TABLE 2. Percentage of women aged 16–49 years with blood mercury (Hg) levels ≥5.8 µg/L, by race/ethnicity — National Health and Nutrition Examination Survey, United States, 1999–2002

Race/Ethnicity	No.	% with Hg levels ≥5.8 µg/L	(95% CI*)
Mexican American	1,106	1.70	(1.04–2.79)
White, non-Hispanic	1,377	5.77	(3.71–8.97)
Black, non-Hispanic	794	4.82	(2.55–9.11)
Total	**3,637**	**5.66**	**(4.04–7.95)**

* Confidence interval.

mal scores on the Boston Naming Test for children exposed in utero (*2*). All women and children in the 1999–2002 NHANES survey period had blood Hg levels below 58 µg/L. The harm to a fetus from levels of exposure as measured by cord blood levels between 5.8 µg/L and 58 µg/L is uncertain.

The findings in this report are subject to at least two limitations. First, NHANES does not include an adequate sampling of women (e.g., sport fishers) who might eat large amounts of fish to characterize the distribution of total blood Hg in this group. Second, the ratio of Hg in cord to maternal blood (i.e., equivalent to NHANES measures) is uncertain (*2,8*). Therefore, NHANES values might not be directly comparable to the EPA RfD, which is based on cord blood Hg levels.

Fish are an important part of a diet, high in protein and nutrients and low in saturated fatty acids and cholesterol. The short-term strategy to reduce Hg exposure is to eat fish with low Hg levels and avoid or reduce consumption of fish with high Hg levels. Because exposure to methyl-Hg can harm fetuses, the Food and Drug Administration (FDA) advises that women who are or might become pregnant not eat shark, swordfish, king mackerel, and tile fish (*9*). In addition, EPA and the Agency for Toxic Substances and Disease Registry have established daily consumption levels of Hg considered to be without harm (*1*). State-based fish advisories and bans identify fish species contaminated by Hg and their locations and provide safety advice (*10*). The NHANES program continues to collect Hg measurements in human tissue to monitor the effectiveness of efforts to reduce Hg exposure in the U.S. population.

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Outbreak of Histoplasmosis Among Industrial Plant Workers — Nebraska, 2004

In February 2004, the Nebraska Health and Human Services System (NHHSS) notified CDC about an outbreak of histoplasmosis among workers at a local agricultural processing plant (plant A). Three workers at the plant had acute, febrile, respiratory illness; two had serologic evidence of histoplasmosis. NHHSS and CDC conducted an investigation to determine the source of transmission and the extent of the outbreak. This report summarizes the findings of that investigation, which confirmed occupationally acquired histoplasmosis. Additional measures might be necessary to minimize risk for histoplasmosis among persons who work in the agricultural industry in areas where it is endemic.

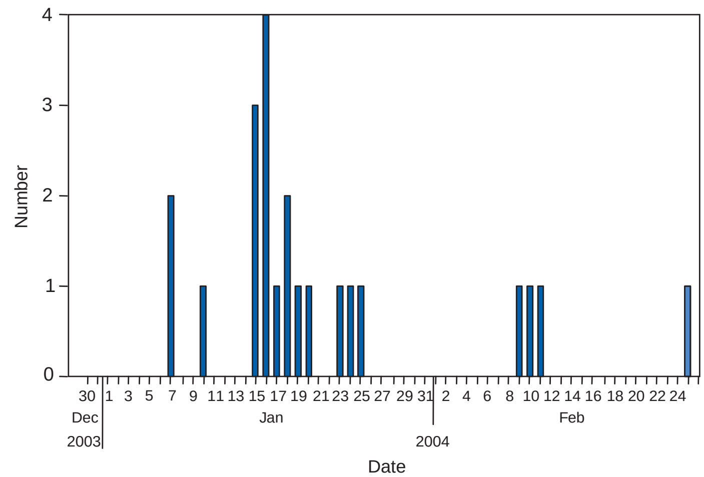
Plant A is located in an area with historically low endemicity for histoplasmosis. However, in September 2003, NHHSS had investigated an outbreak of histoplasmosis at plant A related to excavation of soil and repair of an underground outdoor pipe. Approximately 3 months later, on January 2, 2004, the excavated soil (i.e., spoil pile) was moved, under standard protocol and appropriate precautions, to an off-site landfill. None of the plant workers with suspected histoplasmosis in the 2004 outbreak had participated in removal of the spoil pile, nor had they been implicated in the 2003 outbreak.

To identify workers with symptomatic acute pulmonary histoplasmosis acquired during the 2004 outbreak, a cohort study was conducted among plant workers. To better identify risk factors for disease, a nested case-control study was performed among workers who had laboratory testing for histoplasmosis. For the cohort study, all workers were instructed by plant safety managers to complete a self-administered, web-based questionnaire in late February 2004. A clinical case of histoplasmosis was defined as fever plus at least one of the following four symptoms in a plant A worker reported since January 1, 2004: headache, cough, chest pain, or shortness of breath. Workers whose symptoms were consistent with the clinical case definition had histoplasmosis serology testing performed. A laboratory-confirmed case was defined as the presence of a complement fixation (CF) titer $\geq$1:32 and/or the presence of an H or M band by immunodiffusion test from a single serum sample obtained from a plant A worker, drawn at least 6 weeks after onset of illness. Controls for the case-control study were randomly selected from workers without any symptoms of histoplasmosis identified during the cohort study. These workers were asked to have a serum sample drawn for histoplasmosis testing and were found to have no serologic evidence of recent *Histoplasma capsulatum* infection.

Of 979 plant workers, 724 (74%) completed the cohort questionnaire; 108 (16%) had symptoms consistent with the clinical case definition. The most commonly reported symptoms were headache (93%), cough (77%), and shortness of breath (44%). No workers were hospitalized. Symptomatic workers (clinical cases) were as likely as asymptomatic workers (nonclinical cases) to report working outside, seeing bird droppings, and performing grounds work. Symptomatic workers were more likely to have worked in building complex X (the complex in closest proximity to the spoil pile) than asymptomatic workers (44 [41%] versus 141 [23%]; risk ratio = 2.0; p<0.001). Building complex X was not located in an area known to be heavily contaminated with bird droppings.

Of the 108 symptomatic workers, 90 (83%) had sera available for testing; 25 (28%) had laboratory-confirmed histoplasmosis. Analysis of 22 workers with laboratory-confirmed histoplasmosis with specified dates of symptom onset indicated a cluster of cases during mid-January (Figure). Workers with laboratory-confirmed histoplasmosis were further categorized as clustered cases (n = 18) (symptom onset during January 7–25) and outlying cases (all others, n = four). For the case-control study, the 22 workers with laboratory-confirmed histoplasmosis were compared with 31 unmatched controls. Workers categorized as clustered cases were more likely to have worked in building complex X than controls (12 [67%] versus eight [26%]; odds ratio [OR] = 5.8; 95% confidence interval [CI] = 1.6–20.4); no specific activities, dates reporting to work, or relative amount of outside activity

FIGURE. Number* of laboratory-confirmed cases of histoplasmosis among plant A workers, by date of symptom onset — Nebraska, January 7–February 25, 2004



* n = 22.

during days of any reported soil disruptions (i.e., December 30, January 2, and January 15) were associated with increased risk for acquiring histoplasmosis. In contrast, workers categorized as outlying cases were as likely to work in building complex X as controls (one [25%] versus eight [26%]; OR = 1.0; p = 1.0); no specific occupation was associated with workers with outlying case status.

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Editorial Note: The findings in this report confirm that an outbreak of occupationally acquired histoplasmosis occurred among at least 25 workers from plant A in January 2004. Histoplasmosis usually is an acute, self-limited respiratory illness with an incubation period of 1–2 weeks after inhalation of *H. capsulatum* spores (*1*). Previous occupation-related outbreaks of histoplasmosis occurred among workers in a paper factory and courthouse and among bridge workers (*2–4*), in which disruption of bird or bat droppings, known sources of transmission for *H. capsulatum* spores, had occurred. As in previous outbreaks, this investigation identified cases clustered in time and location. The majority of patients reported illness onset in mid-January, suggesting a point-source exposure in early January. In addition, workers with laboratory-confirmed infection and onset of illness in mid-January were more likely to work at building complex X than controls, supporting the hypothesis of a common source of exposure.

The likely source of this outbreak was the disruption of the spoil pile from the 2003 outbreak. The spoil pile was known to be contaminated with *H. capsulatum*; the workers closest in proximity to it worked at building complex X, and the timing until symptom onset for workers categorized as clustered cases was consistent with histoplasmosis. However, implication of the spoil pile as the source of the outbreak was surprising for several reasons. First, building complex X was approximately 950 feet from the spoil pile. Second, appropriate precautions were taken during removal of the spoil pile (e.g., limiting the number of workers in the area, using appropriate personal protective equipment [PPE], soaking the spoil pile with water before manipulation, and using both a plastic liner and a tarp to cover the soil once it was transferred to a dumpster).

Onset of illness after the mid-January period indicates that some illness might not be associated with the point-source exposure at the plant, but rather might reflect ongoing low-level exposure to *H. capsulatum* either through other work-related or nonwork-related activities. Further investigation will be necessary to identify all activities placing workers at increased risk for disease.

This outbreak underscores the highly infectious nature of *H. capsulatum* spores and the need to protect workers when engaging in work-related activities involving exposure to *H. capsulatum*. In particular, these data suggest that manipulation of soil known to be contaminated with *H. capsulatum* can pose a risk to persons who are not engaged in the activity directly but who might be hundreds of feet away. In addition to following CDC guidelines for the prevention of histoplasmosis among workers (*5*), the recommendations given to prevent further outbreaks of histoplasmosis at this site included assigning job activities according to three levels of risk: higher, lower, and minimal/no risk. Activities identified as higher risk include those involved in disturbing soil obviously contaminated with bird droppings or in disturbing accumulations of bird droppings. The level of PPE required for these activities includes the use of disposable coveralls such as Tyvek®, rubber boots over normal work shoes, and a respirator providing a higher level of protection, such as a powered air-purifying respirator with high-efficiency particulate air (HEPA) filters or a full-facepiece respirator with HEPA filter. For lower-risk activities (e.g., those disturbing soil that has not been contaminated by bird droppings or during the changing of air filters from buildings or equipment), the level of PPE might be decreased to a NIOSH-certified N-95 filtering facepiece respirator. For activities designated as minimal risk (e.g., those in which no soil or bird droppings are disturbed), no respiratory protection is required, but N-95 filtering facepiece respirators should be available on a voluntary-use basis.

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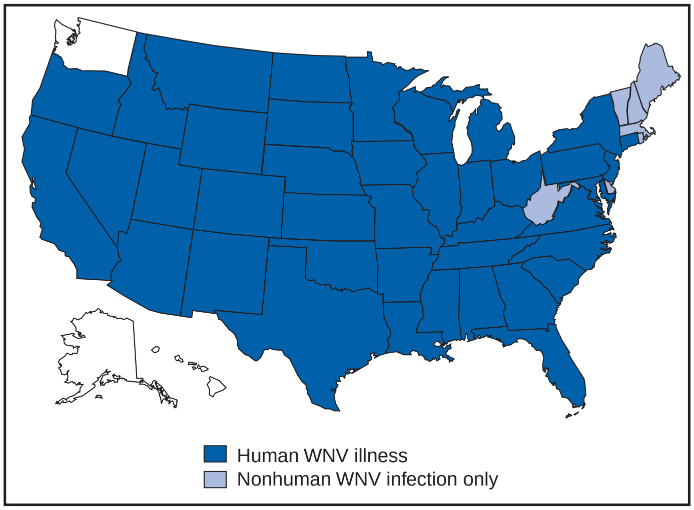
West Nile Virus Activity — United States, October 27–November 2, 2004

During October 27–November 2, a total of 10 cases of human West Nile virus (WNV) illness were reported from eight states (Arizona, Georgia, Iowa, Michigan, New Mexico, Ohio, Oklahoma, and Pennsylvania).

During 2004, 40 states and the District of Columbia (DC) have reported 2,241 cases of human WNV illness to CDC through ArboNET (Figure and Table). Of these, 710 (32%) cases were reported in California, 381 (17%) in Arizona, and 276 (12%) in Colorado. A total of 1,295 (59%) of the 2,211 cases for which such data were available occurred in males; the median age of patients was 52 years (range: 1 month–

FIGURE. Areas reporting West Nile virus (WNV) activity — United States, 2004*



* As of 3 a.m., Mountain Standard Time, November 2, 2004.

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National Diabetes Awareness Month — November 2004

November is National Diabetes Awareness Month. An estimated 18.2 million persons in the United States (i.e., 6.3% of the population) have diabetes. However, 5.2 million (29%) of these persons have not had their condition diagnosed. Persons with diabetes have a risk of premature death that is approximately two times greater than that of persons without the disease. From 1980 to 2002, the number of persons with diabetes in the United States more than doubled. In 2000, diabetes was the sixth leading cause of death in the United States and cost the nation more than $132 billion dollars in health-care expenditures. Additional information about diabetes is available from CDC at http://www.cdc.gov/diabetes.

During November, CDC, along with 59 state and territorial diabetes-control programs and other partners, will highlight activities that increase awareness about diabetes and women's health. More than 9.3 million women in the United States are now living with diabetes. CDC is a major partner in the *Initiative on Diabetes and Women's Health*, which will release a 30-minute video that emphasizes the healthy behaviors and coping skills that women have learned from adolescence through their older years to help manage their disease.

Throughout this month, *MMWR* will publish reports related to diabetes, including reports on diabetes among certain racial/ethnic populations, diabetes and obesity, diabetes and vision impairment, and psychological distress associated with the disease.

Influenza and Pneumococcal Vaccination Coverage Among Persons Aged ≥65 Years and Persons Aged 18–64 Years with Diabetes or Asthma — United States, 2003

Vaccination of persons at risk for complications from influenza and pneumococcal disease is a key public health strategy for preventing associated morbidity and mortality in the United States. Risk factors include older age and medical conditions that increase the risk for complications from infections. During the 1990–1999 influenza seasons, more than 32,000 deaths each year among persons aged ≥65 years were attributed to complications from influenza infection (*1*). National health objectives for 2010 call for 90% influenza and pneumococcal vaccination coverage among noninstitutionalized persons aged ≥65 years and 60% coverage among noninstitutionalized persons aged 18–64 years who have risk factors (e.g., diabetes or asthma) for complications from infections (*2*) (objective nos. 14.29a–d). To estimate influenza and pneumococcal vaccination coverage among these

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