

EXERCISE

Black Trapezium

Serial 2.0
Scenario

SCENARIO

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Outline scenario

Background Scenario

A family from Solihull, England become ill with a severe bout of fever, abdominal cramps and diarrhoea within 24 hours of returning from holiday in Romania. Of the extended family group that went on holiday, 4 have been ill with one, an 84 year old female, hospitalised for 5 days with severe dehydration in addition to the other associated symptoms. The hospital laboratory gave a presumptive identification as *Salmonella* Typhi on all samples received from this cluster of patients. The other patients included a male age 56, a female age 48 and a male age 4.

Following further analysis, the surveillance laboratory CfI HPA reports on EPIS an increase in the number of cases of illness associated with tetracycline resistant *Salmonella* with the antigenic structure 4,5,12:i:-. Although this strain is found to be monophasic it reacts with the *S. Typhimurium* phages and has a recognised phage pattern (DT120) therefore it is considered by HPA to be *S. Typhimurium*. Further investigation is underway and the laboratory is currently carrying out PFGE and MLVA analysis with results expected in the next few hours.

Initial response from MS via EPIS

From Denmark, the Stats Serum Institute respond that they have seen two cases of *Salmonella* Typhimurium phage type DT120 in 2 non-Danish nationals, both male Slovenian citizens, in their 20's, one aged 26 the other 28, recently returned from Ljubljana in Slovenia. They work in a meat packers in Vejen (Skate meat packers K/S) and were sent home and referred to the doctors because of the nature of their work. They attach a MLVA (multi locus variable analysis pattern) of the strain isolated from both individuals, which was identical in both cases. (MLVA pattern 3-13-10-0-211).

The Norwegian Institute of Public Health (fhi) Department of Foodborne Infections report a single case from a traveller recently returned to Stavanger from a holiday in Romania. The 55 yo male had been staying in a self-catering apartment in Mangalia on the Black Sea with his wife. He had been ill on the last day of the holiday and on return had been to see his doctor to get antibiotics. Samples were taken and analysed at the local hospital before further analysis at FHI. The presumptive disease causing bacterium was typed as *Salmonella* Typhimurium phage type DT120 and the R-type was found to be resistant to tetracyclines (T).

In Spain, a couple and young son (age 4) with no recent travel history, originally from Romania, but now living permanently in Spain and working as domestic staff and gardener in a large house on the outskirts of Cartagena, Murcia, become infected with *Salmonella*. The son is hospitalised and the regional laboratory identify the causative agent as an atypical dulcitol negative monophasic *Salmonella* Typhimurium and report this to the MSPS (Ministerio de sanidad y politico social).

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The Hellenic Centre for Disease Control (Keelpno) in Athens reports a single case of unusual group B monophasic *Salmonella* with the antigenic structure 4,5,12:i:-. The sample was taken from a hospitalised resident of Alexandroupoli in eastern Greece, an 80 yo male with no recent travel history, and reported 3 days ago.

The Health Protection Surveillance Centre in Dublin, reporting through the Irish Health Service Executive reports one case of *Salmonella* Typhimurium (unusual biochemistry for subspecies I as it is dulcitol negative). This single case has recently returned from a holiday in the West of Romania where he had been working as a volunteer on a joint project with the University of Edinburgh archaeology department, excavating the stone age settlement of Schela Cladovei. This settlement is located a few kilometres below the Iron Gates gorge (Portile de Fier) on the River Danube.

(http://www.shc.ed.ac.uk/archaeology/events/fieldwork/2008/schela_cladovei/excavation.html).

The case returned 5 days ago and was first taken ill on the day of return.

The Maltese Honorary Consul to Slovenia (female, 64) has just returned from Ljubljana to Malta for a family wedding and has been taken ill with *Salmonella*. Reports from the Infection Disease Prevention and Control unit (IDCU) have typed the strain isolated as an unusual group B *Salmonella*. Further typing is being undertaken.

Germany and Slovakia report no *Salmonella* strains with a DT120 phage pattern.

Updated Information

HPA, UK have reanalysed their isolates from this outbreak and found them to be all dulcitol negative. In addition, the MLVA profile is found to be 3-13-10-0-211 with MLVA profile designations based on the Larsson naming scheme e.g. number of tandem repeats at each locus. Ireland also have an MVLVA result :- 3-13-10-0-211. They are both the same as that posted earlier by Denmark. They post a PFGE profile of the serotype (STYMXB.0131 from the PulseNet database) to the FWD community through EPIS and ask if others have identified the same PFGE?

Meanwhile ECDC have their 11:30am (CET) Round table to discuss current open threats and potential new ones.

UK suggests to ECDC that an Ad Hoc forum would be helpful to discuss with those countries that have responded positively to their urgent enquiry. Countries invited :- UK, Denmark, Norway, Romania, Malta, Greece, Ireland, Slovenia, Spain together with ECDC. This telecom is planned for ~11:30 GMT (12:30 CET;13:30 EET).

Meanwhile Greece receives further information on the case in Alexandroupoli – an ethnic Romanian with a family in Orsova in South West Romania on the Serbian border (deduced from the family name - Ionescu). Further enquiries reveal the case recently received a visit from his relatives in Romania to celebrate his birthday. It is sensible to assume that they would have brought local food from the region with them to share at the celebration.

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Ireland also learns that their case has revealed that on the night before the departure he was invited out for a meal with colleagues from the Archaeological Institute where he was encouraged to try the local produce. .

Malta have now typed their strain and the serotype is identified as a *Salmonella* Typhimurium 4,5,12:i:-.

This information is timed to be available for sharing at the ad hoc forum.

Involvement of EFSA and revision of the risk assessment by ECDC

By now it should be clear that this is a Europe-wide outbreak and may be associated with food. There is also a clear connection to Romania but no cases identified yet in Romania. This suggests that the foodstuff is essentially limited in its distribution and possibly aimed at the export or high end market. This additional information should be enough for ECDC to reconsider its risk assessment.

However there are three loose connections:- Cases in Spain, Slovenia and Malta.

The National Institute of Public Health of the Republic of Slovenia reports two cases of salmonellosis associated with monophasic *Salmonella* Typhimurium. They are two co-workers that work in the food industry as waitresses. They have been working recently at the Romanian Embassy. An event promoting speciality foods from Romania has recently ended and the waitresses were given some of the produce left over to take home with them. One of the waitresses was particularly pleased as her boyfriend was returning from Denmark for the weekend to see her and she usually spent a fortune on buying in food from the supermarket. They shared some Caltabosi, sausages traditionally made, in this case, of pork, at a factory owned by SC Industrializarea carni Kosaromas S.A in Craiova. This factory produces small batch high end products mainly for the tourist market and export. Whilst the Caltabosi is suspected as the cause samples are yet to be analysed to provide confirmation.

One of the 60 guests at the Romanian Embassy event was the Maltese Honorary Consul to Slovenia.

The Spanish cases are linked with the receipt of a food parcel from Romania. The maternal grandmother sent a parcel of food to celebrate the son's birthday. Included was a range of cured meats and Caltabosi sausages but all the food has either been eaten or disposed of. The last was consumed just 6 days ago.