfield, MA Waterbury, CT Worcester, MA Mid. Atlantic	21 55 25 7 23 38 59 2 21 14 48	15 42 18 3 18 20 41 2	5 10 6 1 4 13	1 2 1 3	 	_	3	,	110	21	54	12	6	4	4
Hartford, CT Lowell, MA Lynn, MA New Bedford, MA New Haven, CT Providence, RI Somerville, MA Springfield, MA Waterbury, CT Worcester, MA Mid. Atlantic	55 25 7 23 38 59 2 21 14 48	42 18 3 18 20 41 2	10 6 1 4 13	2 1 3	_	_			112	77	21	6	7	1	5
Lowell, MA Lynn, MA New Bedford, MA New Haven, CT Providence, RI Somerville, MA Springfield, MA Waterbury, CT Worcester, MA Mid. Atlantic	25 7 23 38 59 2 21 14 48	18 3 18 20 41 2	6 1 4 13	1 3 —	_		4	Jacksonville, FL	145	102	30	8	3	2	21
Lynn, MA New Bedford, MA New Haven, CT Providence, RI Somerville, MA Springfield, MA Waterbury, CT Worcester, MA Mid. Atlantic	7 23 38 59 2 21 14 48	3 18 20 41 2	1 4 13	3	_	_		Miami, FL	90	59	17	9	2	3	8
New Bedford, MA New Haven, CT Providence, RI Somerville, MA Springfield, MA Waterbury, CT Worcester, MA Mid. Atlantic	23 38 59 2 21 14 48	18 20 41 2	4 13	_	—		3	Norfolk, VA	44	30	8	4	1	1	3
New Haven, CT Providence, RI Somerville, MA Springfield, MA Waterbury, CT Worcester, MA Mid. Atlantic	38 59 2 21 14 48	20 41 2	13			_	—	Richmond, VA	54	31	13	4	4	2	2
Providence, RI Somerville, MA Springfield, MA Waterbury, CT Worcester, MA Mid. Atlantic	59 2 21 14 48	41 2			1	_		Savannah, GA	54	35	14		2	3	3
Somerville, MA Springfield, MA Waterbury, CT Worcester, MA Mid. Atlantic	2 21 14 48	2	13	4	1	_	5	St. Petersburg, FL	47	26	14	2	3	2	2
Springfield, MA Waterbury, CT Worcester, MA Mid. Atlantic	21 14 48			2	2	1	3	Tampa, FL	195	135	43	12	3	2	6
Waterbury, CT Worcester, MA Mid. Atlantic	14 48	13						Washington, D.C.	82	46	19	14	2	1	5
Worcester, MA Mid. Atlantic	48		5	1	1	1	2	Wilmington, DE	6	2	4				2
Mid. Atlantic		10	3	1	_	_		E.S. Central	956	619	239	63	15	20	58
		31	10	5	2	_	4	Birmingham, AL	177	119	44	7	1	6	11
Albany, NY	1,865	1,296	390	104	32	39	82	Chattanooga, TN	99	69	20	7	2	1	6
	51	38	9		1	3	2	Knoxville, TN	110	81	22	6		1	8
Allentown, PA	22	20		1	—	1	1	Lexington, KY	65	37	22	4	1	1	
Buffalo, NY	60	42	15	1	_	2	—	Memphis, TN	163	100	44	10	3	6	16
Camden, NJ	12	9	1	—	_	2	—	Mobile, AL	151	97	39	12	2	1	5
Elizabeth, NJ	11	8	2	_	1	—	_	Montgomery, AL	48	32	8	6	2	_	3
Erie, PA	51	39	7	5	—	—	3	Nashville, TN	143	84	40	11	4	4	9
Jersey City, NJ	23	18	5		15	_		W.S. Central	1,326	834	334	82	46	29	75
New York City, NY	906	646	180	53	15	9	45	Austin, TX	94	61	21	9	1	2	5
Newark, NJ	24	11	6	4	2	1	1	Baton Rouge, LA	79	38	17	14	10	_	2
Paterson, NJ	10	4	3	3				Corpus Christi, TX	55	32	13	4	2	4	2
Philadelphia, PA	402	239	117	27	7	12	13	Dallas, TX	197	116	54	13	10	4	13
Pittsburgh, PA [§]	31	23	6	1	1	2	1	El Paso, TX	86 U	64 U	17	4		1 U	3 U
Reading, PA	31 66	24 48	3 7	5	2	1 4	3 2	Fort Worth, TX Houston, TX	350	215	U 101	U		9	24
Rochester, NY	12	40	2	1		4		Little Rock, AR			14	14	10	9	
Schenectady, NY Scranton, PA	24	18	2 5	_	1	_	_	New Orleans, LA	55 U	37 U	14 U	1 U	2 U	U	1 U
Syracuse, NY	75	57	12	2	2	2	8	San Antonio, TX	224	149	48	18	6	3	11
Trenton, NJ	28	22	6		2		1	Shreveport, LA	73	44	21	10	3	4	4
Utica, NY	28	7	1	1	_	_	_	Tulsa, OK	113	78	21	4	2	1	10
Yonkers, NY	17	14	3	_	_	_	2	Mountain	965	624	234	73	18	16	56
E.N. Central	1,863	1,267	419	110	31	36	105	Albuquerque, NM	115	79	234	73	3	3	7
Akron, OH	53	37	11	3	1	1	7	Boise, ID	51	35	13	2	1		4
Canton, OH	33	24	6	1	_	2	4	Colorado Springs, CO	52	29	18	4	1	_	_
Chicago, IL	259	165	62	21	8	3	17	Denver, CO	87	53	20	9	1	4	8
Cincinnati, OH	89	57	21	6	1	4	6	Las Vegas, NV	303	210	70	20	1	2	17
Cleveland, OH	251	179	51	12	5	4	8	Ogden, UT	30	210	5	20	_		2
Columbus, OH	255	165	62	20	2	6	10	Phoenix, AZ	165	89	46	18	6	6	10
Dayton, OH	104	77	21	3	3	_	6	Pueblo, CO	30	21	7	1	1	_	2
Detroit, MI	125	62	46	8	1	8	3	Salt Lake City, UT	121	80	30	8	2	1	6
Evansville, IN	37	31	5	1	_	_	7	Tucson, AZ	11	5	2	2	2	_	_
Fort Wayne, IN	56	38	13	2	1	2	4	Pacific	1,566	1,049	352	92	41	31	124
Gary, IN	12	6	3	3	_	_		Berkeley, CA	6	3	3			_	
Grand Rapids, MI	49	29	13	5	2	_	1	Fresno, CA	119	80	22	9	3	5	7
Indianapolis, IN	149	98	36	7	4	4	11	Glendale, CA	27	20	6	1	_	_	5
Lansing, MI	38	28	7	3	_		2	Honolulu, HI	66	44	15	4	1	2	5
Milwaukee, WI	57	41	10	6	_	_	4	Long Beach, CA	51	36	8	4	1	2	5
Peoria, IL	34	25	6	2	1	_	5	Los Angeles, CA	240	153	54	20	10	3	32
Rockford, IL	47	40	6	_	_	1	6	Pasadena, CA	23	16	6	1		_	1
South Bend, IN	53	38	12	2	_	1	_	Portland, OR	93	66	18	5	4	_	6
Toledo, OH	108	83	21	3	1	_	3	Sacramento, CA	188	121	51	10	5	1	17
Youngstown, OH	54	44	7	2	1	_	1	San Diego, CA	146	94	36	7	3	5	11
W.N. Central	542	340	138	34	18	12	26	San Francisco, CA	102	74	20	5	2	1	9
Des Moines, IA	76	540	150	3	10	5	4	San Jose, CA	190	137	42	7	2	2	12
Duluth, MN	31	26	5		_	_	-	Santa Cruz, CA	20	137	42	_			3
Kansas City, KS	U	20 U	U	U	U	U	U	Seattle, WA	136	81	35	8	5	7	5
Kansas City, MO	103	67	21	6	4	5	8	Spokane, WA	63	43	14	2	1	3	4
Lincoln, NE	31	28	21	1	-		o 1	Tacoma, WA	96	45 64	14	2	4		4
Minneapolis, MN	51	28 29	18	3	1	1	3	Total [¶]	90 10,720	7,079	2,495	9 675	250	215	640
Omaha, NE	52 89	29 57	25	3 4	3	_	3 5		10,720	1,079	2,490	0/5	200	د ا ۲	040
St. Louis, MO	89 101	57 47	25 35	4 14	3 5	_	5 4								
St. Paul, MN	59	47 35	35 16	3	5 4	1	4 1								
Wichita, KS	59 U	35 U	16 U	3 U	4 U	U	U								

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. * Pneumonia and influenza.

[§] 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.

[¶] Total includes unknown ages.

The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format. To receive an electronic copy each week, visit *MMWR*'s free subscription page at *http://www.cdc.gov/mmwr/mmwrsubscribe.html*. Paper copy subscriptions are available through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone 202-512-1800.

Data presented by the Notifiable Disease Data Team and 122 Cities Mortality Data Team in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. Address all inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop E-90, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333 or to *mmwrq@cdc.gov*.

All material in the MMWR Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

References to non-CDC sites on the Internet are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of these sites. URL addresses listed in *MMWR* were current as of the date of publication.

☆ U.S. Government Printing Office: 2010-623-026/41271 Region IV ISSN: 0149-2195