a person exhibiting a skin lesion or lesions with emergence of one or more Guinea worms. Each infection is counted as a case only once during a calendar year. An imported case is an infection acquired in a place (another country or village within the same country) other than the community where it is detected and reported. Six countries where transmission of dracunculiasis was previously endemic (Cote d'Ivoire, Ghana, Kenya, Niger, Nigeria, and Sudan) are in the precertification stage of eradication.

In each country affected by dracunculiasis, a national eradication program receives monthly reports of cases from each village that has endemic transmission. Reporting rates are calculated by dividing the number of villages with endemic dracunculiasis that report each month by the total number of villages with endemic disease. All villages with endemic dracunculiasis are kept under active surveillance, with daily searches of households for persons with signs and symptoms suggestive of dracunculiasis. These searches are conducted to ensure that detection occurs within 24 hours of worm emergence so that patient management can begin to prevent contamination of water. Villages where endemic transmission of dracunculiasis is interrupted (i.e., zero cases reported for 12 consecutive months) also are kept under active surveillance for 3 consecutive years.

WHO certifies a country free from dracunculiasis after that country maintains adequate nationwide surveillance for at least 3 consecutive years and demonstrates that no cases of indigenous dracunculiasis occurred during that period. As of the end of 2011, WHO had certified 192 countries and territories as free from dracunculiasis (3); 14 countries remain to be certified.

Substantial progress has been made since 1986 in reduc-ing the annual number of reported dracunculiasis cases. The 1991 and 2004 WHA goals to eradicate dracunculiasis globally by 1995 and 2009, respectively, were not achieved (6,7). Nevertheless, considerable progress toward eradicatio continues to be made. The number of cases of dracuncullia-sis worldwide reported by countries in which the disease is endemic decreased 49%, from 1,058 cases in 2011 to 542 cas in 2012. In January–June 2013, the 89 cases reported from 28 villages in the four remaining dracunculiasis-endemic countries (Chad, Ethiopia, Mali, and South Sudan) represent reductions of 77% and 45%, respectively, from the 393 cases reported from 51 villages during January–June 2012. Of the 89 cases reported during January–June 2013, 83% were fron South Sudan.

Chad was officially declared dracunculiasis-endemic again in 2012 as a result of having an indigenous case[†] for the third consecutive year following discovery of cases in 2010. Chad Ethiopia, and Mali have each reported slightly more cases in January–June 2013 than in the same period of 2012. Active

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[†] An indigenous case is defined as infection occurring in a person exhibiting a

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surveillance for dracunculiasis conducted by the national eradication program in Mali deteriorated significantly after a coup d'etat in March 2012. Active surveillance in at-risk areas of Chad improved dramatically during the same period, and active surveillance in Ethiopia remained weak outside of one known dracunculiasis-endemic district. CDC has tested 92 specimens from suspected cases in nine countries during

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TABLE 2. Number of reported indigenous dracunculiasis* cases, by country — worldwide, January 2011–June 2013

Country	2011	2012*	1-yr change (%)	January–June 2012*	January–June 2013	6-mos change (%)	Cases contained during January–June 2013 (%)
[illegible]	1,02	521	(-4)	3	4	(- 1)	(0)
[illegible]	12		(-42)	1	4	(300)	(25)
[illegible]	10	10	(0)	1	5	(400)	(0)
[illegible]	6	4	(-33)	2	6	(200)	(50)
Total	**1,056**	**542**	**(-49)**	**393**	**89**	**(-77)**	**(67)**

* 2012, [illegible] 200 [illegible] 2013. [illegible] 2012.

reported by Niger in September 2012 that were exported fro Mali, represent a reduction of 42% from the 12 indigenou cases reported in 2011. All three of the exported cases repo in Niger were contained; three of the four cases reported Mali were contained. Mali reported four cases in Januar June 2013, of which only one was contained, compared wi one case (contained) reported during January–June 2012. C of the cases (not contained) reported in 2013 was from Mop Region, and three cases were from Kidal Region.

Mali's peak transmission season is June–October. The p gram has not been fully operational in three dracunculias endemic northern regions (Gao, Kidal, and Timbuktu) sinc April 2012, following a coup d'etat. Periodic humanitarian missions by the United Nations have allowed limited survei lance in areas around the town of Kidal, and parts of Ga and Timbuktu regions recently have become accessible the program. The most recent sampling of knowledge about the cash reward for reporting a case of dracunculiasis found 70%–90% awareness in areas in which dracunculiasis is endemic (2012) and 0%–2% awareness in areas in which it is not endemic (2011).

Ethiopia. Ethiopia reported four cases (two contained) in April, May, August, and December 2012, after 9 consecutive months with no known cases. This was a reduction of 33% from the six indigenous cases reported in 2011. The program reported six cases (50% contained) during January–June 2013, compared with two cases reported during the same period of 2012. Five of the six cases in 2013 involved residents of a hamlet where a worm emergence was associated with an uncontained case in April 2012. The sixth case involved a resident of a village that had not reported a case since 2010.

The peak transmission season in Ethiopia is March–May. The only known dracunculiasis-endemic village in 2012 received a functioning borehole well in May 2013. After discussions during the World Health Assembly in May 2013, follow-up visits to Gambella by the federal minister of health, and a visit by a delegation of representatives from The Carter Center, WHO, and the Bill & Melinda Gates Foundation, the health ministry plans to designate staff devoted full time to eradication of dracunculiasis. The most recent available sampling of reward awareness found 83% awareness in an ar in which dracunculiasis is endemic (2011) and 60% awarenes in an area in which it is not endemic (2012).

[illegible] 3.5 [illegible] 1 6, [illegible] 542 [illegible] 2012. [illegible] 2012 [illegible] 4 %, [illegible] 2011, [illegible] % [illegible] 2012 [illegible] 2013. [illegible] 3% [illegible] 2013. [illegible]

Chad. Chad was officially declared dracunculiasis-endemic again in 2012 after cases of dracunculiasis were confirmed in 3 consecutive years (2010–2012),§ after a decade with no reported cases (8). Chad reported 10 cases (four contained) i nine villages in 2012, compared with 10 cases (four contained) reported from nine villages in 2011, but only two of the 16 villages had cases in both years. Specimens from several ca were confirmed at CDC as D. medinensis. Chad reported five cases in January–June 2013, of which four were contained from five villages, compared with one case reported during January–June 2012. None of the villages reporting cases i 2013 had reported a case previously.

The peak transmission season in Chad appears to be April–August. Since March 2012, The Carter Center has helped the

§ A country will be considered to have reestablished dracunculiasis endemicity if 1) the country has not reported a confirmed indigenous case of the disease for >3 years, and 2) subsequent indigenous transmission of cases (laboratory confirmed) is shown to occur in that country for 3 consecutive calendar years.

ministry of health to implement active village-based surveillance by training nearly 2,000 volunteers in 700 villages in the at-risk area along the Chari River. In addition to the unusually sporadic, limited nature of the outbreak in Chad over the past 3½ years, dogs with emerging worms have been detected in the same at-risk area in the past year, often without any correlation with villages where human cases have occurred. The worms emerging from dogs are morphologically and genetically indistinguishable from the Guinea worms emerging from humans. Intensive epidemiologic investigation and further genetic studies of these worms are being conducted. The most recent sampling of reward awareness found 100% awareness in an area in which dracunculiasis is endemic (2012) and 38% awareness in an area in which it is not endemic (2012).

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Editorial Note

Based on the trend for 2012, when approximately three quarters of all reported cases occurred during January–June, and initial findings for the same period of 2013, fewer than 150 cases of dracunculiasis likely will be reported in 2013. If so, this would be a historic low. The rapid acceleration in reduction of cases in South Sudan, despite many challenges, is encouraging, and shows that the intensification of interventions there in 2012 is having positive results. Unless Chad, Ethiopia, and Mali can overcome their own challenges quickly, South Sudan might eliminate dracunculiasis before they do.

The main challenges requiring urgent attention by governments and partners include 1) failures in surveillance and containment (e.g., missed cases, unexplained sources of cas and uncontained cases), 2) establishment and maintenanc of surveillance in Guinea worm–free areas of all countries in which the disease still occurs or was recently eliminated, and 3) providing clean drinking water quickly to as many targeted villages as possible. Insecurity in parts of Mali is now the main political barrier to complete eradication of dracunculiasis.

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a chest radiograph was normal. Because of persistent fevers noted when the patient was reevaluated on July 18, the patient under went a CT scan of the chest, abdomen, and pelvis without IV contrast; the scan revealed a left lower lobe pneumonia and mild pulmonary fibrosis of the right lung base. Laboratory analysis of

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Editorial Note

Three of four patients with diagnosed histoplasmosis reported no recent travel and likely acquired their infections in Montana. Although patient 1 likely acquired her infection in Montana before traveling out of state, the possibility also exists that she acquired infection in California following exposure to bat guano–containing potting soil. Each of the four patients had immunocompromising conditions present before symptom onset, increasing their risk for H. capsulatum disease (2). Patient 2 might have acquired infection during a cave exploration–related bat guano exposure. The lack of recent travel history to recognized areas with histoplasmosis-endemicity likely contributed to diagnostic delays for three patients; of these, two patients also had unusual clinical presentations, likely further contributing to diagnostic delays.

H. capsulatum culture from body fluids and tissues provides the strongest evidence of histoplasmosis, but is insensitive (8). Patient 3 was diagnosed after H. capsulatum isolation from a pulmonary nodule biopsy. The absence of recent travel outside of Montana for this patient suggests that the infection was acquired8ve ient5 0.012 Tw 17.6T1_2 1ww (8)ises,

Acknowledgments

Brenda Eberling, Edward Pierce, MD, Sidney Health Center, Sidney; Julie Brodhead, Richland County Health Dept, Sidney; Nancy Iversen, Billings Clinic, Billings; Chad Spangler, St. Peter's Hospital, Helena; Beth Cottingham, Lewis and Clark City-County Health Dept, Helena; Noel Mathis, MSN, Jefferson County Public Health Dept, Boulder; Elton Mosher, Montana Dept of Public Health and Human Services. Rachel Smith, MD, Benjamin Park, MD, Div of Foodborne, Waterborne, and Environmental Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases, CDC.

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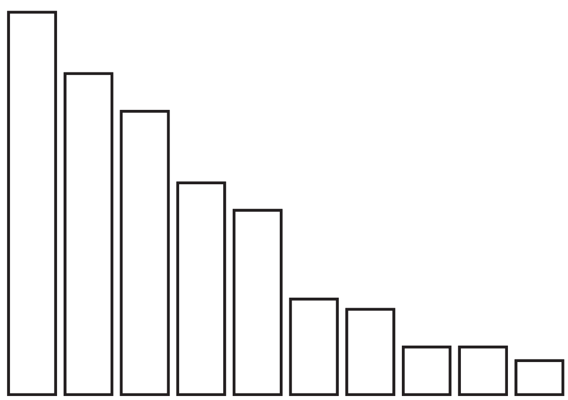
1.

FIGURE. Number* and percentage of respiratory specimens testing positive for influenza reported by World Health Organization and National Respiratory and Enteric Virus Surveillance System collaborating laboratories in the United States, by type, subtype, and week — United States, May 19–September 28, 2013†



and one was associated with an influenza A virus for which subtyping was not performed.

Novel Influenza A Virus Infection

Between May 19 and September 28, a total of 20 cases of influenza A variant viruses (18 [H3N2]v and two [H1N1]v) were reported from five states (Arkansas [two], Illinois [one], Indiana [14], Michigan [two] and Ohio [one]). The 20 cases reported resulted in one influenza A (H3N2)v–associated hospitalization and no deaths. Although cases have been identified from five states, Indiana reported 14 (70%) of the 20 cases. In all 20 cases, contact with swine in the week before illness onset was reported. No ongoing community transmission of these viruses has been detected. The median age of patients was 6.5 years (range: 2–69 years); 65% were female (Influenza Division, National Center for Immunization and Respiratory Diseases, CDC, unpublished data, 2013).

Worldwide

During May 19–September 28, typical seasonal patterns of influenza activity occurred in the temperate climate Southern Hemisphere countries. In Australia and New Zealand, influenza activity began in early August and decreased in mid-September. Influenza A viruses predominated in both countries with influenza A (H3N2) viruses identified more frequently than influenza A (pH1N1) viruses. Influenza B viruses were also identified in both countries. In South Africa, after a peak in influenza activity caused by influenza A (pH1N1) in June, a second, smaller peak was observed in early August because increased influenza A (H3N2) and influenza B virus circulation. In temperate areas of South America, influenza activity peaked in June and declined through September. Influenza A viruses were reported more frequently than influenza B viruses and influenza A (pH1N1) was the predominant virus reported by Argentina, Chile, and Uruguay. Influenza A (H3N2) viruses predominated in Paraguay (2).

Influenza activity was reported from countries with tropical influenza seasonality. The overall level of activity compared with previous seasons, and the predominant subtype varied by country. In the Caribbean and Central America, influenza activity peaked in early July and declined during August and September, with cocirculation of influenza A (pH1N1) and influenza A (H3N2) viruses. In tropical South America, influenza A (pH1N1) viruses predominated, with two peaks of activity: the first in June, primarily the result of activity in Brazil and Columbia, and a second peak in late July, the result of increased activity in Ecuador and Peru. South Asia and Southeast Asia saw a decrease in influenza activity during September. Different combinations of types and subtypes

Reported by

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Editorial Note

During May 19–September 28, 2013, influenza A (pH1N1), influenza A (H3N2), and influenza B viruses cocirculated worldwide. In the United States, similar levels of seasonal influenza viruses were detected compared with summer months of previous years (excluding the 2009 pandemic), and influenza A viruses were predominant. Although neither the influenza viruses that will predominate nor the severity of influenza-related disease during the 2013–14 season in the United States can be predicted, antigenic characterization of viral isolates submitted during the summer demonstrated that the majority of influenza viruses were antigenically similar to the influenza vaccine strains contained in the 2013–14 Northern Hemisphere vaccine.

Compared with the summer of 2012, fewer human infections with novel influenza A viruses were identified in the United States in the summer of 2013. Since the first identification of H3N2v viruses in humans, direct contact with swine has been documented in most cases, but limited person-to-person spread is suspected in a small number. Consistent with the age distribution of patients, serologic studies suggest there is little or no existing cross-reactive antibody to H3N2v in young children, but a substantial proportion of adolescents and younger adults have cross-reactive antibodies (8,9

Treatment with influenza antiviral medications is recommended as early as possible for patients with confirmed or suspected influenza (either seasonal influenza or variant influenza virus infection) who have severe, complicated, or progressive illness; who require hospitalization; or who are at higher risk for influenza-related complications¶¶ (7).

Influenza surveillance reports for the United States are normally posted online weekly and are available at http://www.cdc.gov/flu/weekly. Additional information regarding influenza viruses, influenza surveillance, influenza vaccines, influenza antiviral medications, and novel influenza A virus infections in humans is available at http://www.cdc.gov/flu.

Acknowledgments

State, local, and territorial health departments and public health laboratories; U.S. World Health Organization (WHO) collaborating laboratories; the National Respiratory and Enteric Virus Surveillance System collaborating laboratories; U.S. Outpatient Influenza-like Illness Surveillance Network; Influenza-Associated Pediatric Mortality Surveillance System; 122 Cities Mortality Reporting System; WHO FluNet.

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Notes from the Field

Strongyloidiasis in a Rural Setting — Southeastern Kentucky, 2013

Strongyloidiasis is caused by *Strongyloides stercoralis*, a parasitic nematode (worm). Initial symptoms can include abdominal pain, diarrhea, or rash. Infection is often asymptomatic in the chronic phase but can be life-threatening in immunosuppressed persons. Transmission typically occurs when larvae from stool-contaminated soil penetrate skin; intraintestinal autoinfection is also possible, sometimes allowing infection to persist for decades. Serologic studies are often used in prevalence estimates because intermittent shedding can make stool-based testing insensitive. Strongyloidiasis is most common in tropical and subtropical environments with poor sanitation. In the United States, it is commonly reported among refugees and immigrants; in the 1980s, studies in the rural southeastern United States also reported prevalence estimates ranging from 1.2%–6.1% (*1,2*). Prevalence might have since decreased because of investments in sanitation (*3*); however, no recent studies have been done, and strongyloidiasis is not a reportable disease in any state.

The Kentucky Department for Public Health and CDC sought to determine whether *Strongyloides* transmission continues in a rural area of the United States where transmission has been demonstrated in previous serostudies. Kentucky is a state where strongyloidiasis historically has been endemic (*2*). In 2011, Kentucky had 15 strongyloidiasis-related hospital discharge diagnoses reported by the Healthcare Cost and Utilization Project database (*4*). Origin and travel history are not reported in that database, making country of exposure unclear for those cases. Approval for this project was obtained from the Kentucky Cabinet for Health and Family Services Institutional Review Board prior to the start of the study. Investigators recruited a convenience sample of patients attending a nongovernmental organization's weekend clinic offering dental, vision, and medical services in southeastern Kentucky. All patients were eligible to enroll in the study and were referred for free treatment if needed. Patients provided informed consent, demographic information, exposure history, and blood samples that were tested by CDC for anti-*S. stercorali* antibody by enzyme immunoassay; a positive result indicatec current infection (titers decrease after successful treatment).

A total of 752 patients attended the clinic. Testing was offered in a public area frequented by all patients, and multiple invitations for testing were issued in group waiting areas. A total of 102 (13.6%) patients, all adults, agreed to be tested. Five patients tested positive for *S. stercoralis* antibody, including on man and four women, ranging in age from 21 to 69 years. All were born in the United States and provided addresses in on of four cities in southeastern Kentucky. Four had an indoor flush toilet; the fifth had an indoor toilet with manual waste removal. No travel to tropical countries was reported.

Although antibody testing cannot be used to differentiate between acute and chronic infection, given the lack of travel history, autochthonous transmission of *Strongyloides* appears to persist in this Appalachian area. Wider investigations are plannec

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Notes from the Field

Strongyloides Infection Among Patients at a Long-Term Care Facility — Florida, 2010–2012

During a 2-week period in August 2011, two patients in a long-term care facility in Miami-Dade County, Florida, had gastrointestinal symptoms; microscopic examination of stool specimens showed that both harbored *Strongyloides stercoralis*, an intestinal nematode. A subsequent chart review revealed an additional case within the facility 1 year earlier. Concerned about the possibility of an outbreak, the associate director of patient care services at the facility contacted the Florida Department of Health in Miami-Dade County and the Florida State Department of Health, which contacted CDC. This report describes the subsequent investigation.

In May 2012, a serologic and risk-factor survey of residents and staff was performed to assess the prevalence of and associations with infection. Strongyloides informational packets were distributed to all residents and staff members, and consent for serologic testing was obtained. In June, blood samples from consenting residents and staff members were tested for *S. stercoralis*–specific antibody testing by crude antigen enzyme-linked immunosorbent assay. This serologic test becomes positive after infection (how long after infection is not well defined), and antibody titers typically drop to <50% by 6–18 months after successful treatment of the parasite.

In a convenience sample of 106 of the 176 facility residents, 12 (11%) had a positive result, as did three from a convenience sample of 26 of the 238 staff members. All 15 persons with positive results reported being born either in North America (five) or the West Indies (10). Thirty-seven long-term care facility residents in the convenience sample were born in the United States or Mexico, and four (10.8%) had results positive for S. stercoralis-specific antibody; only one of these persons reported no travel outside of the United States. Six long-term care facility residents reported corticosteroid use in the last 3 months, and none were infected. Because no prior testing had been performed, assessing whether any of the infections had been acquired within the facility was not possible.

Recommendations were made to offer testing and treatment to the residents and staff members who had not yet been approached and to extend this offer to incoming residents. Further research is needed to determine the prevalence of Strongyloides infection and the risk for transmission to help inform screening strategies for long-term care facilities.

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Notice to Readers

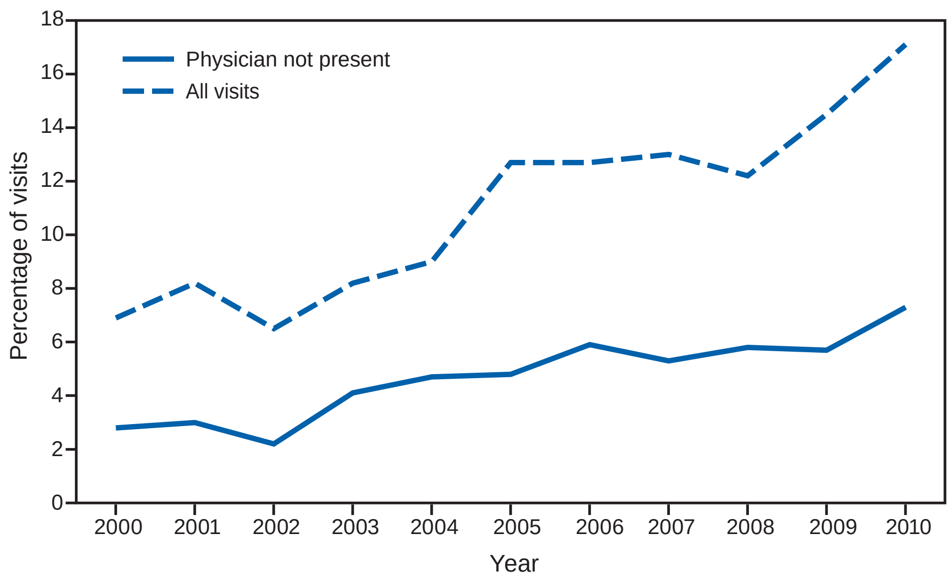
Notifiable Disease and Mortality Tables for Weeks 39–41 Now Online

The Notifiable Disease and Mortality Tables for surveillance weeks 39, 40, and 41 have now been posted on the MMWR website, along with current week 42 data and the October 25, 2013, issue. The data include quarterly Table IV data regarding tuberculosis. Posting of the notifiable disease and mortality data for the 3-week period was delayed because of the lapse in government funding.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Percentage of Emergency Department (ED) Visits During Which a Patient Was Seen by a Physician Assistant or Nurse Practitioner, Overall and Without a Physician Present* — National Hospital Ambulatory Medical Care Survey, United States, 2000–2010



*

% 2000 1 % 2010. 3% 2000 % 2010.

Source:
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