

JOINT EVENT

9<sup>th</sup> International Conference on **Emerging Infectious Diseases**

&amp;

6<sup>th</sup> World Congress on**Control and Prevention of HIV/AIDS, STDs & STIs**

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**A protracted outbreak of *Salmonella* Hessarek infection associated with one brand of eggs - South Australia, March 2017-June 2018****Bernadette Kenny<sup>1</sup>, Megge Miller<sup>1</sup> and Tambri Housen<sup>2</sup>**<sup>1</sup>Communicable Disease Control Branch - South Australian Department of Health and Wellbeing, Australia<sup>2</sup>The Australian National University, Australia

*Salmonella* Hessarek infections are rare; a global literature review identified only one publication relating to *S. Hessarek* in humans plus some on detection of this serovar in wild animals. In Australia, for the period 2015-2017, notifications of *S. Hessarek* increased to 30 per year, from a previous five year average of 12 notifications (2010-2014). The majority of notifications were in South Australia (SA). A prospective case series study to determine any common source of infection in SA was conducted between 1 March 2017 and 30 June 2018. All 24 cases (14 males, ten females, median age: 48 years, age range 1-91 years) notified with *S. Hessarek* infection in this period were interviewed; 23 cases reported consuming eggs with 16 naming brand X eggs. Four dozen brand X eggs were sampled; *Salmonella* was not cultured from the egg-shell rinse of any egg samples, however, *S. Hessarek* was cultured in the content of one egg sample. The epidemiological and laboratory evidence strongly support brand X eggs as a protracted source of *S. Hessarek* infection in SA. *S. Hessarek* was also cultured from the content of eggs in SA in 2014. To determine whether cases of *S. Hessarek* notified prior to March 2017 are associated with brand X eggs, whole genome sequencing (WGS) of *S. Hessarek* isolates since 2014 is being considered; currently, no *S. Hessarek* reference strain, required for WGS, is available globally. Further research to understand this emerging *Salmonella* serovar in SA and inform efforts to control *Salmonella* associated with eggs is occurring.

Bernadette.Kenny@sa.gov.au