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# COMMISSION OF THE EUROPEAN COMMUNITIES



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# COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND TO THE COUNCIL

with regard to the state of play on the control of food-borne Salmonella in the EU

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## 1. Purpose

The purpose of this Communication is to inform the European Parliament and the Council on the state of play on implementation of the Community provisions intended to control *Salmonella* and the results since adoption of Regulation (EC) No 2160/2003 of the European Parliament and of the Council of 17 November 2003 on the control of *Salmonella* and other specified food-borne zoonotic agents<sup>1</sup> and of Directive 2003/99/EC of the European Parliament and of the Council of 17 November 2003 on the monitoring of zoonoses and zoonotic agents<sup>2</sup>. This Communication additionally covers other Community legislation and activities to ensure/improve control of *Salmonella* along the food chain.

## 2. Introduction

The European Centre for Disease Prevention and Control (ECDC) and the European Food Safety Authority (EFSA) reported 151,995 human cases of salmonellosis in 2007 in the 27 Member States of the European Union (EU), being an incidence of 31.1 per 100,000 population<sup>3</sup>. It is, however, evident that the number of human cases is seriously underestimated and underreported<sup>4</sup>.

Part of the human cases referred to above was detected within the frame of 3,131 food-borne outbreaks<sup>5</sup> which is 64.5% of the total number of food-borne outbreaks of known origin. The *Salmonella* outbreaks affected 22,705 victims, of whom 14% were hospitalised and 23 died. *Salmonella* Enteritidis and *Salmonella* Typhimurium were responsible for 95% of outbreaks with known serotype.

Humans can acquire the *Salmonella* infection through consumption of contaminated food (most cases) or drinking water. Products of animal origin, mainly eggs and meat (products) are reported as the main food sources, but bakery products, fruit, vegetables and chocolate have also caused *Salmonella* outbreaks.

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OJ L 325, 12.12.2003, p. 1.

OJ L 325, 12.12.2003, p. 31.

The Community Summary Report on Trends and Sources of Zoonoses and Zoonotic Agents in the European Union in 2007 (*The EFSA Journal* (2009) 223).

Scientific Opinion of the Panel on Biological Hazards on a quantitative microbiological risk assessment on Salmonella in meat: Source attribution for human salmonellosis from meat. *The EFSA Journal* (2008), 625, 1-32.

Outbreak means two or more human cases linked to the same source; such outbreaks attract media attention whereas individual cases do not.

An additional public health concern is the emergence of antimicrobial resistance of salmonellosis in humans arising from the use of antimicrobials in farm animal production<sup>6</sup>.

## 3. MONITORING OF SALMONELLA

## 3.1. Monitoring in humans

Commission Decision 2000/96/EC of 22 December 1999 on the communicable diseases to be progressively covered by the Community network under Decision No 2119/98/EC of the Parliament and of the Council<sup>7</sup> lays down the mandatory surveillance of salmonellosis in humans. These data are collected by ECDC via its networks in the Member States.

# 3.2. Monitoring in feed, foodstuffs and animals

The purpose of Directive 2003/99/EC is to ensure that zoonoses, zoonotic agents and their antimicrobial resistance are properly monitored and that food-borne outbreaks receive proper epidemiological investigation. The results from monitoring food, animals and feed in the Member States are submitted electronically to the EFSA.

Investigation of food-borne outbreaks together with sporadic cases used for source attribution, makes it possible to set priorities indicating the foodstuffs and animal populations which should be primarily considered for action to control *Salmonella*, to reduce the public health risk most rapidly and to guarantee an integrated approach. Both the ECDC and the EFSA are allocating considerable resources to developing tools and recommendations to improve such investigations.

Data on feed, animals, food and humans are compiled by the EFSA in its annual Community summary report on zoonoses. In addition, the EFSA Panel on Biological Hazards analyses the report and makes recommendations to improve monitoring and to consider measures.

Monitoring of *Salmonella* has been progressively harmonised by common sampling protocols and analytical methods laid down in the baseline studies and control programmes (see point 5) in the case of live animals and by common microbiological criteria in the case of foodstuffs (see point 6.2). As a result, prevalence data have become comparable between Member States and risk assessments at Community level can be envisaged.

The Community Reference Laboratory for *Salmonella* has been nominated and coordinates a network of national reference laboratories to improve testing methodology and ensure high quality of laboratory analyses in all Member States.

Action: Research should be encouraged, or monitoring in humans should be improved, in order to get a better estimation of the real prevalence of human

See: www.who.int/foodborne disease/resistance

<sup>&</sup>lt;sup>7</sup> OJ L 28, 3.2.2000, p. 50.

salmonellosis and to better compare prevalences between Member States and, if possible, third countries.

#### 4. CONTROL OF SALMONELLA IN FEED

Processed animal proteins must comply with the *Salmonella* criterion laid down in Regulation (EC) No 1774/2002 of the European Parliament and of the Council of 3 October 2002 laying down health rules concerning animal by-products not intended for human consumption<sup>8</sup>.

Salmonella has also been found in a substantial number of vegetable feed materials such as soybean meal and rapeseed meal<sup>3</sup>. The measures laid down in Regulation (EC) No 183/2005 of the European Parliament and of the Council of 12 January 2005 laying down requirements for feed hygiene<sup>9</sup>, including an HACCP system, are therefore critical for preventing or limiting Salmonella contamination during transport, storage and processing of feed materials.

In June 2008, the Panel on Biological Hazards of the EFSA provided an Opinion on the Microbiological Risk Assessment in feedingstuffs for food-producing animals. The Opinion recommends the setting of *Salmonella* criteria in (vegetable) feed in order to prevent infections of animals.

**Action**: Consideration of *Salmonella* criteria in feed. Exchanges of views with Member States and stakeholders are ongoing.

# 5. CONTROL OF SALMONELLA IN ANIMAL POPULATIONS

In accordance with the provisions in Regulation (EC) No 2160/2003, Community targets are being established for the reduction of the prevalence of *Salmonella* in poultry and pig populations. For each population a similar approach is followed:

- Baseline studies on the prevalence of *Salmonella* have been initiated pursuant to Directive 2003/99/EC from a few months after 10 more Member States joined the EU in 2004. In this way, comparable information was collected on laying hens and broilers in the 25 Member States. Results from baseline studies on turkeys and slaughter pigs in all 27 Member States became available in the first half of 2008. A baseline study on *Salmonella* in breeding pigs was carried out in 2008.
- In the poultry population, the baseline studies provide the reference prevalence for setting a reduction target for *Salmonella* pursuant to Regulation (EC) No 2160/2003. They also allow analysis of risk factors with a view to developing control programmes. Finally, they have encouraged Member States with high prevalence to step up their action before the Community imposes requirements.

<sup>&</sup>lt;sup>8</sup> OJ L 273, 10.10.2002, p. 1.

<sup>9</sup> OJ L 35, 8.2.2005, p. 1.

- In pig populations, the baseline surveys provide information for a cost/benefit analysis prior to using the data as the reference prevalence for setting a reduction target. Additionally, a quantitative assessment of the risk by the EFSA is needed for this cost/benefit analysis. Poultry populations have been derogated from these cost/benefit analyses.
- National control programmes are submitted to the Commission by Member States and third countries for approval each time a target for reduction has been agreed on.
- Control programmes, including a harmonised monitoring of the population apply after approval and in any case within 18 months after setting a target for reduction. Placing on the market of live animals and eggs is restricted if the control programmes have not been submitted or approved, or if certain *Salmonella* serotypes are detected.

# 5.1. Breeding hens of Gallus gallus

A reduction target for *Salmonella* in flocks of breeding hens was set by Commission Regulation (EC) No 1003/2005 of 30 June 2005 implementing Regulation (EC) No 2160/2003<sup>10</sup>. By the end of 2009 a maximum of 1% of adult breeding flocks may be infected by one of the five main serotypes.

Since the start of national control programmes on 1 January 2007, Member States are required to sample all flocks or hatcheries following a harmonised method. If *Salmonella* Enteritidis or *Salmonella* Typhimurium is detected, hatching eggs may no longer be produced and the hens are culled or slaughtered safely. In 2007, 1.2% or fewer flocks in most Member States were still infected with the five main serotypes, having achieved or almost achieved the target. In five Member States the percentage of infected flocks was still between 4.2 and 15.4%.

Since adoption of Commission Decision 2007/843/EC of 11 December 2007 concerning approval of *Salmonella* control programmes in breeding flocks of *Gallus gallus* in certain third countries<sup>11</sup>, imports of hatching eggs and live poultry intended for breeding are allowed only from the United States, Canada, Croatia, Tunisia and Israel which are the only countries that have submitted a *Salmonella* control programme equivalent to the EU provisions.

# 5.2. Laying hens

The baseline study highlighted the major differences in prevalence in flocks of laying hens, finding from 0 to over 50% of flocks *Salmonella*-positive. Due to this variation and high prevalence in a number of Member States, the Commission decided to set a reduction target depending on the preceding year until the prevalence falls below 2% (Regulation (EC) No 1168/2006<sup>12</sup>).

OJ L 170, 1.7.2005, p. 12.

OJ L 332, 18.12.2007, p. 81.

OJ L 211, 1.8.2006, p. 4.

The *Salmonella* control programme in flocks of laying hens has started in all Member States on 1 February 2008 at the latest, including harmonised monitoring in all flocks every 15 weeks.

In addition, the Commission adopted measures (Commission Regulation (EC) No 1237/2007<sup>13</sup>) to restrict the placing on the market of table eggs:

- from 1 November 2007 in the case where the flock is the source of a *Salmonella* outbreak in humans
- from 1 January 2009 if the absence of *Salmonella* Enteritidis or *Salmonella* Typhimurium is not demonstrated by the monitoring.

Based on the submission and approval of equivalent control programmes, only Switzerland and Croatia are allowed to export table eggs to the EU. Only these two countries and the United States are allowed to export live poultry intended for laying.

## 5.3. Broilers

A baseline study on broiler flocks was conducted in the Member States between October 2005 and September 2006. At Community level 23.7% of flocks tested positive for *Salmonella*.

Consequently, a reduction target for *Salmonella* Enteritidis and *Salmonella* Typhimurium of 1% or less of flocks remaining infected was set by Commission Regulation (EC) No 646/2007 of 12 June<sup>14</sup>.

The *Salmonella* control programmes for flocks of broilers started in all Member States on 1 January 2009 at the latest, and include monitoring of all flocks before broilers are sent for slaughter.

Under Regulation (EC) No 2160/2003, *Salmonella* should be "absent in 25 grams" of fresh poultry meat from the end of 2010 on, but detailed rules still need be laid down by the Commission.

Equivalent guarantees on exports of slaughter poultry have only been provided by Switzerland. Day-old broilers can only be exported from Switzerland and the United States to the EU.

**Action**: The Commission will adopt detailed rules on the *Salmonella* food safety criterion for fresh poultry meat before the end of the year including minimum sampling frequencies, harmonised sampling plans and analytical methods. Assessment of equivalent guarantees of third countries from which exports of fresh poultry meat are currently allowed will be conducted as soon as details have been agreed for trade in fresh poultry meat in the EU.

OJ L 280, 24.10.2007, p. 5.

OJ L 151, 13.6.2007, p. 21.

# 5.4. Turkeys

A baseline study on turkeys was carried out between October 2006 and September 2007 in every Member State, including Bulgaria and Romania. The Community observed prevalence of *Salmonella*-positive flocks was 13.6% in breeding turkeys and 30.7% in fattening turkeys.

Based on the results of the baseline study, a reduction target for *Salmonella* Enteritidis and *Salmonella* Typhimurium of 1% or less of flocks remaining infected was set by Commission Regulation (EC) No 584/2008 of 20 June 2008<sup>15</sup>.

The Commission is currently evaluating the national control programmes submitted by Member States and third countries. The control programmes will apply from the beginning of 2010.

The food safety criterion on fresh poultry meat will apply to turkey meat in addition to broiler meat from the end of 2010.

**Action:** Evaluation and possible approval of control programmes of Member States and third countries before the end of 2009.

# 5.5. Slaughter pigs

A baseline study on slaughter pigs was carried out between October 2006 and September 2007 in every Member State, including Bulgaria and Romania. At Community level 10.3% of slaughter pigs tested positive for *Salmonella*.

The Commission is carrying out a cost/benefit analysis as required by Regulation (EC) No 2160/2003 before setting a Community target. This analysis includes a quantitative assessment of risk factors and mitigation options as well as an estimate of the benefit for human health. It is done in close collaboration with the EFSA and should be completed by mid-2010.

**Action:** A reduction target will be established as soon as the cost/benefit analysis has been completed. Notwithstanding a delay in fixing a target for reduction due to the need to collect comparable prevalence data in the 27 Member States and the requirement of a cost/benefit analysis, the legal framework currently in force, in particular the hygiene Regulations (see point 6.1) and the Regulation on microbiological criteria in foodstuffs (see point 6.2), already provides for a high level of food safety.

## 5.6. Breeding pigs

A baseline study on breeding pigs was carried out from January to December 2008 in all 27 Member States. The Commission will carry out a cost/benefit analysis similar to slaughter pigs before setting a Community target. This analysis includes a quantitative assessment of risk factors and mitigation options as well as an estimate of the benefit of reducing *Salmonella* in fattening pigs. It is done in close collaboration with the EFSA and should be completed by the end of 2010.

<sup>&</sup>lt;sup>15</sup> OJ L 162, 21.6.2008, p. 3.

**Action:** A reduction target for *Salmonella* in breeding pigs will be considered immediately after the cost/benefit analysis which is later than the date set in Regulation (EC) No 2160/2003.

#### 6. CONTROL OF SALMONELLA IN FOODSTUFFS

## **6.1.** The Hygiene Regulations

Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs<sup>16</sup> lays down general rules for food business operators on the hygiene of foodstuffs. It ensures food safety all along the food chain by implementing procedures based on HACCP and good hygiene practice.

Regulation (EC) No 853/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific hygiene rules for food of animal origin 17 supplements the rules laid down in Regulation (EC) No 852/2004 with regard to unprocessed and processed products of animal origin. Regulation (EC) No 854/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption 18 ensures that it is implemented correctly.

These Regulations provide a general framework for hygiene conditions that limit the presence of *Salmonella* in foodstuffs. A report is currently prepared evaluating the implementation of the Regulations.

## 6.2. Regulation (EC) No 2073/2005 on microbiological criteria for foodstuffs

Regulation (EC) No 2073/2005 of 15 November 2005<sup>19</sup> lays down microbiological criteria for certain micro-organisms and the implementing rules to be complied with by food business operators.

The Regulation lays down food safety criteria for *Salmonella* in 18 groups of foodstuffs, including minced meat and meat preparations, mechanically separated meat, egg products, ice cream and dried infant formulae. These criteria define the acceptability of foodstuffs placed on the market.

Process hygiene criteria for *Salmonella* on carcases of broilers, turkeys, pigs, cattle, sheep, goats and horses are also laid down in the Regulation. They set an indicative value above which corrective action is required in order to maintain hygiene during processing.

OJ L 139, 30.4.2004, p. 1; as corrected by OJ L 226, 25.6.2004, p. 3.

OJ L 139, 30.4.2004, p. 55; as corrected by OJ L 226, 25.6.2004, p. 22.

OJ L139, 30.4.2004, p. 206; as corrected by OJ L 226, 25.6.2004, p. 83.

OJ L 338, 22.12.2005, p. 1.

#### 7. CONTROL OF RESISTANCE TO ANTIBIOTICS AGAINST SALMONELLA

#### 7.1. Within the EU

The EFSA reported an increasing trend of human *Salmonella* isolates resistant to antibiotics over recent years<sup>20</sup>.

The resistance in *Salmonella* isolates from pigs and cattle, and to some extent from broilers, and in the meat thereof, largely resembled the occurrence in humans. It clearly demonstrates the presence of a pool of *Salmonella* isolates resistant to antibiotics in farm animals and food thereof.

Since 1 January 2006, the use of antibiotics as feed additives, others than coccidiostats and histomonostats, has been prohibited in the EU. In addition, antibiotics cannot be used as a specific method to control *Salmonella* in poultry except under exceptional circumstances clearly defined in Commission Regulation (EC) No 1177/2006 of 1 August 2006<sup>21</sup>. Taking into account this prohibition, control programmes to reduce *Salmonella* in farm animal populations may be the most efficient way to reduce *Salmonella* resistant to antibiotics.

In order to obtain comparable information from every Member State, The Commission has adopted harmonised rules on monitoring of resistance in *Salmonella* isolates<sup>22</sup>.

In addition, a Community reference laboratory and a network of national reference laboratories for antimicrobial resistance has been established<sup>23</sup> to improve testing methodology and to ensure high quality of laboratory analyses in all Member States.

The Commission sent a mandate to the relevant scientific bodies SCENIHR<sup>24</sup>, EFSA, EMEA<sup>25</sup> and ECDC to asses the risk from antimicrobial resistance in zoonotic agents including *Salmonella*.

**Action:** The Commission will evaluate the SCENIHR/EFSA/EMEA/ECDC risk assessment in order to consider appropriate options if needed.

# 7.2. At international level

Since 2007, the European Community has also taken the lead in development of management options within an *ad hoc* Intergovernmental Task Force on Antimicrobial Resistance set up by the FAO/WHO Codex Alimentarius Commission. Preliminary work of the World Organisation for Animal Health (OIE) is followed very closely.

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The Community Summary Report on Trends and Sources of Zoonoses, Zoonotic Agents, Antimicrobial Resistance and Foodborne Outbreaks in the EU in 2006, *The EFSA Journal* (2007), 130.

OJ L 212, 2.8.2006, p. 3.

Decision 2007/407/EC of 12 June 2007 on harmonised monitoring of antimicrobial resistance in *Salmonella* in poultry and pigs, OJ L 153, 14.6.2007, p. 26.

Regulation (EC) No 776/2006 of 23 May 2006 amending Annex VII to REgulation (EC) No 882/2004 as regards Community references laboratories, OJ L 136, 24.5.2006, p. 3.

Scientific Committee an Emerging and Newly Identified Health Risks.

European Medicines Agency.

**Action:** The Commission will continue to support the adoption of Codex guidelines on antimicrobial resistance by 2011.

# 8. SPECIAL GUARANTEES

At the time of their accession Finland and Sweden were granted special guarantees with regard to *Salmonella*. Other Member States wishing to send meat or eggs to Finland or Sweden must prove that the products contain no *Salmonella*, following a strict sampling protocol. The reason for granting special guarantees was the favourable epidemiological situation in Finland and Sweden and the strict measures they apply within their control programmes.

Any Member State or any region of a Member State that has a control programme recognised as equivalent to those approved for Finland and Sweden may obtain the same special guarantees.

Denmark submitted in 2007 a request for special guarantees as regards *Salmonella* in broiler meat and eggs, similar to the guarantees granted to Finland and Sweden. The *Salmonella* prevalence in Denmark was, however, not yet considered sufficiently low to receive the support of a majority of Member States.

**Action:** The Commission will reconsider special guarantees for Denmark when the prevalence has further decreased and continue to assess Member States' applications to obtain special guarantees.

#### 9. TRAINING ON THE CONTROL OF ZOONOSES

In 2007 as well as in 2008, five four-day training sessions on monitoring and control of zoonoses were organised within the "Better training for safer food" programme. *Salmonella* control is the main issue during such training. The objective of this course was:

- to equip about 200 participants from competent authorities with adequate knowledge to plan or adjust national programmes/plans for the control of zoonoses in line with the EU legislation;
- to make decisions consistent with the EU's expectations in the framework of monitoring and control of zoonoses and application of microbiological criteria in foodstuffs.

The training is being repeated in 2009 and 2010 for other participants.

More general training on application of HACCP was organised in 2006, 2007 and 2008, attracting over 1100 participants from the Member State and 15 non-EU countries.

#### 10. TASK FORCE MEETING ON THE CONTROL OF SALMONELLA

The Commission established a Task Force on the control and eradication of animal diseases to improve the efficiency of the measures taken by the Member States as well as to improve the cost-benefit ratio of the control programmes co-financed by the Community such as those on *Salmonella*.

Between September 2007 and March 2009, four regional meetings were organised specifically addressing *Salmonella* control. The Commission and the Member States present examined the national control programmes for poultry, shared experience as regards their implementation and identified areas where further actions are needed.

**Action:** The Commission will continue to organize specific ad hoc meetings for those Member States with approved co-financed *Salmonella* control programmes.

#### 11. COMMUNITY CO-FINANCING OF SALMONELLA CONTROL PROGRAMMES

Under Council Decision 90/424/EEC of 26 June 1990 on expenditure in the veterinary field<sup>26</sup>, programmes to control zoonotic *Salmonella* may be co-financed by the Community.

For 2008 twenty Member States have submitted *Salmonella* control programmes for flocks of laying hens of *Gallus gallus* which were considered eligible for cofinancing and 19 Member States have received Community financial support for implementing their *Salmonella* control programme in breeding flocks of poultry. Measures co-financed by the Community include expenditure by the Member State authorities on bacteriological testing, purchase of vaccines and compensation for destruction of flocks. Total Community funding of  $\leq 29,935,000$  was allocated to *Salmonella* control for 2008.

For the year 2009 20 Member States submitted *Salmonella* control programmes in breeding flocks of *Gallus gallus*, 22 applications arrived to co-finance control programmes in laying hens of *Gallus gallus* and 16 Member States applied to obtain funding to implement their *Salmonella* control programmes in broilers.

In the year 2009 the cost of analysis to verify the efficiency of the use of disinfectants is considered as eligible for the first time.

#### 12. INVOLVEMENT OF STAKEHOLDERS

Community legislation on the control of *Salmonella* is intended to increase food safety for consumers. It may also put European food producers in a better position for international trade as certain importing countries pay a lot of attention to the presence of *Salmonella* in food and several currently exporting countries may have difficulties to fulfil the strict EU requirements.

OJ L 224, 18.8.1990, p. 19.

At the beginning of a control programme when the prevalence is still relatively high, however, the social and economic impact of the measures should not be underestimated. The willingness of stakeholders to cooperate in the control programme is therefore essential if it is to be implemented correctly and succeed.

The Commission is, therefore, pleased that stakeholders are developing Community guides to good hygiene practice. In particular:

- The Committee of Professional Agricultural Organisations in the EU and the General Confederation of Agricultural Cooperatives in the EU (COPA/COGECA) and the European Union of Wholesale with Eggs, Egg Products, Poultry and Game (EUWEP) have agreed to develop a Community guide to good practice for hygiene in flocks of laying hens;
- COPA/COGECA and the Association of Poultry Processors and Poultry Trade in the EU (a.v.e.c) have agreed to develop a Community guide to good practice for hygiene in flocks of broilers and at the slaughterhouse.

Both guides focus on the control of Salmonella.

**Action:** The Commission will continue to encourage stakeholders involved to develop guides to good hygiene practices in particular in pig meat production.

#### 13. RESEARCH ACTIVITIES

A substantial number of initiatives targeting *Salmonella* and anti-microbial resistance have been launched and supported by the Commission under the 6<sup>th</sup> and 7<sup>th</sup> Research Framework Programme (FP). For example, the FP6 Network of Excellence MEDVETNET concentrates on the prevention and control of (mainly food-borne) zoonoses. Transatlantic scientific cooperation on the best approaches to tackle zoonoses might be useful.

#### 14. CONCLUSIONS

The current focus of Regulation (EC) No 2160/2003 is on controlling *Salmonella* in primary production of poultry and pigs. The Commission has been successful in setting reduction targets for *Salmonella* in line with the requirements in the legislation. Only in the case of pigs there is a quite significant delay in setting a target, due to the need to collect comparable prevalence data from all 27 Member States and to the requirement to carry out a cost/benefit analysis. A comprehensive cost/benefit analysis is considered necessary before setting a target for reduction in pigs because such reduction is not evident based on current scientific advice and experiences from certain Member States.

The Commission did not limit itself to the adoption of implementing provisions of the Regulation (EC) No 2160/2003, but took the initiative for additional actions needed to increase the chance of success of its approach, for example:

• by providing training to the competent authorities in the Member States and third countries;

- by convincing European stakeholders organisations to actively participate;
- by providing financial support to the Member States.

Control of *Salmonella* has also been integrated into a broad approach to control pathogens all along the food chain, in line with the Commission's "farm to fork" approach and taking into account possible negative side-effects such as the increase of the antimicrobial resistance.

The Commission has stepped up monitoring of *Salmonella* in order to check the results of its own efforts and of the efforts by the Member States by collecting reference values in baseline studies, by networking laboratories and by harmonising the sampling protocol.

Since Regulation (EC) No 2160/2003 on zoonoses control was adopted, the awareness and motivation of competent authorities and stakeholders to tackle *Salmonella* has increased significantly, often resulting in action before the Community provisions became mandatory. The effect on public health can already be seen in the trend of salmonellosis in humans from 2004 until 2007 in Figure 1. Furthermore, a significant reduction could be expected from 2009 (restrictions on table eggs) and from 2011 (food safety criterion on poultry meat).

Figure 1: Number of reported salmonellosis cases in the EU25 from 2004 until 2007

