Report of the
Task Force on Zoonoses Data Collection
on the Analysis of the baseline survey on the prevalence of
Salmonella in turkey flocks, in the EU, 2006-2007

Part A: Salmonella prevalence estimates

five Member States accounted for 79.3% of the fattening bird population, namely, France (18.7%), Germany (16.4%), Italy (16.0%), Spain (14.7%), and Poland (13.5%).

Six of the 14 Member States isolated Salmonella spp. in their breeding flocks, which resulted in a Community observed prevalence of Salmonella-positive breeding flocks of 13.6%. This means that in the European Union around one in seven breeding turkey flocks raised over the one year period of the baseline survey was Salmonella-positive. The Salmonella prevalence in these flocks varied widely amongst the Member States, from 0% to 82.9%. Three of those six Member States isolated Salmonella Enteritidis and/or Salmonella Typhimurium, the two most common serovars found in Salmonella infection cases in humans. This resulted in an estimated Community observed prevalence of 1.7% for these two serovars, varying from 0% to 8.3% within the Member States.

The Community observed prevalence of Salmonella-positive fattening flocks was 30.7%, meaning that approximately one in three fattening turkey flocks raised over the one year period of the baseline survey were Salmonella-positive. The Salmonella prevalence in these flocks also varied widely amongst the Member States, from 0% to 78.5%. Thirteen of the 22 Member States with fattening turkey flocks reported to have isolated S. Enteritidis and/or S. Typhimurium resulting in a Community observed prevalence of 3.8% in the fattening turkey flocks. The Member State-specific observed flock prevalence of S. Enteritidis and/or S. Typhimurium varied from 0% to 18.4% in fattening turkeys.

In breeding flocks no single Salmonella serovar was isolated in more than three of the 14 reporting Member States. The five most frequently isolated Salmonella serovars from fattening turkey flocks in the European Union, in decreasing order, were: S. Bredeney, S. Hadar, S. Derby, S. Saintpaul and S. Kottbus. Out of these, only S. Hadar and S. Derby are frequent causes of Salmonella infections in humans within the European Union. The serovar distribution varied amongst the Member States, with serovars tending towards specific distribution patterns of their own.

The number of positive samples in a Salmonella positive breeding or fattening flock ranged between one and five. Almost all Member States had a major part of their Salmonella-infected flocks of fattening turkeys with all five samples positive. Reducing the number of samples taken per flock would have lead to a substantially lower prevalence estimate of S. Enteritidis and/or S. Typhimurium in fattening turkey flocks.

Salmonella positive turkey flocks contribute to a consequent contamination of turkey meat. The risk for human health arises from accidental under-cooking of the meat or cross-contamination to other foods. Thorough cooking and strict kitchen hygiene will prevent or reduce the risk posed by Salmonella contaminated turkey meat.

While Community reduction target will most likely be set for a transitional period only for S. Enteritidis and S. Typhimurium, Member States may wish to consider addressing in their national Salmonella control programmes also other serovars when these serovars are of public health importance in their country.