

# **OUTBREAK OF SALMONELLA AGONA INFECTIONS LINKED TO INTERNATIONALLY DISTRIBUTED INFANT FORMULA AND THE SITUATION IN GHANA**

## **OUTBREAK OF SALMONELLA AGONA IN FRANCE**

An unusually high number of *Salmonella* Agona strains were identified by the National Reference Center (NRC) in France in young children under 6 months of age. Subsequent investigations conducted by Santé publique France identified an outbreak of *Salmonella enterica* serovar Agona associated with French produced infant formula products (the Lactalis Nutrition Santé (LNS) group). As a result, Lactalis Nutrition Santé proceeded with the withdrawal and recall of 12 batches of implicated product.

On 12 January 2018, Lactalis Group expanded their recall again to include all infant formula and nutritional products manufactured and conditioned in their Craon factory regardless of their date of production and their batch number, according to a maximum precautionary measure.

The Minister of Economy and Finance of France also ordered the suspension of marketing and exports and the recall of several infant formula products manufactured by LNS since 15<sup>th</sup> February 2017.

More than 7,000 tons of implicated products that were manufactured from 15 February 2017 to present have been recalled so far.

As of 11 January 2018, the outbreak had affected 39 infants (children <1 year of age): 37 in France, one in Spain confirmed by whole genome sequencing (WGS) and one in Greece, considered to be associated with this event based on the presence of a rare biochemical characteristic of the isolate. The date of symptom onset for the most recent case was 2 December 2017.

Implicated infant formula products have been distributed internationally to 49 countries and territories (excluding Ghana).

## **WHO RISK ASSESSMENT**

WHO risk assessment indicates that *Salmonella enterica* serovar Agona is in the top 10 most common non-typhoidal serovars reported in humans in the EU. Powdered infant formulas are not sterile products. *Salmonella* is prevalent in raw ingredients and can survive under harsh, dry conditions for lengthy periods of time. Routine microbiologic controls of end product may fail to detect a low-grade contamination, which nevertheless may cause infection. Preparing formula with tepid water can allow for rapid growth/multiplication of the initial low level *Salmonella* contamination, which may in turn cause serious illness and outbreaks among infants.

*Salmonella* Agona appears to be particularly well adapted to dry powdered infant formula production environments and has caused similar outbreaks in the past.

The amount of products recalled (7,000 tons) would represent a very large number of bottles of formula. According to the manufacturer, 40% of the amount recalled had not yet left its premises.

#### **SITUATION IN GHANA**

The Food and Drugs Authority, Ghana, upon receipt of this alert conducted its checks which confirmed that there are no registered infant formula manufactured by Lactalis group in France imported into Ghana. The Authority has currently increased its Post Market Surveillance activities as well as vigilance at the points of entry into the country to ensure these products are not brought into Ghana.

The Food and Drugs Authority therefore advises that the WHO guidelines for the safe preparation, storage and use of powdered formula should be adhered to. In addition to adhering to specific information contained in these guidelines, preparing bottles with hot water before allowing the prepared bottle to cool down before serving (boiling water and letting it cool to approximately 70°C), would help inactivate any bacteria potentially present in the powder formula.

If children show symptoms, such as diarrhoea with or without fever, parents are recommended to contact a doctor as soon as possible.