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## **European Statistics on microbiological risks and comparative analysis of national experiences.**

### *Current monitoring of microbiological risks and national trends :*

In co-operation with the Community Reference Laboratory for the Epidemiology of Zoonoses, the Commission prepares annual reports on trends and sources of zoonotic agents in animals, feedingstuffs, food and man in the European Union (and Norway from 1999). The first report covered year 1994 and the report concerning the year 2000 was presented recently. The collection of epidemiological data has improved each year and currently all 15 Member States submit their annual reports. Although the quality of the data still suffers from unharmonised surveillance data collection systems whether along the food chain or in humans, very valuable information is collected and used even by scientific committees.

11 zoonotic agents are subject to reporting either on a compulsory or on a voluntary basis : salmonellosis (150165), campylobacteriosis (131527), yersiniosis (7385), brucellosis, verotoxigenic E.coli (VTEC) infections, listeriosis, toxoplasmosis, echinococcosis, tuberculosis (M. bovis), trichinellosis, rabies (ranked by decreasing number of reported cases in humans ; data 2000). The cases reported represent often only the severe end of the spectrum of the disease, since it is generally known that many human infections go unrecorded.

When looking at the results, certain conclusions can be drawn. This is particularly valid for salmonella where interest in data collection is great, but also for other zoonoses like campylobacter. While the total number of salmonellosis cases reported in the EU is decreasing with time (minus 31% in 5 years), the number of campylobacteriosis shows an increasing trend. Out of 2501 existing salmonella serotypes, two serotypes represent a large majority of the human isolates. The distribution of serotypes in humans is different from the serotypes in feedingstuffs but more similar to those found in different species of livestock. For *Salmonella* Enteritidis, poultry derived products might be the main animals source. As regards salmonella, an increasing number of MSs have taken measures to strengthen their controls along the food chain in particular at primary production. This was either mandatory or at the initiative of the industry. Without trying to explain the success only by those measures, one can note that a number of them have experienced a significant decrease in the human incidence. In particular, Denmark, The Netherlands, France and the United Kingdom had a continuous decrease during the years 1997-2000.

### *Proposed new approach on monitoring and control of microbiological risks :*

The "farm to fork approach" was implemented to some extent in the field of zoonoses control. The existing Community legislation has obliged the Member States to control certain salmonella in breeding flocks of poultry for several years already. In August 2001, the Commission adopted proposals to replace the existing legislation on zoonoses. The legislation would be split in two pieces: a Directive on monitoring and a Regulation on control. The *Directive* would put in place more co-ordinated monitoring systems on zoonoses throughout the food chain, to make data more relevant and comparable, to support microbiological risk assessment activities and risk management measures. Where appropriate, there would be a possibility for the Commission to harmonise monitoring in the EU. The monitoring would also cover food-borne outbreaks and the anti-microbial resistance in certain micro-organisms. The European Food Safety Authority would be involved in the analysis of data and production of the (yearly) Community reports. Collection of data in humans would be made within the "Communicable Diseases Network" set up by Decision 2119/98/EC. The *Regulation* would set up a framework for pathogen reduction policy, primarily in animal

populations. Salmonella targets are to be set for different categories of poultry and pigs, on a step-by-step basis. Targets for other emerging zoonoses and/or other steps in the food chain could also be set, if appropriate. The Member States should prepare national control programmes in order to meet these targets.