In South Africa, foodborne illness outbreaks are notifiable; however, they are generally under-reported. On 7 July 2017, Gauteng Department of Health and NICD investigated gastrointestinal illness including symptoms of diarrhoea, vomiting, and abdominal cramps amongst 687 delegates at a business training centre in Johannesburg. Twelve of the delegates who reported ill were admitted to hospital between 5 and 7 July 2017.

Stool cultures were taken from patients who were admitted, and results were made available to the investigating team. Environmental investigations were conducted and selected food items were tested. A line list of exposed persons was obtained from the institution. An exposure questionnaire was drawn up using menus provided by the institution. Exposed persons for whom email addresses were available were invited to complete the questionnaire through a link on Google forms. A case-control study design was applied. Bivariate and multivariate analysis was performed on food items that both cases and controls reported consuming.

Stool specimens from eight patients yielded *Salmonella enterica* serovar Enteritidis (*Salmonella Enteritidis*). Molecular studies confirmed these were clonally related. All laboratory-tested foods yielded negative results. 78/494 (16%) of contactable persons who were exposed responded to the questionnaire, of whom 33 had developed gastro-intestinal illness. The age range of respondents was 21-62 years, with a mean age of 38 years. The majority of patients reported watery diarrhoea (76%), followed by abdominal pain (67%), fever (46%) and vomiting (30%). Multivariate analysis indicated that consumption of scrambled egg on the morning of 5 July 2017 had the strongest association with gastrointestinal disease (OR=5.4, 95% confidence interval 1.8-16, p<0.05).

These findings together suggest a foodborne outbreak associated with consumption of food contaminated with *Salmonella Enteritidis*. *Salmonella Enteritidis* is commonly associated with foodborne illness and outbreaks involving the consumption of egg-based foodstuffs and poultry. However, the investigation did not confirm the presence of the organism in the implicated foodstuff, nor were environmental sources and extrinsic contamination adequately ruled out.

Source: Centre for Enteric Diseases, NICD-NHLS; Field Epidemiology Training Programme, NICD-NHLS