Crimean-Congo Hemorrhagic fever in former Soviet Union countries based on ProMED-RUS reports (2005-2015 years)

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Background: Russian ProMED-mail (ProMED-RUS) is one of ProMED’s regional networks that offers Russian language reports on emerging infections in 15 Former Soviet Union (FSU) countries. Several FSU countries have annual cases of Crimean-Congo hemorrhagic fever (CCHF).

We wanted to review ProMED-RUS data to assess the epidemiology in the territory of FSU.

Methods & Materials: We used CCHF as the keyword to search reports in ProMED-RUS posted from 2005 to 2015. Comments by the moderators to complement the information provided in the outbreak itself were also reviewed.

Results: According to ProMED-RUS, CCHF were recorded in Russia, Kazakhstan, Georgia, Tajikistan, and Uzbekistan. The South of Russia (Stavropol, Rostov, Volgograd and Astrakhan regions, Kalmikia, Ingushetia, Dagestan, Karachaevo-Cherkessia) are endemic for CCHF. Between the years 2005 and 2015, 1,397 total cases, including 42 fatalities and a case fatality rate (CFR) of 4.2% were recorded. The highest numbers were registered between 2006 and 2008, which coincides with official Russian MOH statistics. Beginning in 2009, the incidence rate decreased, averaging 70 registered cases. In 2015 for the first time since 2009, the number of cases rose significantly and reached up to 139. ProMED-RUS reported about CCHF in Kazakhstan since 2008, with the highest number of cases (26) in 2009 in the southern regions - Jambyl and Kizilorda. Until 2015, 74 total cases and 16 fatal cases were registered with a CFR of 21.6%. In Tajikistan, ProMED-RUS reported about 5 cases in 2009 including 3 fatalities, CFR - 60%. ProMED-RUS published Georgia cases in 2012-2015: 2012 (1 case), 2013 (13 cases), 2014 (20 cases with 4 fatalities, CFR 20%) and this year 2 cases. In 2015 ProMED-RUS reported 13 CCHF cases in Uzbekistan within 2013-2015, including 10 fatal cases. CCHF starts in April, peaks between May and June, and decreases in August mostly due to tick bites. However, Kazakhstan (2009), Tajikistan (2009), and Russia (2011) registered 3 nosocomial clusters among healthcare workers due to inadequate infection control with 5, 7, and 9 cases respectively.

Conclusion: ProMED-RUS reports of outbreaks and comments from experts provide useful information for emerging infection case reporting, analysis, and comparison in the territory of FSU.