**News**

**Multistate Outbreak of Fungal Infection Associated With Injection of Methylprednisolone**

(Compiled from multiple Centers for Disease Control and Prevention [CDC] sources)—On 18 September 2012, a patient in Tennessee was diagnosed with *Aspergillus fumigatus* meningitis 46 days after epidural steroid injection. The number of cases have subsequently increased and as of 20 October 2012, a total of 284 confirmed or suspected fungal infections with 23 deaths have been reported. Of the cases, 281 were meningitis or other central nervous system (CNS) infections and 3 were peripheral joint infections. All fatalities have been with CNS infection. There were 23 states in which the steroid was injected. Over 70% of the cases have been reported from injections in Indiana, Michigan, Tennessee, and Virginia.

All patients had received epidural or joint steroid injections compounded at the New England Compounding Center in Framingham, Massachusetts. All of the products were recalled in early October. State and local health departments have identified almost 14,000 persons potentially exposed to these medications.

With CNS disease, median cerebrospinal fluid (CSF) white blood cell count was 1299 cells/µL (range, 13–15,400 cells/µL) with a neutrophilic predominance; median CSF glucose was 42 mg/dL (range, 11–121 mg/dL), and median protein was 129 mg/dL (range, 45–588 mg/dL). The fungal species has been identified in a total of 47 patients. *Exserohilum rostratum* (common in grass and dirt) was found in all but 2 of these patients. *Aspergillus fumigatus* and *Cladosporium* species were found in the other 2. When known, the median time from last steroid injection to onset of symptoms was 15 days (range, 1–42 days).

The clinical presentation of fungal meningitis is often indolent, with few patients displaying the classic meningeal signs of bacterial meningitis. Some of these patients either presented with, or later developed, a stroke in the posterior circulation (which supplies the cerebellum, midbrain, and brainstem).

The current CDC recommendations for treatment of CNS and parameningeal infections include empiric high-dose voriconazole and liposomal amphotericin B. Treatment duration is likely to be prolonged, on the order of months. Routine use of adjuvant steroids or intrathecal amphotericin B in treatment and post-exposure prophylaxis or screening of asymptomatic persons by lumbar puncture currently is not recommended. Updates of epidemiological information and guidance for patients and clinicians, including interim treatment guidelines, are available at [http://www.cdc.gov/hai/outbreaks/meningitis.html](http://www.cdc.gov/hai/outbreaks/meningitis.html).

**Editorial comment.** The total number of cases has been mounting daily. *Exserohilum rostratum* (a brown-black mold) seems to be the primary cause of disease. It is hoped that all of the recalled lots were in fact sent back and not used after 6 October (the last date of recall), and also that 42 days is really the longest possible incubation period. Even if these hopes are met, we can expect many more cases to surface by 17 November (42 days after recall).

If nothing else, this outbreak proves 2 points. One is that given the right (or wrong) conditions, any agent can be pathogenic. The other is that any invasive procedure has the potential for severe consequences; there is no such entity as a “totally safe” procedure.

**New Virus not Spreading Easily between People According to the WHO**

28 September 2012 (Reuters Health [Kate Kelland])—A new and potentially fatal virus, from the same family as severe acute respiratory syndrome (SARS), discovered in a patient in London, appears not to spread easily from person to person, a spokesperson for the World Health Organization (WHO) said.

The WHO put out a global alert saying a new virus had infected a 49-year-old Qatari man who had recently traveled to Saudi Arabia, where another man with the same virus had died. No new confirmed cases of infection with the virus have since been reported.

The new virus shares some of the symptoms of SARS, another coronavius, which emerged in China in 2002 and killed around a tenth of the 8000 people it infected worldwide.

Both patients who have so far been confirmed with the virus suffered kidney failure.

Scientists at the European Centre for Disease Prevention and Control, which monitors disease in the European Union, said initial virology results and the separation in time of the only 2 confirmed cases suggest the infection may have come from animals.

The WHO’s clinical guidance to its 194 member states says health workers should be alert to anyone with acute respiratory syndrome and requiring hospitalization who had been in the Middle East where the virus was found or in contact with a suspected or confirmed case within the previous 10 days. The United Nations agency has not recommended any travel restrictions in connection with the new virus.

Health experts said rapid progress has already been made in figuring out the
nature and genetic makeup of the new coronavirus, and in the development of sensitive and specific diagnostic tests.

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Editorial comment. We all recall the rapid spread, infectivity, and severity of SARS just 10 years ago. These episodes serve to remind us of the constant emergence of new infections from the animal kingdom.

Use of 13-Valent Pneumococcal Conjugate Vaccine and 23-Valent Pneumococcal Polysaccharide Vaccine for Adults With Immunocompromising Conditions: Recommendations of the Advisory Committee on Immunization Practices

(MMWR 61:816, 2012)—Adults with specified immunocompromising conditions who are eligible for pneumococcal vaccine should be vaccinated with 13-valent pneumococcal conjugate vaccine (PCV13; Prevnar 13) as below.

The Advisory Committee on Immunization Practices recommends that adults aged ≥19 years with immunocompromising conditions, functional or anatomic asplenia, cerebrospinal fluid leaks, or cochlear implants, and who have not previously received PCV13 or 23-valent pneumococcal polysaccharide vaccine (PPSV23; Pneumovax 23) should receive a dose of PCV13 first, followed by a dose of PPSV23 at least 8 weeks later. Subsequent doses of PPSV23 should follow current PPSV23 recommendations for adults at high risk. Specifically, a second PPSV23 dose is recommended 5 years after the first PPSV23 dose for persons aged 19–64 years with functional or anatomic asplenia and for persons with immunocompromising conditions. Additionally, 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 elapsed since their previous PPSV23 dose.

Adults aged ≥19 years with these conditions who previously have received ≥1 dose of PPSV23 should be given a PCV13 dose ≥1 year after the last PPSV23 dose was received. For those who require additional doses of PPSV23, the first such dose should be given no sooner than 8 weeks after PCV13 and at least 5 years after the most recent dose of PPSV23.

Influenza Vaccination Coverage among Healthcare Personnel—2011–2012

Influenza Season, United States

(MMWR 61:753, 2012)—The Centers for Disease Control and Prevention conducted an internet panel survey with 2348 healthcare personnel (HCP) during 2–20 April 2012. This survey found that, overall, 66.9% of HCP reported having had an influenza vaccination for the 2011–2012 season. By occupation, vaccination coverage was 85.6% among physicians, 77.9% among nurses, and 62.8% among all other HCP participating in the survey. Vaccination coverage was 76.9% among HCP working in hospitals, 67.7% among those in physicians’ offices, and 52.4% among those in long-term care facilities (LTCFs). Among HCP working in hospitals that required influenza vaccination, coverage was 95.2%; among HCP in hospitals not requiring vaccination, coverage was 68.2%.

Coverage among HCP aged ≥60 years (75.7%) was higher than coverage for other age groups. Among racial/ethnic groups, coverage did not differ more than 5 percentage points. Vaccination coverage was higher among HCP with vaccination available at no cost on multiple days at their worksite (78.4%), compared with those not offered vaccination at no cost (48.4%). Overall, 496 (21.1%) of participating HCP reported being required to be vaccinated by their employers. Influenza vaccination was more common among those who reported that their employers promoted influenza vaccination (75.8%), compared with those whose employers did not promote influenza vaccination (55.8%).

The overall HCP influenza vaccination coverage estimate from this survey for the 2011–2012 season was 66.9%, compared with 2 previous surveys with varying methods, of 63.5% for the 2010–2011 season and 63.4% for the 2009–2010 season. Earlier estimates of influenza vaccination coverage levels in HCP based on the National Health Interview Survey were 10% in 1989, 38% in 2002, and 49% in 2008. From the 2009–2010 season to the 2011–2012 season, coverage increased among physicians from 80.5% to 85.6%, and among nurses from 68.5% to 77.9%. Coverage among all other HCP was similar from 2009–2010 through 2011–2012.

For certain categories, vaccination coverage among HCP differed from 2010–2011 to 2011–2012. Coverage in physicians’ offices increased from 61.5% during the 2010–2011 season to 67.7% during the 2011–2012 season, and coverage in hospitals increased from 71.1% to 76.9%. Among LTCFs, influenza vaccination coverage was lower in 2011–2012 season, and coverage in hospitals increased from 71.1% to 76.9%. Among LTCFs, influenza vaccination coverage was lower in 2011–2012 (52.4%), compared with 2010–2011 (64.4%). The 2011–2012 coverage in work settings other than hospitals, physicians’ offices, and LTCFs was higher (61.5%) than in 2010–2011 (52.4%).

These results indicate that targeted intervention and promotion programs developed for HCP groups other than physicians and nurses, and especially for those who work in LTCFs, might be important components in improving overall HCP vaccination coverage.

Published by Oxford University Press on behalf of the Infectious Diseases Society of America 2012.
DOI: 10.1093/cid/cis931