

Burden of foodborne disease: pilot study in Albania

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Aim of the country study

To intend and to involve all the food safety stakeholders to create and collect the data about foodborne disease, to share results with stakeholders, and promote efforts to use the information for developing evidence-based policies.

Motivation

- Increasing number of gastroenteric illness, specify as unknown gastroenteritis (approximately 56,000 cases/year and 2,000 cases/100,000 population).
- Acknowledge the numerous hazards in the food supply (biological and chemical hazards)
- Limited data about the FBO
- Having more information for the decision marker for improving the food safety system in Albania

Process of Albanian study (1)

1. We created a team to conduct the study.

The members of this team included representatives from government and academic institutions.

2. The study team:

- a. conducted a situation analysis
- b. described the regulatory and status of food safety in the country
- c. identified actors, policies and practices, and generally provide context for the scientific data.
- d. identified hazards in the food supply that were relevant for Albania.

Process of Albanian study (2)

Local scientists collated data and information from human health surveillance sources and food safety agencies on the incidence and nature of foodborne diseases.

The structure and nature of agencies responsible for food safety and surveillance were described, as part of a situation analysis.

The data were augmented by searches of the scientific literature (*ad hoc* studies) for information on food safety in Albania.

This activity was intended to provide a collation of existing information towards estimation of the burden of foodborne disease.

Situation Analysis:

Public health and food safety governance in Albania

Food safety

- The Ministry of Agriculture, Food and Consumer Protection Food Safety Directorate includes the National Food Authority (NFA) which is responsible for official control, risk assessment, and communication. Official control involves the inspection of food production hygiene and certification of hazard analysis critical control point (HACCP) based systems.
- Data on the prevalence of hazards in the food supply are limited. Official monitoring programmes for shellfish (algal toxins and *Escherichia coli*) have been in place since 2005 to support exports to the European Union.

Situation Analysis: *Human health surveillance*

- Human health surveillance of foodborne diseases in Albania is led by the Public Health Institute within the Ministry of Health, which collates data supplied by regional departments of public health.
- An early warning surveillance system operates across all of Albania, and the case definitions are the same as for syndromic surveillance under the International Health Regulations.
- Key indicators of foodborne disease are the annual rates of reported gastrointestinal illness.
- Food poisoning cases are reported on the basis of assessment by physicians from primary health care as well as hospitalized cases.
- Etiology for cases in these general disease categories is rarely investigated. Surveillance for parasitic or viral infections is not routine.

Limitations

1. This pilot study has collated surveillance information and *ad hoc* studies on diseases commonly caused by foodborne transmission of pathogens.
2. There are no community level studies, and for cases of gastroenteric illness and food poisoning etiological information is missing.
3. There are few data on the prevalence of hazards in the Albanian food supply.

Findings/Lesson learned (1)

- This pilot study has suggested some ways in which the food safety system in Albania could be strengthened.
- The legal framework and regulatory infrastructure for the Albanian food safety and surveillance system are in place: one major gap appears to be resourcing to support the existing laboratories to undertake diagnostic testing, and more comprehensive monitoring of the food supply.
- This would also support the greater use of epidemiological investigation tools, to identify sources of infection.

Findings/Lesson learned (2)

- In the longer term, development of capacity for typing of pathogens and potential sources would assist in attribution.
- It may be useful to apply needs assessment tools to the assessment of the Albanian food safety system, as has recently been applied to Albanian maternity services.
- This pilot study *prompted efforts to develop greater capacity in relation to food safety* and foodborne disease in Albania.

Challenges

1. Strengthened the laboratory capacity (IFSV, some of labs accredited)
 - a. Microbiological (food safety and animal health)
 - b. Chemical (heavy metals and pesticides residues)
2. Strengthened the laboratory capacity of foodborne pathogens (*Salmonella* and *Campylobacter*) in PHI.
3. Updating food regulations at the Chapters related to;
 - Coordination of control activities and collaboration (collection, analysis, interpretation data and dissemination of information)
 - Outbreak detection, investigation and response

Future steps

- We are in the process of the reorganization of the national structure of food safety system.

Thank you for your attention!