

Research on E. coli in Europe and WHO: 'The triallife study on the incidence of the E. coli cluster-outbreak in Global Community Blood Transfusion (NE) countries, countries at risk and Europe'

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A systematic study on the incidence of the E. coli cluster-outbreak in World Health Organization countries, countries at risk and Europe was conducted in "Seven Years of Middle East (NE) outbreak: Clinical and Translational studies conducted by Global Community Based Blood Transfusion, T.I. Lab Alliance", Volume 32, No 2, October 2011 (<http://www.keyeneve.org/cgi...>). During 2007-2010, the European Health Products Agency (EHPA) examined the epidemiological significance of five E. coli outbreaks with the most definitive impact on the recovered infections: the 2008 Beirut E. coli outbreak; the 2009 Austria outbreak; the 2010 Australian outbreak; the 2010 Brazil outbreak; and the 2011 Sambuca-Ebola-Lescuminosa bacterial outbreak. These five outbreaks represent seven (7) countries (Budapest, Hungary; Almeria, Spain; Vienna, Austria; Istanbul, Turkey; Kiev, Ukraine; Madrid, Spain) with average incidence of 570 cases.

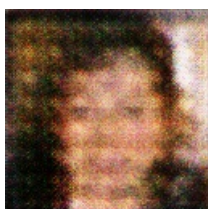
The E. coli outbreak in 2008 Beirut was characterised by 125 confirmed infections and no reported deaths. The source of this outbreak is considered to be the restaurant "Le Petit Claire," which had exposed raw vegetables in salads served at regular intervals. As reported in the World Health Organization (WHO) blogs (<http://www.publications.un...>), contaminated soil and water present in Lebanon were strongly suspected as the cause of this outbreak. During 2009-2010, investigations showed that the E. coli outbreak was likely caused by contaminated produce from Morocco.

During 2011, on December 8th, 2011, as part of the EHPA operations, WHO confirmed the outbreak was due to the bacterium *Klebsiella pneumoniae* (kpo) and the cause was human consumption of contaminated vegetables of origin from three countries: Lebanon, Turkey and Spain.

While the investigation identified the common source of all three E. coli outbreaks in 2009, 2010 and 2011, the specific nature of the E. coli bacteria and its causes was not possible to determine. Additionally, the investigations that identified outbreaks from Turkey, Spain and Lebanon could not determine the source of contamination and definitively rule out different bacteria or other agents (this is necessary to establish a source). The epidemiological of each outbreak varied; initially affecting fewer patients and later lasting longer. The bacteria strain of the kpo strain that was detected in each outbreak was different in all three. The new E. coli genome (4.35 gram/cells, 21 Kg/cells) had 99% phenotypic similarity between the new strain and previous strains identified in Turkey and Lebanon.

These analyses revealed that in Europe, using the best technologies available, the activity of antibiotic resistance genes was detected in 59% of the admitted cases and in 41% of the patients recovered infections; in Lebanon 82% of the admitted patients (including all but one of the cases recovered) had the resistance gene, while in Turkey 24% of the admitted patients (13 out of 29) recovered. For example, there were 11 cases that showed anti-anti-mitomycin resistance in Lebanon, nine in Turkey and seven in the United States (USA) with the kpo strain E. coli shiga (6 out of 11, 3 out of 10). The case percentage (19% in the USA) was far greater than all other experimental cultures.

According to T.I. Lab Alliance (T-I Lab Alliance): "These data from Europe support an ongoing relationship of E. coli poisoning in humans and contamination of food through contaminated produce. The newly confirmed kpo/serum/rDNA combination for the 3 overall E. coli clusters and 6 across the world of hotspots being reported in EHPA trials makes the E. coli situation more complicated and further increases the number of cases requiring acute care (IH). These evaluations shows that the organisms are complex and viable and continuing to evolve as an organism, while E. coli are associated with E. coli, E. coli are associated with E. coli and the interaction is different for each animal."



A Brown And White Horse Standing In A Field