



# Examples of applied One Health policy in the European Union

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## One Health inside the EU and in external action worldwide

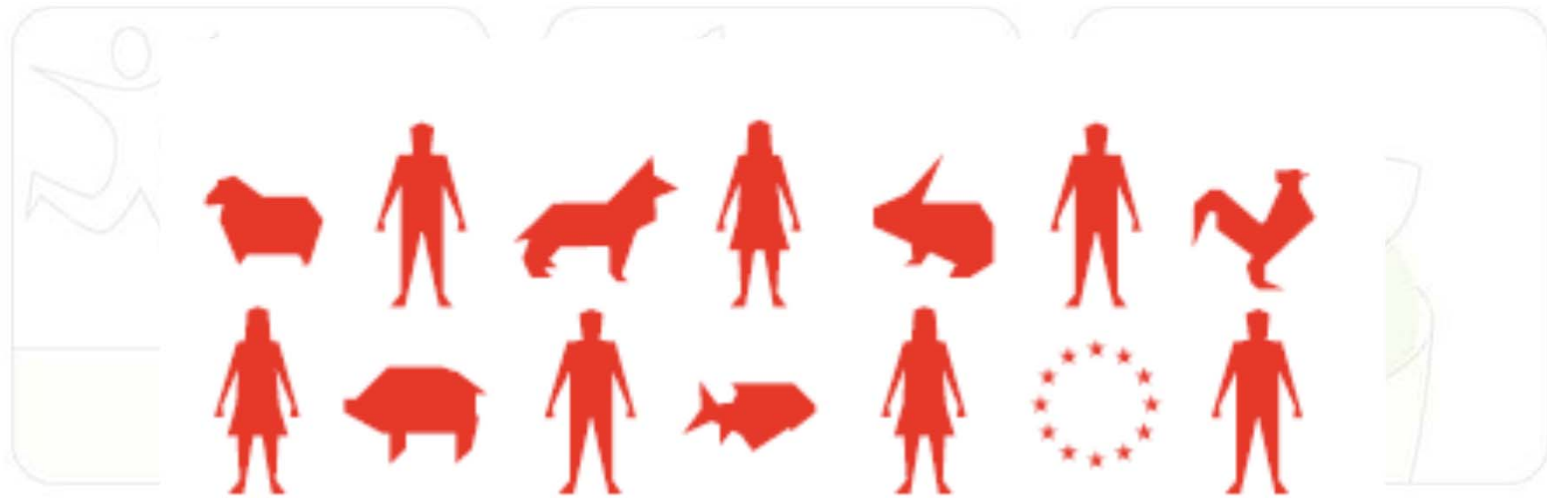
- Inside the EU: European Commission, DG Health and Consumers –this presentation-, DG Research.
- Outside the EU: European External Action Service and European Commission, DG EuropeAid Development and Cooperation, DG Research.



- One Health at domestic level in the EU.
  - Current focus.
  - Why endorsing OH?
  - Added value.
  - History.
  - Developments.
- Examples and “success stories”.
  - Tuberculosis and brucellosis.
  - The zoonoses directive.
  - Food safety, e.g. *Salmonella* control.
  - H5N1 highly pathogenic avian influenza & pandemic (H1N1) 2009.
  - Coordination of the control of antimicrobial resistance.
- Conclusions.



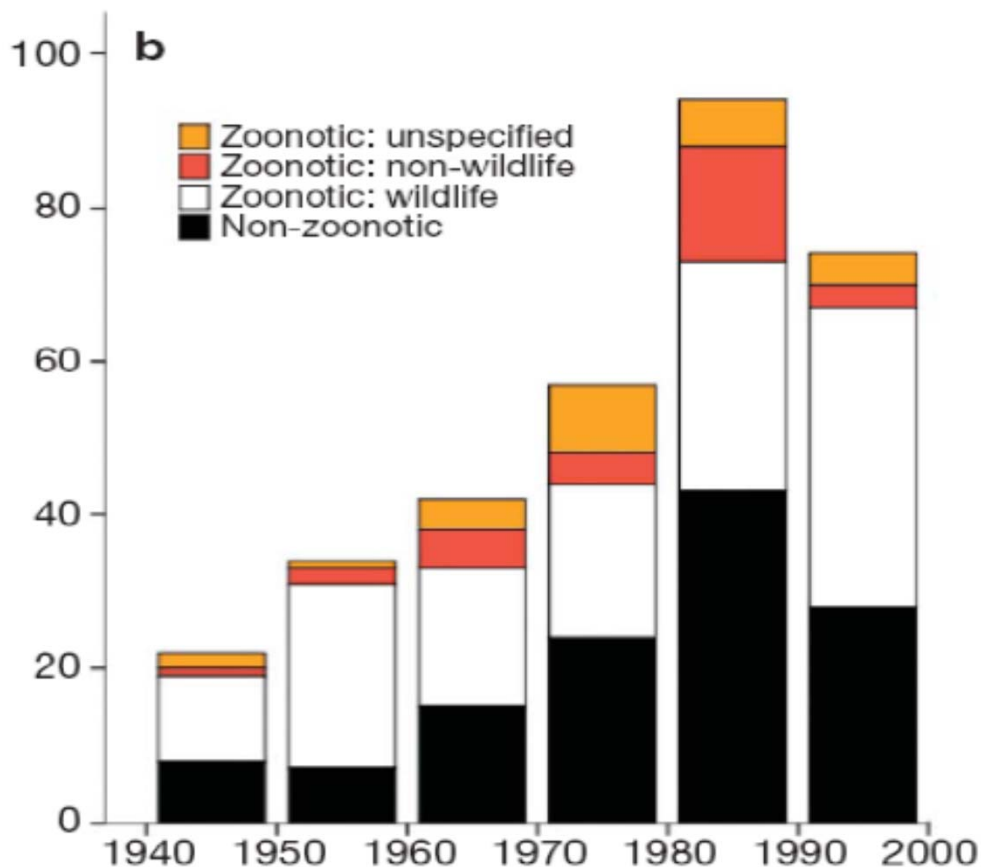
## The OH approach: current focus at domestic level inside the EU



**Animals + Humans = One health**

**+ Links to human behaviour and environment**

# Why endorsing the One Health approach?



- 60% of human diseases originate in animals (domestic or wild) i.e. are zoonoses
- 75% of human emerging diseases are zoonoses
- 80% of agents with potential bio-terrorist usage are zoonotic agents



## Added value of One Health for the European Commission and EU member states at domestic level

The One Health approach, inside the EU, facilitated the set up of a joint (Commission, Member States) **strategic framework** for reducing the risks of infectious diseases at the interface between animals and humans.

One Health provides a **cross-sectoral and multidisciplinary context** for the prevention of epidemics and epizootics, in particular zoonoses.



## History of “One Health” inside the EU

- The basis of the EU harmonised rules on animal diseases was the fight against tuberculosis and brucellosis, two major zoonoses, eventually eradicated from many Member States or controlled.
- The crises of the 90ies increased the need for intersectoral cooperation: food borne diseases (listeriosis, salmonellosis), BSE.
- Serious outbreaks of animal diseases (Classical Swine Fever, Foot and Mouth Disease) showed links to environment and human behaviour.



## History of “One Health” inside the EU -followed-

- 1999: set-up of the DG Health and Consumers of the European Commission, covering matters of public health, animal health and food safety.
- 2003: legal acts on zoonoses monitoring and *Salmonella* control.
- End 2005: HPAI crisis starting and its developments will lead to a broader endorsement of the One Health approach at various levels, globally, regionally, nationally.
- 2007: launching of a New Animal Health Strategy in the EU, including the One Health approach.



## Key pillars of "One Health" in the EU

- 1. Disease control at the domestic and wild animal source** must be tackled by public and private veterinary services and info and strategy shared with public health services
- 2. Prediction, prevention and response: Surveillance and Biosecurity** are common and compulsory tools, both in humans and animals, as well as early warning systems and contingency plans
- 3. Horizontal approach** and investment during peacetime, including awareness
- 4. Common research and education** are crucial



# Example 1

## Brucellosis and Tuberculosis: a long term fight (decades)

Brucellosis of large and small ruminants: mass vaccination followed by test and cull; regulation on raw milk. Result = dramatic reduction of human cases, close to eradication; in animals, eradication from many EU Member States, control in others.

Bovine Tuberculosis: test and cull; regulation on raw milk. Result = ~ no more human cases of Bovine Tuberculosis.



## Example 2

The European Directive on Zoonoses: an obligation of permanent awareness, preparedness and readiness

- Surveillance of zoonotic animal diseases transmissible to humans; linked to public health surveillances with the monitoring in humans. Discussions on the list of diseases concerned, including emerging zoonoses.
- Examples: West Nile Fever (and other vector borne encephalitis) = alert system;
- Q Fever = alert in human outbreaks prompts reactions in animal sector



## Example 3

# Management of food-borne diseases outbreaks

- Co-operation between public health surveillance and food safety authorities, with mandatory veterinary controls.
- Obligation to identify the source(s) of infection, the patterns of contamination and spread, in order to prevent further burden.

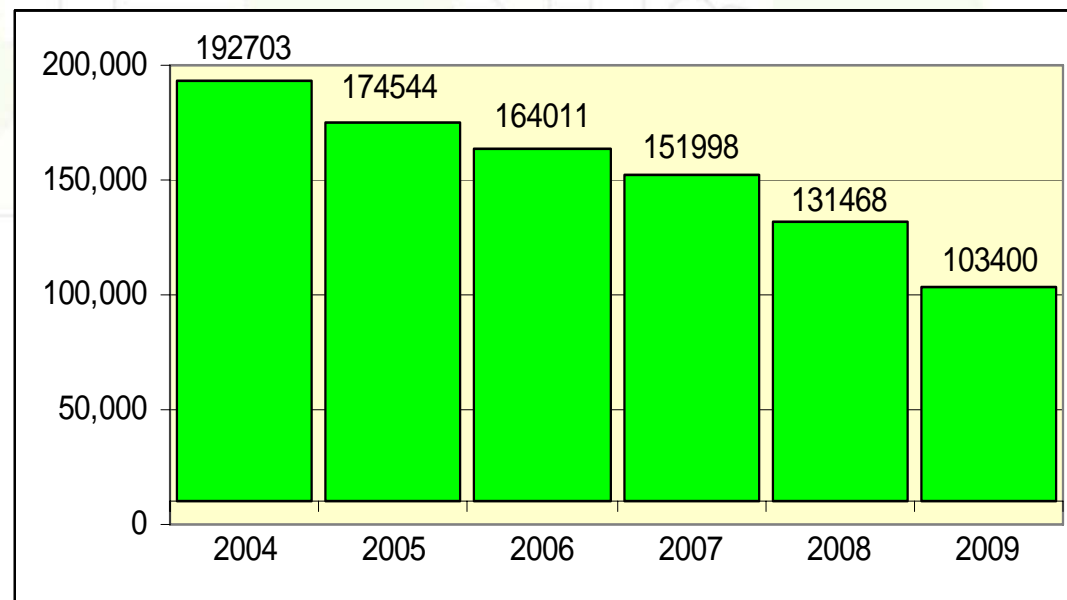
Two key issues to prevent further human diseases of animal origin: (i) to reconsider management actions, (ii) to rank the human burden of zoonoses.

Result: continuous decline of the number and severity of zoonotic outbreaks.

# Example 4

## *Salmonella* Control

- Comprehensive approach covering feed, animals, food, consumers information.
- The result: ~50% decline of reported human cases





## Example 5

# Antimicrobial resistance of zoonotic pathogens

- ❑ Effort to harmonise susceptibility testing of human, food and animal isolates
- ❑ Joined report on scientific evidence by ECDC (human), EFSA (food and animals) and EMA (authorisation medicines)
- ❑ Development of management strategy considering human burden and animal health/welfare.



## Example 6

# Influenza viruses

- Type A: Birds and mammals (including humans, pigs, horses, mink, sea mammals etc): rapid alert system and measures for highly pathogenic influenza in animals; human and animal influenza monitoring networks; participation in OFFLU; sharing of antigens, ...
- Type B: Humans.
- Type C: Humans and pigs.



## One Health: a reality that works

### Common intra-EU effort:

“Data sharing and coordinated communication can minimize health and economical impacts”.

Involved all concerned directorates of DG Health & Consumers, EFSA, ECDC, reference laboratories, human and animal health scientists, stakeholders, Member States, partner countries, international organisations and agencies, other stakeholders.

In 2009, statements made by the OIE, WHO, FAO, WTO, ECDC and EFSA adequately addressed the issue of safety of pork meat and meat products for human consumption in relation to influenza. While H5N1 “Bird flu” had caused a severe drop in consumption of poultry meat, pandemic (H1N1) 2009, regrettably called “Swine flu” in the media, did not affect significantly pork consumption inside the EU.



More information  
on the European Commission webpages  
of DG Health and Consumers:

"One Health":

<http://one-health.eu/ee/index.php/en/homepage/>

Pandemic (H1N1) 2009 influenza virus:

[http://ec.europa.eu/food/animal/diseases/influenzaAH1N1/index\\_en.htm](http://ec.europa.eu/food/animal/diseases/influenzaAH1N1/index_en.htm)

*Salmonella*:

[http://ec.europa.eu/food/food/biosafety/salmonella/index\\_en.htm](http://ec.europa.eu/food/food/biosafety/salmonella/index_en.htm)





<http://www.eeas.europa.eu/health/>



**Other EU websites on  
One Health**

**DG EUROPEAID DEVELOPMENT AND COOPERATION**

<http://ec.europa.eu/europeaid/where/asia/regional-cooperation/animal-human-health/>

**Thank you for your  
attention!**

**Merci de votre  
attention !**

**Gracias por su  
atención !**

