

## Epidemiology Update: Fungal Infections Associated with Contaminated Product

November 19, 2012

*The information and analyses in this update report are preliminary and subject to change.*

- 50 cases (including 2 fatal cases) meet meningitis (n=48) or osteomyelitis/epidural abscess (n=2) case definition. Nineteen (38%) are lab-confirmed cases with detectable *Exserohilum* (n=17), *Cladosporium* (n=2), and *Penicillium* species (n=1); one patient had two different fungi detected.
- 680 persons are believed to have been exposed in Virginia since June 1, 2012 to 1 of 3 recalled methylprednisolone acetate (MPA) lots produced by the New England Compounding Center.

**Table 1. Attack Rates by Lot of Methylprednisolone Acetate**

| Lot                     | Total      | Cases     | Attack Rate Overall | Attack Rate Epidural Only |
|-------------------------|------------|-----------|---------------------|---------------------------|
| 06292012                | 273        | 35        | 13%                 | 14%                       |
| 06292012 with other lot | 89         | 12        | 13%                 | 14%                       |
| 05212012 only           | 276        | 2         | 1%                  | 1%                        |
| 08102012 only           | 35         | 0         | 0%                  | 0%                        |
| 05212012 + 08102012     | 6          | 1         | 17%                 | 17%                       |
| 05212012 with other lot | 1          | 0         | 0%                  | 0%                        |
| <b>Total</b>            | <b>680</b> | <b>50</b> | <b>7%</b>           | <b>8%</b>                 |

- Description of 50 cases:
  - Forty-seven (94%) cases are in VA residents and 3 (6%) are in WV residents.
  - 26 (52%) are female. The median age at the time of first exposure is 64 years (15 – 92 years).
  - All have been or are currently hospitalized. Five (10%) were admitted to an ICU, five (10%) had a stroke reported and two (4%) died.
  - The range of onset dates is July 30, 2012 – October 18, 2012 (see Figure 1)

**Table 2. Clinical Information by Case Status**

|   | Lab-confirmed Cases (n=19) | Probable Cases (n=31) | All Cases (n=50) |
|---|----------------------------|-----------------------|------------------|
| Headache  | 16 (84%)                   | 29 (94%)              | 45 (90%)         |
| Neck stiffness  | 12 (63%)                   | 16 (52%)              | 28 (56%)         |
| Fever   | 13 (68%)                   | 13 (41%)              | 26 (52%)         |
| Photophobia   | 6 (32%)                    | 3 (10%)               | 9 (18%)          |
| Median incubation period (range)  | 19 (1–32)                  | 20 (4–48)             | 20 (1–48)        |
| Median adjusted WBC per mm <sup>3</sup> (range)*  | 1,825 (0–6,530)            | 545 (0–9,080)         | 664 (0–9,080)    |
| Median glucose (range), mg/dL   | 46 (15–68)                 | 48 (36–87)            | 48 (15–87)       |
| Median protein (range), mg/dL   | 89 (45–108)                | 99 (38–164)           | 93 (38–164)      |
| Median # Days from Last Injection to First Positive LP (>5 adjusted leukocytes per mm <sup>3</sup> )* | 30 (6–52)                  | 30 (11–88)            | 30 (6–88)        |

\*Leukocyte counts were adjusted for presence of red blood cells by subtracting 1 leukocyte per 500 red blood cells present \*7 case-patients with meningitis had initial LP with  $\leq 5$  corrected wbc per mm<sup>3</sup>; both case-patients with epidural abscesses had one or more LP with  $\leq 5$  corrected wbc per mm<sup>3</sup>.

**Figure 1. Fungal Infections among Patients Exposed in Virginia  
by Case Status and Date of Initial Symptom Onset  
(as of November 19, 2012, n=50)**

