



ANNEX I

ORGANIZATION AND MANAGEMENT OF THE WHO SURVEILLANCE PROGRAMME FOR CONTROL OF FOODBORNE INFECTIONS AND INTOXICATIONS IN EUROPE

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1. Introduction

1.1 Main objectives

The main objectives of the WHO Surveillance Programme for Control of Foodborne Infections and Intoxications in Europe^{a)} are:

- to identify the causes of foodborne diseases and to delineate factors contributing to the spread of these diseases;
- to make available and distribute relevant surveillance information;
- to cooperate with national authorities in identification of priorities and use of resources to meet both emergency and other needs in the prevention and control of foodborne diseases.

Although surveillance is the central activity in the Programme, it must be emphasized that the overall aim is action to prevent and control foodborne diseases^{b)}. It is obvious that this action must be taken at national level and that international involvement is needed to secure the necessary coordination and cooperation.

1.2 Benefits of the programme

The international involvement is intended to stimulate national effort and seeks to produce early and long-term benefits. Among the early benefits special importance is given to the establishment of an emergency reporting system (see section 4. Early warning (alert) system) between participating European countries, WHO headquarters, the WHO Regional Office for Europe, the FAO/WHO Collaborating Centre for Research and Training in Food Hygiene and Zoonoses,^{c)} and other relevant agencies and programmes. Under certain circumstances additional international involvement may ensure speedy interaction between diagnostic and preventive measures at the national level.

The long-term benefits are not as clearly identifiable, but nevertheless a significant impact should be achieved by:

- (a) strengthening food control practices
- (b) improving epidemiological investigational procedures
- (c) carrying out more efficient laboratory analyses of suspect food and water samples and clinical specimens
- (d) improving the reporting of investigated foodborne diseases
- (e) identifying significant trends in foodborne diseases
- (f) encouraging research to identify new foodborne disease organisms, toxins and chemicals in food
- (g) stimulating surveys of foods regularly implicated in illness
- (h) evaluating the cost-benefit of foodborne disease control
- (i) enhancing the relationship between existing international collaborating centres
- (j) improving health manpower training and utilization

a) Hereafter called the "Programme"

b) Any disease of an infectious or toxic nature caused by or thought to be caused by the consumption of food or water

c) FAO/WHO Collaborating Centre for Research and Training in Food Hygiene and Zoonoses, Thielallee 88-92, D-1000 Berlin 33; hereafter called the "Collaborating Centre."

(k) harmonizing legislation

1.3 Flow of information

An international programme of this type must of necessity be based on surveillance activities at the national level. National health authorities will have the responsibility of investigating, collecting and analysing national data. This paper deals particularly with the flow of information from national surveillance centres in the participating countries to the Collaborating Centre, feedback to the national centres and consequent action to be taken by the countries in cooperation with WHO.

1.4 Guidelines on surveillance

Guidelines on surveillance, including the investigational aspects of foodborne and waterborne disease incidents, are available from WHO.

2. Contact Points at the National Level

In consultation with WHO each participating country would designate one or more contact points to provide official data and other related information to the Collaborating Centre. It is desirable that a contact point represents the national authority responsible for the surveillance and control of communicable diseases. If veterinary data are not included in its programme, this authority should try and ensure that the veterinary authority responsible for the surveillance and control of zoonoses and/or foodborne diseases should participate equally in the programme.

The development of a surveillance programme may encounter problems arising from the internal organization of the country concerned. Thus, the distribution of national responsibilities may rest with different government authorities, in which case communication difficulties may arise. The Programme will therefore be based on an approach that allows effective liaison between the national authorities concerned and, in particular, collaboration between medical and veterinary services.

3. Regular Surveillance Data

3.1 Collection of data (Collaborating Centre)

The Collaborating Centre will function as the international contact point in the Programme and, on behalf of WHO, will collect data from participating countries through the designated national contact points.

3.2 Type of data required

The type of data collected should fulfil the main objectives of the Programme referred to in the Introduction of this paper (section 1.1), and will be dependent on what the countries are able and willing to contribute.

The following data are of particular importance:

3.2.1 Causal agents

Table 1:

Agents to be included in the programme:
<p>Bacteria including their toxins: <i>Bacillus cereus</i> <i>Clostridium botulinum</i> <i>Clostridium perfringens</i> <i>Salmonella typhi</i> and <i>Salmonella paratyphi</i> A,B,C <i>Salmonella</i> (other than <i>S. typhi</i> and <i>S. paratyphi</i>) <i>Shigella</i> <i>Staphylococcus aureus</i> <i>Vibrio cholerae</i> and related vibrios other bacteria, e.g. <i>Brucella</i>, <i>Campylobacter</i>, <i>Escherichia coli</i>, <i>Francisella tularensis</i>, <i>Mycobacteria</i>, <i>Vibrio parahaemolyticus</i>, <i>Yersinia enterocolitica</i></p>
<p>Parasites and protozoa: <i>Cysticercus / Taenia</i> <i>Echinococcus</i> <i>Trichinella</i> other parasites, e.g. <i>Entamoeba histolytica</i>, <i>Giardia</i>, <i>Toxoplasma</i></p>
<p>Viruses and rickettsia: Hepatitis A Rotavirus other viruses, e.g. Echovirus, Polio virus <i>Coxiella burnetii</i></p>
<p>Toxic animals: Fish, e.g. scombroid poisoning Shellfish, e.g. paralytic shellfish poison other animals</p>
<p>Toxic plants: mushrooms, e.g., Amanita toxin other plant poisons</p>
<p>Mycotoxins: Aflatoxins other mycotoxins</p>
<p>Chemical contaminants and residues: heavy metals, e.g. copper, lead, mercury, tin, zinc organochlorine compounds, e.g. polychlorinated biphenyls organophosphorus compounds, e.g. monosodium glutamate, polybrominated biphenyls</p>
<p>So-far unknown etiological agents: There will also be incidents in which the etiological agent is not identified at all; this is to be expected, as not all foodborne disease agents have been identified and/or can be</p>

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easily isolated.

A list of proposed groups of agents for surveillance, with examples of individual agents, is given in **Table 1**. Counts and toxin levels should be determined where appropriate. Each country should report as many foodborne diseases as justifiable and possible, but it is recognized that initially many countries may be able to report only on diseases caused by a limited number of agents. This should not, however, be an obstacle to participation in the Programme. All pertinent information is desirable to strengthen the surveillance and control of foodborne diseases.

The Programme will be linked with other WHO surveillance programmes, where appropriate.

3.2.2 Epidemiological and clinical investigation

Information should be obtained on:

- number of persons ill
- number of persons at risk
- symptoms of illness
- incubation period
- duration of illness
- fatalities
- laboratory analysis (clinical specimens).

3.2.3 Responsible vehicles (food and water)

Information should be obtained on:

- type of food
- methods of processing or preparation
- place where food was eaten
- place where food was contaminated or mishandled
- factors contributing to incidents
- laboratory analysis (food samples).

3.2.3 Cost-benefit analysis

Any cost-benefit analysis data on foodborne incidents will be of value in evaluating the economic and social benefits of food control programmes.

3.2.4 Prevention and control measures

Attention should be paid to the collection of any information which may assist in the prevention and control of foodborne disease.

3.3 Reporting procedures

When reporting to the Collaborating Centre, the participating countries should preferably use a standardized reporting form as shown in **FIGURE 1**. Information can be submitted in any of the official languages of the WHO European Region (English, French, German, Russian).

Figure 1:

REPORT OF INCIDENT			
1. COUNTRY :	2. YEAR : 19 <input type="text"/> <input type="text"/>	3. REPORT NO.: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
4. Place of incident : City/Town : _____ Province/District : _____			
5. Causative agent/type: Code : <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> _____ Phagetype : <input type="text"/> <input type="text"/> <input type="text"/> Confirmed: <input type="checkbox"/> Presumed: <input type="checkbox"/>			
6. Number of persons: at risk: _____ ill : _____ hospitalized : _____ died : _____ by age groups from 0 to 4 : _____ from 4 to 15 : _____ from 15 to 60 : _____ over 60: _____			
7. Symptoms nausea: _____ vomiting: _____ diarrhoea: _____ abdom.pain: _____ fever: _____ neurolog.: _____ cardiovas.: _____ other: _____			
8. Date of onset of illness : (day/month/year) first person : <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> last person : <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/>			
9. Incubation time and duration of illness: (in hours H/days D) : <input type="text"/> ? Incubation time: shortest: _____ longest: _____ median: _____ Duration of illness: shortest: _____ longest: _____ median: _____			

=>

10. Food/Vehicle involved :				
Code <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -----				
Confirmation :		Laboratory: <input type="checkbox"/>	Epidemiological: <input type="checkbox"/>	
Commercial name of product: -----				
Producer : -----				
11. Methods of marketing, processing, serving :				
Marketed: Code <input type="checkbox"/>		Treatment before final preparation : Code <input type="checkbox"/>		
Served and eaten : Code <input type="checkbox"/>				
12. Place where food was contaminated :				
Place: Code <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Country: Code <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
13. Place and date where food was acquired and eaten :				
Date : <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/>		Place : Code <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
During transit :		means of transit : Code <input type="checkbox"/> <input type="checkbox"/>		
		from: Code <input type="checkbox"/> <input type="checkbox"/> to Code <input type="checkbox"/> <input type="checkbox"/>		
14. Factors contributing to incident:				
a) Code <input type="checkbox"/> <input type="checkbox"/>		b) Code <input type="checkbox"/> <input type="checkbox"/>		
other : -----				
Note: In case of more than one factor may have contributed, list all that are applicable, but code the two major ones only				
15. Results of lab tests : testing laboratory : -----				
Specimens/samples		Number		
Details/comments				
		tested	positive	
Ill people	°	-----	-----	-----
Healthy people	°	-----	-----	-----
Food handlers		-----	-----	-----
Suspect. food		-----	-----	-----
Other foods		-----	-----	-----
Environment		-----	-----	-----
° clinical samples				

It is realized that in the early stages of their participation some countries may be unable to provide all the desired information, and also that they may wish to submit their data on a nationally used form which is similar, but not identical, to that shown in Figure 1. These factors, however, should not hinder the participation of these countries in the Programme. In addition, other pertinent data, such as reports of foodborne outbreaks of epidemiological importance, results of surveys which may have been carried out for specific purposes, and appropriate references in the scientific literature, will be distributed periodically.

3.4 Frequency of reporting

It is envisaged that report of incident forms may be sent to the Collaborating Centre as soon as possible after investigations are complete, or at regular intervals but at least annually for each calendar-year period. Annual summary reports of foodborne disease incidents prepared nationally and other relevant data would also be welcome.

3.5 Collation and interpretation of data

The incoming reports should be as complete as possible and preferably should include a narrative in addition to numerical data to enable the Collaborating Centre to make a comprehensive assessment of the situation. The Collaborating Centre will collate and evaluate the accumulated data and interpret them with particular attention to regional and international trends.

3.6 Dissemination of data

The data on foodborne incidents will be published by the Collaborating Centre in annual summaries based on the reports submitted by the national contact points. It is particularly intended to identify the causes of foodborne diseases occurring in Europe, to delineate the factors contributing to illness and to outline future preventive action. In addition, other pertinent data, such as narrative reports of foodborne incidents of epidemiological importance, results of special surveys which may have been carried out for specific purposes, and appropriate references in the scientific literature, will be distributed periodically.

4. Early Warning (Alert) System

One of the principal aims of the programme is to institute control measures without delay and an emergency reporting system should therefore be set up. This system should report incidents of international concern in order to facilitate their rapid control. An "early warning (alert) report" should be made, for instance, when:

1. internationally distributed foods or feeds have resulted in incidents, or contaminated lots have been identified;

2. incidents occur associated with international caterers and carriers (air, train, ship);
3. illness occurs among members of tourist groups or is introduced by tourists or immigrants;
4. incidents of unusual foodborne diseases are recorded in a country;
5. incidents concern a disease of a severe nature;
6. other matters considered to be an emergency by the country making the report are observed.

Information for early warning (alert) should be transmitted directly to WHO headquarters by telex, telephone or other appropriate means and the information will be passed immediately to the WHO Regional Office for Europe, the Collaborating Centre and to all countries concerned through their officially designated contact points. The WHO head-quarters automatic telex reply service will also be available for information, and more detailed data will be mailed later.

5. Administration of the programme

The overall responsibility for the management of the Programme lies with the WHO Regional Office for Europe, which will make liaison with WHO headquarters, the Collaborating Centre, FAO and other organizations, as appropriate. It is envisaged that an advisory body will be established by WHO to review the progress of the Programme and to make recommendations for its further development.