



Number: 4

### Salmonella in poultry

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# Infection and antimicrobial resistance

Salmonella infection (Salmonellosis) is an enteric pathogen that affects animals and humans. Poultry can become infected with many different serotypes of Salmonella: around 10% of all Salmonella have been detected in poultry.

Salmonella typhimurium and Salmonella enteritidis are the most important but other frequent serotypes found in poultry around the world are Salmonella hadar, Salmonella livingstone and Salmonella senftenberg.

When it comes to commercial poultry production, food safety is a major public health concern. Contaminated poultry meat and eggs are the most common sources of human food poisoning. Antimicrobial resistance in Salmonella is considered an additional concern. As humans contract the infection by consuming contaminated poultry products, Salmonella must evade methods of control applied at the farm and processing facilities.

#### Disease symptoms in poultry

The level of illness depends on the bacterium's serotype and phage type, and on the host; the poultry's age and general health status. Symptoms can include weakness, loss of appetite, drooping wings, watery diarrhoea and poor growth. It is mainly in young chicks of up to two weeks of age that Salmonella can cause death. In most cases, poultry are not sick and production is not affected.

# Spread of infection and disease control

Poultry usually become infected through contaminated feed, infected animals or eggs, and also through contact with a contaminated environment. During rearing, slaughter and processing, the bacteria can be transferred into food products.

To completely eradicate Salmonella from poultry production is very difficult, at farm level, by applying a combination of strategies which include proper management, biosecurity, vaccination and nutritional feed additives, it will help to control it.