this rarity remains unexplained. This rarity contrasts with the observation that cases and outbreaks are more common in other parts of the developed world, particularly in northern climes (*1,5,6–8*). The recent appearance of epizootic *Y. pseudotuberculosis* in farmed deer in the southern United States suggests that this could change (*9*).

The high proportion of *Y. pseudotuberculosis* cases that were diagnosed by blood culture suggests that less invasive *Y. pseudotuberculosis* infections are underrecognized in the United States. Diagnosis of *Yersinia* infections is difficult without specific culture, *Yersinia* is not routinely tested for in the United States, and isolation of the organism by culture may be difficult with standard media (*2,10*). Clinical diagnosis of *Y. pseudotuberculosis* infections can be challenging because physicians are not aware that *Y. pseudotuberculosis* is a potential cause of gastroenteritis (*10*). In the syndrome of pseudoappendicitis, the distinctive findings found by surgical exploration of severe mesenteric lymphadenitis can be suggestive, but diagnosis would require confirmation by culture of nodes or feces (*2,3*).

Unless the physician is both aware of *Y. pseudotuberculosis* as a cause of gastroenteritis and knows which diagnostic test to order, *Y. pseudotuberculosis* infections will go undiagnosed. Clinicians should consider *Y. pseudotuberculosis* as a cause of gastroenteritis and pseudoappendicitis and request appropriate microbiologic testing for patients with suspected cases. If more cases are identified in the United States, another investigation of *Y. pseudotuberculosis* might clarify the epidemiology of this infection.

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Measles Outbreak, the Netherlands, 2008

To the Editor: From June 1 through October 16, 2008, an outbreak of 99 reported measles cases occurred in the Netherlands (*1*). This outbreak was the largest measles outbreak in the Netherlands since 1999–2000, when ≥3,200 cases, including 3 deaths, were reported (*2*).

In the Netherlands, clinical symptoms compatible with measles in a person with laboratory-confirmed measles virus infection or an epidemiologic link to a laboratory-confirmed case are notifiable (i.e., must be reported to public health authorities). The National Measles Reference Laboratory conducts genotyping and submits sequences to the World Health Organization European Region Measles Nucleotide Surveillance database (www.hpa-bioinformatics.org.uk/Measles/Public/Web_Front/main.php).

Of the 99 measles cases reported in the 2008 outbreak, 40 were laboratory confirmed and 59 were notified based on an epidemiologic link. The first case-patient in the outbreak was a 6-year-old unvaccinated resident of The Hague who had not been abroad in the month before onset of illness.

The source of her infection was unknown. She attended a school based on anthroposophic principles; the school had an estimated measles-mumps-rubella (MMR) vaccination coverage of 80% (M. Monné-van Wirdum, pers. comm.). Subsequently, 52 additional cases were reported from this and from another anthroposophic school in The Hague (cluster 1; online Appendix Figure, www.cdc.gov/EID/content/16/3/567-appF.htm). Two months after the first case, 22 additional cases were reported associated with an anthroposophic summer camp in the east of the Netherlands (cluster 2; online Appendix Figure). Five additional cases had an epidemiologic link with an anthroposophic summer camp in France (cluster 3, 2 cases; online Appendix Figure) and Switzerland (cluster 4, 3 cases; online Appendix Figure). No known measles patients in Switzerland were linked to this cluster (J. Richard, pers. comm.). Subsequently, 12 cases were reported that were associated with 2 daycare centers in the city of Utrecht (cluster 5 and 6), both linked to an anthroposophic community. From all 6 clusters and from 2 of the 7 cases with an unknown source, indistinguishable measles viruses (genotype D8, 22 cases) were identified. Given the low prevalence of this strain in Europe (J. Kremer, pers. comm.), we concluded that virus transmission occurred between all 6 clusters. The first cluster was not epidemiologically linked to any of the recent outbreaks in anthroposophic groups in Europe (3).

No case had an epidemiologic link to more than 1 cluster, suggesting the 6 cases introducing measles into these clusters were unreported. When the 7 cases with an unknown source were considered, this finding suggests that at least 13 cases were not reported (maximum reporting completeness 88%). However, transmission through patients with subclinical cases may also have played a role (4).

There were no deaths. Four case-patients (4%) were admitted to hospitals. The median age was 9 years (range 8 months–48 years). Of the 98 case-patients with information on vaccination status, 91 (93%) had been unvaccinated, 6 (6%) had had 1 dose, none (0%) had had 2 doses, and 1 (1%) had had 3 doses before onset of illness. One of the 6 case-patients, vaccinated only once, had received her MMR vaccine only 11 days before the date of onset of illness and is hence not considered a vaccine failure. Of all 99 case-patients, 91% had been eligible for ≥1 MMR vaccination according to the vaccination schedule in the Netherlands. Of these cases, available information for 84 case-patients indicated 48% (40 persons) were reported to be unvaccinated because of their anthroposophic beliefs, 49% (41 persons) because of a critical attitude towards vaccination, and 4% (3 persons) for other reasons.

Outbreak control plans in the Netherlands focus on protecting the population by adjusting the vaccination schedule during a nationwide outbreak (5). Studies are ongoing into knowledge and attitudes toward vaccination in communities with low vaccination coverage, aiming to identify opportunities to improve coverage.

The outbreak remained largely restricted to persons with philosophical objections to MMR vaccination, which suggests that there are sufficient levels of herd immunity in the general population. Remarkably, no cases were reported from the Dutch Orthodox Reformed Church community, despite the low vaccine coverage in this group. This finding suggests that orthodox reformed and anthroposophic population subgroups have little direct contact, consistent with previous observations (6).

Measles vaccination was introduced in the Netherlands in 1976. The single-dose regimen was in 1987 replaced by a 2-dose regimen of MMR vaccine; the first dose at 14 months and the second at 9 years. The vaccination coverage for ≥1 MMR dose has been >95% from birth cohort 1986 onward (7). During 2002–2007, the incidence of measles notifications in the Netherlands was below the World Health Organization regional threshold for elimination (1/1 million population/year) (8). Nevertheless, this outbreak demonstrates the continued risk for measles transmission in the Netherlands. This suggests that indicators based merely on incidence and national vaccination coverage are of limited usefulness for certification of measles elimination. Data on measles seroprevalence and mixing patterns that will soon be available from the second national seroprevalence study will provide more insight into the dynamics of measles transmission in a population with pockets of low vaccination coverage. These data will also help assess progress toward measles elimination from the Netherlands.

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Neurologic Manifestations of Pandemic (H1N1) 2009 Virus Infection

To the Editor: In April 2009, the outbreak of influenza A pandemic (H1N1) 2009 virus was reported. Subsequently, the disease spread throughout the world, and the pandemic alert level was raised to level 6 in June by the World Health Organization. Pandemic (H1N1) 2009 virus infection spread to Thailand and is now found throughout Thailand. Similar to the effects of other viruses, pandemic (H1N1) 2009 virus may cause neurologic complications. Associated neurologic symptoms were first reported from Dallas, Texas, USA: 4 children experienced unexplained seizures or had an alteration of consciousness level that was associated with this virus (1). We report an adult patient with pandemic (H1N1) 2009 infection who had neurologic complications.

A 34-year-old man, previously healthy, was admitted to Chaiyaphum Hospital in Chaiyaphum, Thailand, on August 24, 2009, with influenza-like symptoms. Two days after admission, progressive quadriparesis with bilateral, symmetric paresthesia (glove-and-stocking pattern), and areflexia developed. His motor weakness (grades III/V) began in both legs and then involved both arms and hands. Other neurologic examinations showed limitation of extraocular movement in all directions, normal pupil size and light reflex, and facial diplegia. A lumbar puncture was performed, and cerebrospinal fluid (CSF) contained neither leukocytes nor erythrocytes, with a protein level of 19.5 mg/dL.

On day 3 after the patient's admission, acute respiratory failure developed. A nasopharyngeal aspirate specimen was positive for pandemic (H1N1) 2009 virus by PCR. The patient received oseltamivir, zanamivir, and ventilator support. His chest radiograph showed diffuse alveolar infiltration. On day 10, his motor weakness worsened to grade 0, and his consciousness level was diminished to a drowsy state.

A computed tomography scan of the brain showed diffuse white matter lesions (Figure). Repeated lumbar punctures continued to show CSF findings within the reference range. An electrophysiologic study, electromyogram, and nerve conduction study showed polyneuropathy, axonopathy type. Guillain-Barré syndrome was suspected, and intravenous immunoglobulin was given for 5 days. Tests for GQ1b and GM1 antibodies were carried out at Oxford University; results were negative.

Other laboratory tests showed mild transaminitis and negative results for syphilis testing and for serologic tests for HIV, hepatitis B virus, hepatitis C virus, Japanese encephalitis virus, herpes simplex virus, and *Mycoplasma pneumoniae*. A CSF antigen test was negative, and CSF culture was negative for bacteria. Meropenem was given to treat ventilator-associated pneumonia, which was caused by β-lactam–resistant *Klebsiella pneumoniae*. After a month of treatment, the patient regained consciousness, his motor strength improved considerably, and he was able to be gradually removed from the ventilator. After 3 months, he was discharged with self-assisted status.

Our report shows neurologic manifestations associated with pandemic (H1N1) 2009 virus infection in an adult. The manifestation of progressive quadriplegia with diffuse sensory loss is compatible with a polyneuropathy. The neurologic signs developed 2 days after the respiratory tract signs.

Although a diagnosis of Guillain-Barré syndrome was considered initially, according to the National Institute of Neurologic Disorders and Stroke criteria (2), some clinical features did not support this diagnosis.