

# WHO Global Salm-Surv Strategic Plan (2001-2005)

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Report of a WHO meeting

Copenhagen, Denmark  
8-11 May 2001



WORLD HEALTH ORGANIZATION  
DEPARTMENT OF COMMUNICABLE DISEASE SURVEILLANCE AND RESPONSE

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## I. Preamble

WHO Global Salm-Surv is a worldwide network of institutions and people involved in *Salmonella* surveillance, serotyping and antimicrobial resistance testing. This network was initiated in January 2000 by the World Health Organization (WHO), the Danish Veterinary Laboratory (DVL) and the Centres for Disease Control and Prevention (CDC). The first annual WHO Global Salm-Surv Strategic Planning Meeting was conducted in Copenhagen, Denmark from 8-11 May, 2001.

By initially focusing on *Salmonella*, WHO Global Salm-Surv strives to reduce the global burden of foodborne disease by strengthening national and regional foodborne disease and pathogen surveillance and response systems. As part of this mission, WHO Global Salm-Surv fosters collaboration among microbiologists and epidemiologists in national institutions working with foodborne diseases and foodborne pathogens including human health, veterinary and food-related disciplines.

This Strategic Plan (years 2001-2005) includes the following:

- Overview of the progress of WHO Global Salm-Surv
- Identified needs for WHO Global Salm-Surv priority areas
- Specific and measurable action items for WHO Global Salm-Surv.

## II. Background

*Salmonella* is one of the most common causes of foodborne illness throughout the world. Evidence-based decisions, using laboratory-based surveillance data, are needed to decrease the global burden of foodborne disease. In order to have global surveillance and response systems for foodborne diseases, there is a need to build laboratory capacities and to build relationships between epidemiologists and microbiologists involved in human health, veterinary and food related disciplines.

In response to these needs, WHO Global Salm-Surv (GSS) was implemented in January 2000 by the World Health Organization (WHO), the Danish Veterinary Laboratory (DVL) and the Centers for Disease Control and Prevention (CDC). WHO Global Salm-Surv currently has 348 members and 100 national member institutions in 104 countries (Appendix B). WHO Global Salm-Surv consists of the following six programme elements:

1. A web site.
2. An electronic discussion group.
3. Regional training courses.
4. An external quality assurance system.
5. A web-based country databank.
6. Reference testing services.

Since its induction, Global Salm-Surv has:

- Posted 60 messages on the **electronic discussion group**.
- Conducted six **regional training courses** in Argentina (1), China (1), Greece (1) and Thailand (3); these training courses included 120 participants from over 40 countries.
- Completed an **external quality assurance programme (EQAS)** in Year 2000 with 44 laboratories from 35 countries; EQAS 2001 is currently active and has 113 participants.
- Developed a **Web-based databank** of national reference laboratory contact information and *Salmonella* serotypes by laboratory, country and region.

In January 2001, the WHO Global Salm-Surv Steering Committee agreed that a meeting was needed to develop a five-year strategic plan. This meeting took place at DVL in Copenhagen, Denmark from 8-11 May, 2001 (Appendix C). Twenty-five people from 12 countries participated in the WHO Global Salm-Surv Strategic Planning Meeting (Appendix A). The remaining text of this document is the direct result of this meeting and serves as the WHO Global Salm-Surv Strategic Plan.

### III. Overview of the WHO Global Salm-Surv Strategic Plan

The primary purpose of the Strategic Plan is to provide the Steering Committee with focused direction and specific tasks to be completed over the next five years. The Strategic Plan will be shared with WHO Global Salm-Surv Regional Centres, Member Institutions and General Members, as well as other interested institutions and collaborators. The Strategic Plan is broken down into the following five sections:

- Revised WHO Global Salm-Surv Mission Statement and Primary Goals.
- Terms of Reference for WHO Global Salm-Surv Regional Centres.
- Priority Areas for the Years 2001-2005.
- Needs and Action Items for Priority Areas.
- WHO Global Salm-Surv Strategic Plan Timeline (Years 2001-2005).

Comments on the Strategic Plan are welcome and can be sent to the WHO Global Salm-Surv Moderator via email ([globalsalm-surv@listserv.cdc.gov](mailto:globalsalm-surv@listserv.cdc.gov)) or fax (+1 404 371 5444, attn. WHO Global Salm-Surv).

### IV. WHO Global Salm-Surv Mission Statement and Primary Goals

#### *Mission Statement*

By initially focusing on *Salmonella*, WHO Global Salm-Surv strives to reduce the global burden of foodborne disease by strengthening national and regional foodborne disease and pathogen surveillance and response systems. As part of this mission, WHO Global Salm-Surv fosters collaboration among microbiologists and epidemiologists in national institutions working with foodborne diseases and pathogens including human health, veterinary and food-related disciplines. When national and regional surveillance systems have matured, their data can be used to assist evidence-based decisions.

#### *Goals*

- To **strengthen capacities** of national institutions, particularly national reference laboratories, involved in foodborne disease and pathogen surveillance, including antimicrobial resistance testing.
- To **establish regional centres**.
- To **foster global communication** about foodborne disease and pathogen surveillance, including antimicrobial resistance.
- To **gain political support** and recognition of the role of surveillance in reducing the burden of foodborne disease.

## V. Terms of Reference for WHO Global Salm-Surv Regional Centres

Currently, WHO Global Salm-Surv has a South East Asian Regional Centre in Bangkok, Thailand. A South American Regional Centre will be established in Argentina by September 2001. To help current and future WHO Global Salm-Surv Regional Centres understand their roles and responsibilities, the below Terms of Reference were created.

WHO Global Salm-Surv Regional Centres are expected to lead the following activities for regional countries:

1. To develop a regional strategy to provide high-quality antisera for national *Salmonella* reference laboratories.
2. To lead regional communications about foodborne disease and pathogen surveillance, including activities related to WHO Global Salm-Surv. This role involves fostering communications between microbiologists and epidemiologists working in multiple disciplines such as human health, veterinary and food-related disciplines.
3. To serve as a regional reference centre for national *Salmonella* laboratories; this role includes quality control and reference testing services.
4. To lead region-relevant research projects.
5. To develop methodologies for national foodborne disease and pathogen surveillance systems.
6. To provide training for national foodborne disease microbiologists and epidemiologists, including individual fellowships and at least one WHO Global Salm-Surv training course per year.

## VI. Priority Areas for Years 2001-2005

Eight priority areas for years 2001-2005 were identified by participants at the WHO Global Salm-Surv Strategic Planning Meeting. Six of the priority areas focused on current WHO Global Salm-Surv programme elements; two of the priority areas focused on external activities that could be related to the future of WHO Global Salm-Surv.

### ***Priority Areas for WHO Global Salm-Surv***

*(Programme Elements 1-6, External Activities 7-8)*

1. Microbiology Activities in Level I and II Regional Training Courses.
2. Epidemiology Activities in Level I and II Regional Training Courses.
3. Epidemiology Activities and Level III Regional Training Courses.
4. The web-based Country Databank.
5. Regional Centres.
6. Tools for Communicating WHO Global Salm-Surv to Target Audiences.
7. Global *Campylobacter* Surveillance Activities.
8. A Proposed WHO Global Network of Foodborne Disease Networks.

At the Strategic Planning Meeting, working groups were assigned to each priority area. The methodology and outcomes of the working groups are provided in the next section.

## VII. Needs and Action Items for Priority Areas

Working groups at the Strategic Planning Meeting were asked to identify top needs for each priority area and to develop specific, measurable and realistic action items to meet those needs (Appendix D). Timelines and primary responsible parties were assigned to each action item. Needs and action items identified from each priority area are below. A timeline incorporating objectives from all the working groups are in Section VIII.

### *Priority Area 1: Microbiology Activities in Level I and II Regional Training Courses*

WHO Global Salm-Surv conducts hands-on laboratory training for microbiologists through multi-level regional training courses. Level I courses focus on *Salmonella* isolation, serotyping and antimicrobial resistance testing; Level II courses provide training in *Campylobacter* techniques as well as additional training in *Salmonella*.

The primary needs identified for microbiology activities in the WHO Global Salm-Surv Level I and II regional training courses were as follows:

1. To enhance training in *Salmonella* serotyping.
2. To increase the availability of antisera to participants after the course.
3. To improve the selection of participants.
4. To increase the geographic coverage of the courses.
5. To provide multi-level instruction suitable to accommodate the variable skills of the participants.
6. To recognize regional-specific needs.

The action items to meet these needs are to:

- Revise the training course curricula to allow more time for serotyping and to provide opportunities for multi-level training (DVL by September 2001).
- Investigate external resources to provide region-specific antisera to course participants (WHO, ongoing).
- Start selection process of course participants at least six months in advance (WHO).
- Adhere to set participant profiles originally set for participant selection (WHO).
- Identify two training sites in Africa (WHO and *Institut Pasteur* and the International Network of the *Instituts Pasteur* by May 2002).
- Implement at least one Level I training course in Africa (WHO and *Institut Pasteur* and the International Network of the *Instituts Pasteur* by May 2003).

- Identify a training site in Eastern Europe (WHO by May 2002).
- Implement at least one Level I training course in Eastern Europe (WHO by May 2003).
- Conduct regional needs assessments (Argentina by September 2001, Thailand by May 2002).

*Priority Area 2: Epidemiology Activities in Level I and II Regional Training Courses*

In addition to providing hands-on laboratory training, the Level I and II courses also include lectures on foodborne disease epidemiology and basic surveillance concepts. The primary needs identified for epidemiology activities in the WHO Global Salm-Surv Level I and II regional training courses were as follows:

1. To increase the time allowed to teach epidemiology and surveillance concepts.
2. To use active participatory training in epidemiology.
3. To use region-specific and practical examples.
4. To provide training in indigenous languages.
5. To strengthen the idea of participants' membership in the WHO Global Salm-Surv network.

The action items to meet these needs are to:

- Develop at least one practical epidemiological exercise for training course Levels I and II (CDC by the September 2001).
- Revise the Level I and 2 training course curricula to address the needs for more time on interactive epidemiology and to strengthen the idea of 'network' (CDC by November 2001).

*Priority Area 3: Epidemiology Activities and Level III Regional Training Courses*

Level III regional training courses will focus on epidemiology and surveillance of foodborne diseases and pathogens. Course participants will be microbiologists and epidemiologists from multiple disciplines including human health, veterinary, and food-related disciplines. Other WHO Global Salm-Surv epidemiology activities, in addition to training courses, were explored.

The primary needs identified for epidemiology activities in the WHO Global Salm-Surv, including a Level III training course, were:

1. To identify relevant national foodborne disease epidemiologists for WHO Global Salm-Surv.
2. To coordinate with existing and developing regional and national epidemiology networks.
3. To develop Level III training courses.
4. To increase epidemiologic studies within WHO Global Salm-Surv.
5. To identify other opportunities for microbiology and epidemiology collaborations.

The action items to meet these needs are to:

- Develop a Level III regional training course curriculum. Attendants at the course will be national foodborne microbiologists and epidemiologists. The course will include the following elements: foodborne outbreak investigation training, overview of regional surveillance strategies, basic epidemiological methods, basic laboratory demonstration, a WHO-NET exercise, and a needs assessment and action plan for collaborations between attending national epidemiologists and microbiologists. (CDC by December 2001).
- Implement a Level III regional training course (CDC by July 2002).
- Identify relevant foodborne disease epidemiologists in the Americas. These epidemiologists will be signed up on the Global Salm-Surv electronic discussion group (CDC by July 2001 – Epi-ETA).
- Identify a relevant local epidemiologist to attend the Level I training course in Mexico (CDC by July 2001) and the Level II training course in Argentina (CDC by November 2001).
- Conduct an epidemiological analysis of EQAS 2000 and 2001 data (DVL by December 2001).

#### *Priority Area 4: The Web-Based Country Databank*

WHO Global Salm-Surv members will soon report contact information and annual *Salmonella* serotype data to the WHO Global Salm-Surv web-Based Country Databank. The databank was alpha-tested in 2000.

The primary needs identified for the WHO Global Salm-Surv web-based Country Databank were as follows:

1. To improve the structure of the database.
2. To revise individual page titles.
3. To improve usability of the databank.
4. To expand the non-human sections.
5. To provide links to other databanks.
6. To balance political concerns of a global *Salmonella* databank with its public
7. health benefits.

The action items to meet these needs are to:

- Revise the current Country Databank to address the needs listed above (DVL by June 2001).
- Beta-test the Country Databank (DVL by June 2001).
- Launch the Country Databank; members begin loading data (DVL by July 2001).
- Evaluate the Country Databank's progress (DVL by November 2001).
- Revise the software for the Country Databank, as needed (DVL by July 2002).

*Priority Area 5: Regional Centres*

Regional Centres help lead WHO Global Salm-Surv activities for countries in their region. The Terms of Reference for Regional Centres are provided in Section III. The primary needs identified for WHO Global Salm-Surv Regional Centres were as follows:

1. To add more regional centres.
2. To develop regional steering committees.
3. To investigate external financial support and resources.
4. To provide ongoing quality control of the centres.
5. To investigate external funds for individual training opportunities.
6. To allow new regional training sites to attend another Global Salm-Surv regional training course.
7. To increase the political support and formal recognition of the centres.

The action items to meet these needs are to:

- Renew Thailand's Regional Centre status (WHO by September 2001).
- Establish Argentina's Regional Centre status (WHO by September 2001).
- Establish at least one Regional Centre in Africa (WHO and *Institut Pasteur* and the International Network of the *Instituts Pasteur* by May 2004).
- Establish at least one Regional Centre in Eastern Europe (WHO by May 2004).
- Draft a formal letter of support for Global Salm-Surv regional centres for ministries of health and ministries of agriculture (WHO by September 2001).
- Establish regional steering committees (Argentina and Thailand by December 2001).
- Investigate external support for all existing regional centres (GSS Steering Committee by December 2001).
- Provide an 'evaluation and recommendation' report to all regional centres within one month of each training course (GSS Steering Committee, ongoing).
- Explore resources for individual Global Salm-Surv fellowships (GSS Steering Committee and regional centres by December 2001).
- Have a representative from new training sites attend at least one Global Salm-Surv training course in another region (WHO by January 2002).

*Priority Area 6: Tools for Communicating WHO Global Salm-Surv to Target Audiences*

WHO Global Salm-Surv accesses potential members through international presentations and the Web site ([www.who.ch/salmsurv](http://www.who.ch/salmsurv)). Additional target audiences and tools for communicating (publicizing) WHO Global Salm-Surv were explored.

The primary needs identified for communicating WHO Global Salm-Surv were as follows:

1. To publish scientific papers.

2. To create a WHO Global Salm-Surv annual report.
3. To create a WHO Global Salm-Surv brochure.
4. To present abstracts and lead sessions at scientific meetings.
5. To be recognized by the World Health Assembly.
6. To develop letters for political and financial support.
7. To share Country Reports to a wider audience.
8. To advertise the WHO Global Salm-Surv Web page.
9. To finalize and distribute the Level I training manual.

The action items to meet these needs are to:

- Lead a day-long scientific meeting at the International Conference on Emerging Infectious Diseases in Atlanta, Georgia, United States (CDC by March 2002).
- Publish the WHO Global Salm-Surv brochure in English, Spanish, French and Chinese (CDC and *Institut Pasteur* and the International Network of the *Instituts Pasteur* [French only] by January 2002).
- Draft a letter of support for regional centres and other active national reference institutions (WHO by September 2001).
- Draft letter for the World Bank (WHO by October 2001).
- Launch the WHO Global Salm-Surv Web site in French (*Institut Pasteur* and the International Network of the *Instituts Pasteur* by May 2002)
- Translate WHO Global Salm-Surv Electronic Discussion Group messages into French (*Institut Pasteur* and the International Network of the *Instituts Pasteur* by September 2001).
- Review Level I training manual (CDC & *Institut Pasteur* and the International Network of the *Instituts Pasteur* by June 2001).
- Compare Argentina laboratory manual with Global Salm-Surv training manual (Argentina & DVL by July 2001).
- Post the Level I training manual on the Web site (DVL by September 2001).
- Solicit comments from Global Salm-Surv member on the Level I training manual via the electronic discussion group (by October 2001).
- Publish the Level I training manual (DVL & WHO by January 2002).

*Priority Area 7: Global Campylobacter Surveillance Activities*

In some regions of the world, *Campylobacter* is the most common foodborne pathogen. WHO Global Salm-Surv's involvement in global *Campylobacter* surveillance activities was explored. The primary needs identified for global *Campylobacter* activities were as follows:

1. To detect and identify *C. jejuni* and *C. coli* in national reference laboratories, using basic methods.
2. To strengthen epidemiological capacities to support the assessment of the burden of *Campylobacter* on public health.
3. To strengthen veterinary and food laboratory capacities.
4. To strengthen veterinary and food epidemiological capacities.
5. To strengthen interaction between epidemiologists microbiologists in multiple disciplines involved in *Campylobacter* surveillance.

The action items to meet these needs are to:

- Form a WHO expert group on *Campylobacter* with Terms of Reference supporting the below objectives (WHO completed in 2000).
- Describe participants' profiles (human health professionals), develop a curriculum for a training course and conduct at least one *Campylobacter* Level I training course (DVL by May 2003).
- Utilize *Campylobacter* experts to incorporate *Campylobacter* into ongoing epidemiology activities and training curricula (CDC, ongoing).
- Describe participants' profiles (veterinary and food-related professionals), develop a curriculum for a training course and conduct at least one training course (DVL by May 2005).
- Include elements in training courses to encourage governments to establish interdisciplinary fora for debate, including all relevant experts and stakeholders to raise awareness (DVL by May 2003 [human health] and May 2005 [veterinary and food-related]).
- Develop curriculum for Level II *Campylobacter* laboratory training course, including higher level of identification and characterization of isolates (DVL by May 2004).

*Priority Area 8: A Proposed WHO Global Network of Foodborne Disease Surveillance Networks*

Several well-developed regional foodborne disease and pathogen surveillance networks concurrently exist (e.g., Enter-Net and the LCDC/PAHO Antimicrobial Resistance Surveillance System for Latin America). However, no one network (including WHO Global Salm-Surv) is able to meet all the needs for a global foodborne disease and pathogen surveillance system. Therefore, a WHO Global Network of Foodborne Disease Networks was proposed.

The primary needs identified for a WHO Global Network of Foodborne Disease Surveillance Networks were as follows:

1. To identify existing foodborne disease surveillance networks.
2. To have agreement among existing foodborne disease surveillance networks that would participate.
3. To facilitate global communication about foodborne disease surveillance.
4. To build national capacities for a global foodborne disease surveillance network.
5. To build capability for surveillance and response of foodborne disease outbreaks.

The action items to meet these needs are:

- To identify and meet with existing foodborne disease surveillance networks (WHO by December 2001).
- To develop a survey for existing foodborne disease surveillance networks to identify strengths and gaps for global coverage (DVL by November 2001).
- To develop a WHO 'network of foodborne networks' web site with links to existing foodborne disease surveillance networks and a list of national contact points (WHO by May 2002).
- To investigate software for a tailored network of networks electronic discussion group by October 2001 (CDC & WHO by December 2001).
- To consult with Enter-Net and the Global Alert and Response unit regarding detection, reporting and response to international foodborne disease events (WHO by December 2001).

Action items from all eight priority areas are listed in a timeline in the next section (Section VIII).

#### VIII. WHO Global Salm-Surv Strategic Plan Timeline (Years 2001-2005)

Objective / Activity	Responsible Institution	End of month by which Activity is to be completed	Date Completed
Contact a local epidemiologist to attend at least one day of the Mexico Level I training course	CDC	May 2001	
Provide comments on the Level I training manual	CDC	June 2001	
Contact a local epidemiologist to attend at least one day of the Argentina Level II training course	CDC	June 2001	
Pilot the Web-based databank	DVL	June 2001	

Advertise the Country Databank via the electronic discussion group	CDC	July 2001	
Launch the Country Databank and have GSS members begin to enter data	DVL	July 2001	
Compare Argentina laboratory manual with GSS Level I training manual	Argentina/ DVL	July 2001	
Identify relevant foodborne disease epidemiologists for network in the Americas	Epi-ETA	July 2001	
Revise current epidemiology lectures for Level I and Level II training courses; develop at least one practical epidemiology exercise for each	CDC	September 2001	
Add Epi-ETA epidemiologists to GSS listserv	CDC	September 2001	
Post the Level I training manual on web site	WHO/DVL	September 2001	
Write a letter of support for regional centres (and others, as needed). Send to relevant ministries of health/agriculture	WHO	September 2001	
Renew Thailand's regional centre status	WHO	September 2001	
Establish regional centre status for Argentina	WHO	September 2001	
Solicit comments from GSS member on training manual (electronic discussion group)	CDC	September – October 2001	
Write a letter for World Bank	GSS/CDC	October 2001	
Investigate software for a tailored electronic discussion group for a network of networks	CDC	October 2001	
Conduct a regional needs assessment for South American countries	Argentina	November 2001	
Conduct a Level II training course in Argentina; include packets of antisera for participants and new interactive epidemiology exercise	DVL/CDC/ Argentina	November 2001	
Develop a survey for existing foodborne disease and pathogen surveillance networks	DVL	November 2001	

WHO Consultation Meeting: Identify and meet with existing foodborne disease surveillance networks; consult with Enter-Net and the WHO Global Alert and Response unit; obtain a consensus for a WHO Network of Foodborne Disease Networks	WHO	November 2001	
Establish regional centre steering committees	Argentina and Thailand	December 2001	
Have GSS members enter 1995-1999 data into the Country Databank	DVL	December 2001	
Complete the Level III training course materials	CDC	December 2001	
Conduct an epidemiology training course in Latin America	Epi-ETA	December 2001	
Conduct analyses of EQAS 2000 and 2001 data	DVL	December 2001	
Identify external support for regional centres	GSS	December 2001	
Investigate funds for GSS fellowships	GSS	December 2001	
Publish the Level I Training Manual	DVL/WHO	January 2002	
Publish a GSS brochure in English, French, Spanish and Chinese	CDC with WHO/China/INPI	January 2002	
Lead a day-long GSS meeting at ICEID in Atlanta	CDC	March 2002	
Develop a WHO Network of Foodborne Disease Surveillance Networks web site	WHO	May 2002	
Identify two training sites in Africa	WHO/INPI	May 2002	
Identify at least one training site in Eastern Europe	GSS	May 2002	
Evaluate GSS country databank	DVL	July 2002	
Implement Level III training course in Thailand	CDC	December 2002	
Conduct a training of trainers session for regional centres	DVL	December 2002	
Implement a Level I training course in Africa	GSS/INPI	May 2003	

Implement a Level I training course in Eastern Europe	GSS	May 2003	
Describe the participants' profiles, develop curriculum and conduct at least one <i>Campylobacter</i> Level I training course	DVL	May 2003	
Develop curriculum for Level II <i>Campylobacter</i> training course	DVL	May 2005	
Describe the participants' profiles, develop curriculum for food and animal disciplines and conduct at least one <i>Campylobacter</i> Level I training course	DVL	May 2005	
Revise Level I Training Course schedule to provide more time for <i>Salmonella</i> serotyping	DVL	Before next Level I training course (after Mexico)	
Develop questionnaire for regional needs assessment (for Thailand)	Thailand	To be determined	
Select training course participants	WHO	Six months before each training course	
Send synthesis of GSS evaluation report (with recommendations) to sites after each training course	GSS/DVL	After each training course	
Send representative from a new training site to at least one GSS training course	WHO	As new training sites are established	

**Appendix A**  
**List of participants at the**  
**WHO Global Salm-Surv Strategic Plan Meeting**

**Argentina**

**Dr Norma Binsztein**

Chief, ANLIS "Dr Carlos Malbran", National Institute for Infectious Diseases  
Avenida Velez Sarsfield 563, 1281 Buenos Aires, Argentina

**Dr Marcelo Fabiàn Galas**

Servicio Antimicrobianos, ANLIS "Dr. Carlos G. Malbran", Avenida Velez Sarsfield 563  
1281 Buenos Aires, Argentina

**China**

**Prof Ran Lu**

Institute of Food Safety Control and Inspection, Beijing, Director, Department of  
Microbiology, Ministry of Public Health, Institute of Food Safety Control & Inspection  
Chao Yang District, 7 Pan Jia Yuan Nan Li, 100021 Beijing, China

**Kenya**

**Prof Eric Mitema**

Professor of Pharmacology and Toxicology, Faculty of Veterinary Medicine  
P.O. Box 29053, Nairobi, Kenya

**Poland**

**Dr Andrzej Hoszowski**

National Veterinary Research Institute, Al. Partyzantow 57, 24-100 Pulawy,  
Poland

**Senegal**

**Dr Awa Kane-Aidara**

Institut Pasteur in Dakar, 36, Avenue Pasteur, BP 220 Dakar, Senegal

**South Africa**

**Dr Maryke Henton**

Bacteriology, Onderstepoort Veterinary Institute, 110 Onderstepoort, Onderstepoort,  
South Africa

**Thailand**

**Dr Thongchai Chalermchaikit**

Director , Centre for Antimicrobial Resistance Monitoring in Food-born Pathogens, (CARMFP), Chulalongkorn University, Faculty of Veterinary Science, Henri-Dunant St, Pratumwon, Bangkok 10330, Thailand

**Dr Janenuj Wongtavatchai**

Deputy Director, Centre for Antimicrobial Resistance Monitoring in Foodborn, Phathogens (CARMFP), Chulalongkorn University, Faculty of Veterinary Science Henri-Dunant St, Pratumwon, Bangkok 10330, Thailand

**Campylobacter Experts**

**Dr Jaap Wagenaar**

Institute for Animal Science and Health, P.O. Box 65, 8200 AB Lelyland, The Netherlands

**Prof Diane G. Newell**

Head of Campylobacter Research, Veterinary Laboratories Agency, New Haw, KT15 3NB Addlestone, Surrey, United Kingdom

**ENTER-NET**

**Mr Ian Fisher**

Enter-net Scientific Coordinator, PHLS Communicable Disease Surveillance Centre, 61 Collindale Avenue, NW9 SEQ GB-London, United Kingdom

**Epi-ETA**

**Dr Jeremy Sobel**

Centres for Disease Control and Prevention, 1600 Clifton Road, Mailstop D-63, Atlanta, Georgia 30333, United States of America

**Institut Pasteur and the  
International Network of the Institut Pasteur**

**Dr. Marc Jouan**

Project Manager, International Network of the Institut Pasteur, 25-28 rue du Dr Roux, 75724 Paris Cedex 15, France

**WHO Global Salm-Surv Coordinators**

**Dr Frederick J. Angulo**

Foodborne and Diarrheal Diseases Branch, National Centres for Infectious Diseases,  
Mailstop A-38 1600 Clifton Road, Atlanta, Georgia 30333, United States of America

**Dr Stephanie Wong**

Centres for Disease Control and Prevention, 1600 Clifton Road, Mailstop D-63, Atlanta,  
Georgia 30333, United States of America

**WHO Secretariat**

**Dr Peter Braam**

WHO-HQ World Health Organization, APH, Communicable Diseases Surveillance and  
Response, CH – 1211 Geneva 27, Switzerland

**Dr Pat Drury**

World Health Organization, Department of Communicable Diseases Surveillance and  
Response, 20 Avenue Appia, 1211 Geneva 27, Switzerland

**Dr Jocelyne Rocourt**

SDE/PHE/FOS, WHO-HQ/Institut Pasteur, 20 Avenue Appia, 1211 Geneva 27  
Switzerland

**Dr Klaus Stöhr**

APH, WHO-HQ, World Health Organization, Department of Communicable Diseases  
Surveillance and Response, CH – 1211 Geneva 27, Switzerland

**Denmark**

**Dr Frank Aarestrup**

Section for Antimicrobial Resistance and Environmental, Danish Veterinary Laboratory  
Bülowsvej 27, DK-1790 Copenhagen, Denmark

**Ms. Mary Christine Evans**

Danish Veterinary Laboratory, Bülowsvej 27, DK-1790 Copenhagen V, Denmark

**Mr René Hendriksen**

Laboratory Technician, Danish Veterinary Laboratory, Bülowsvej 27, DK-17890,  
Copenhagen V, Denmark

**Mr Arne Jensen**

Danish Veterinary Laboratory, Bülowsvej 27, DK-1790 Copenhagen V, Denmark

**Dr Anne Petersen**

Scientist, Danish Veterinary Laboratory, Bülowsvej 27, DK-1790 Copenhagen V,  
Denmark

**Prof Henrik Wegener**

Danish Zoonosis Centre, Danish Veterinary Laboratory, 27 Bülowsvej  
DK - 1790 Copenhagen V, Denmark

**Appendix B**  
**Summary of WHO Global Salm-Surv membership**  
 Updated March 12, 2001

**General Membership: 348**

Countries with Members (104):

Algeria, Argentina, Australia, Austria, Bahamas, Belarus, Belgium, Bolivia, Bosnia, Brazil, Budapest, Bulgaria, Cambodia, Canada, Caribbean, Chile, China, Colombia, Costa Rica, Croatia, Cuba, Cyprus, Czech Republic, Democratic Republic of Congo, Denmark, Ecuador, Egypt, El Salvador, Estonia, Finland, France, Georgia, Germany, Greece, Guatemala, Hungary, Iceland, India, Indonesia, Ireland, Israel, Italy, Japan, Jordan, Kenya, Korea, Kuwait, Laos, Latvia, Lebanon, Lithuania, Luxembourg, Former Yugoslav Republic of Macedonia, Madagascar, Malaysia, Mauritania, Mauritius, Mexico, Moldova, Mongolia, Morocco, Mozambique, Myanmar, Nepal, Netherlands, New Zealand, Nicaragua, Norway, Oman, Pakistan, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Saudi Arabia, Senegal, Slovak Republic, Slovenia, South Africa, Spain, Sri Lanka, Sudan, Suriname, Sweden, Switzerland, Syrian Arab Republic, Thailand, Tunisia, Turkey, Turkmenistan, Uganda, United Arab Emirates, United Kingdom, United Republic of Tanzania, United States, Uruguay, Uzbekistan, Venezuela, Viet Nam, and Yugoslavia

**Member Institutions: 100**

Countries with Member Institutions (66): Argentina (2), Australia(4), Austria, Bahamas, Belarus, Belgium, Bolivia, Bulgaria, Cambodia, Canada(2), Chile(2), Colombia(2), Costa Rica, Croatia, Cuba, Czech Republic, Denmark(2), Ecuador, Egypt(2), El Salvador, Estonia(2), Finland(2), France(2), Germany(3), Greece(3), Hungary(2), Iceland(2), India(3), Indonesia(3), Ireland, Israel, Italy(2), Japan(2), Jordan, Korea, Kuwait, Laos(2), Latvia, Lebanon, Luxembourg, Malaysia(3), Maritius, Mexico, Mozambique, Netherlands, Nicaragua, Norway(2), Oman, Paraguay, Peru, Philippines(2), Poland, Slovenia(3), South Africa, Sri Lanka, Suriname, Sweden, Switzerland, Syria, Thailand(3), Tunisia, United Kingdom, United States, Uruguay(2), Venezuela, and Viet Nam(2)

**Laboratory Practices**

- Isolate *Salmonella* 82/93 (88%)
- Serotype *Salmonella* 82/93 (88%)
- Antibiotic susceptibility testing 81/100 (81%)

**Isolate Sources**

- Human 64/98 (65%)
- Nonhuman 73/82 (89%)
  - Animals 48/71 (68%)
  - Environment 45/70 (64%)
  - Food 63/70 (90%)

**Appendix C. PROGRAMME – WHO Global Salm-Surv Strategic Meeting Agenda – May 8-11, 2001**

Time	Tuesday		Wednesday		Thursday		Friday
8:30-10:15	Status and brief discussion of future aspects of: - Introduction to Global SalmSurv (WHO-HQ) - Discussion group/listservers(CDC) - Home page (WHO-HQ) - Web-database (DVL) - EGAS (DVL) - Reference testing (DVL)	Laboratory Demonstration (I) (DVL)	Laboratory Demonstration (II) (DVL)	Plenary Challenge to working groups & Introduction to the needs assessment process		Review of GSS Strategic Plan & Timeline (Years 2001-2005)	
10:15-10:45	Coffee/Tea	Coffee/Tea	Coffee/Tea	WG3 Proposed WHO Global Network of Foodborne Disease Networks	Coffee/Tea	Coffee/Tea	
10:45-12:30	Status and brief discussion on training courses: Level-1 TC's (Thailand, Greece, Argentina) - Objective (WHO-HQ) - Participants selection/qualifications (WHO-HQ) - Theory (CDC) - Lab sessions (DVL)	Laboratory Demonstration (II) (DVL)	Laboratory Demonstration (I) (DVL)	WG4 GSS Regional Centres	WG5 Coordinating with Epidemiology Networks	Preparation of draft final document with GSS vision, recommendations and plan of action  Approval of final document Closing of meeting	
12:30-13:30	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch	
13:30-15:30	Status and brief discussion on training courses: Level-2, level-3, etc. - Aims and objectives (WHO-HQ) - Participants (WHO-HQ) - Theory (CDC) - Lab sessions (DVL)	WG1 Microbiology Activities in GSS Training Courses	WG2 Epidemiology Activities in GSS Training Courses	WG7 Communicatin g GSS to Target Audiences	WG8 GSS Country Databank		
15:30-16:00	Coffee/Tea	Coffee/Tea	Coffee/Tea	Coffee/Tea	Coffee/Tea		
16:00-18:00	Other Surveillance Networks - Epi-ETA - Enter-Net - WHO Outbreak Detection and Response	Reporting back from working groups 1 & 2	Reporting back from working groups 1	Reporting back from working groups 3,4,5,6,7 & 8			

## Appendix D. Challenge to Working Groups

### WHO Global Salm-Surv Working Groups

#### **WG1: Microbiology Activities in Level I and II Regional Training Courses**

##### **Purpose**

The purpose of this working group is to develop a 24-month action plan (June 2001-May 2003) for microbiology activities within WHO Global Salm-Surv Level I and II Regional Training Courses.

##### **Time**

Approximately 2 hours

##### **Objectives**

In this working group, you will:

- Review microbiology activities in Level I and II WHO Global Salm-Surv regional training courses.
- Establish the basic concept and scope of the discussion.
- Assess the top 5 needs for Level I and II microbiology activities.
- Develop general goals for Level I and II microbiology activities.
- Set measurable, realistic 24-month objectives for Level I and II microbiology activities.

##### **Background**

Currently WHO Global Salm-Surv regional training courses focus on laboratory techniques and allow for active communication with microbiologists. Level I courses include training in *Salmonella* isolation, serotyping and antimicrobial resistance testing; Level II courses provide training in *Campylobacter* as well as in *Salmonella*.

WHO Global Salm-Surv would like to review microbiology activities in Level I and II regional training courses.

##### **Working Group Process**

Step 1. Review existing microbiology activities in Level I and II courses (15 minutes)

Step 2. Establish the basic concept and scope of the discussion on microbiology activities in Level I and II courses (15 minutes)

Step 3. Assess the top needs for microbiology activities in Level I and II courses (30 minutes)

Step 4. Develop general goals for each need (20 minutes)

Step 5. Set realistic, measurable 12-month objectives (30 minutes)

## **WG2: Epidemiology Activities in Level I and II Regional Training Courses**

### **Purpose**

The purpose of this working group is to develop a 24-month action plan (June 2001-May 2003) for developing epidemiology activities within WHO Global Salm-Surv Level I and II Regional Training Courses.

### **Time**

Approximately 2 hours

### **Objectives**

In this working group, you will:

- Review epidemiology activities in Level I and II WHO Global Salm-Surv regional training courses
- Establish the basic concept and scope of the discussion
- Assess the top 5 needs for Level I and II epidemiology activities
- Develop general goals for Level I and II epidemiology activities
- Set measurable, realistic 24-month objectives for Level I and II epidemiology activities

### **Background**

WHO Global Salm-Surv hopes to improve communication between epidemiologists and microbiologists. Currently, training courses focus on laboratory techniques and allow for active communication with microbiologists.

WHO Global Salm-Surv would like to strengthen the epidemiology activities within the Level I and II training courses.

### **Working Group Process**

Step 1. Review existing epidemiology activities in Level I and II courses (15 minutes)

Step 2. Establish the basic concept and scope of the discussion on epidemiology activities in Level I and II courses (15 minutes)

Step 3. Assess the top needs for epidemiology activities in Level I and II courses (30 minutes)

Step 4. Develop general goals for each need (20 minutes)

Step 5. Set realistic, measurable 12-month objectives (30 minutes)

**WG3: Proposed WHO Global Network of Foodborne Disease Surveillance Networks****Purpose**

The purpose of this working group is to develop a 12-month action plan (June 2001-May 2002) to explore the need for a WHO global network of foodborne disease surveillance networks.

**Time**

Approximately 2 hours.

**Objectives**

In this plenary session, we will:

- Review the current status of existing global and regional foodborne disease surveillance systems.
- Define the scope of the discussion.

If it is agreed that a global “network of networks” is needed, then we will:

- Assess the top 5 needs for a global network of networks.
- Developed general goals for a global network of networks.
- Set measurable, realistic 24-month objectives for a global network of networks.

**Background**

Several regional and global foodborne disease surveillance systems currently exist. These systems have strengths in various areas. We would like to discuss the need for a global network of foodborne disease surveillance networks. This ‘network of networks’ would utilize the strengths of previously existing systems to meet global foodborne disease surveillance needs.

**Working Group Process**

Step 1. Review current or developing regional or global foodborne surveillance systems (15 minutes).

Step 2. Define the scope of the discussion (15 minutes).

Step 3. Assess the top 5 needs for a global network of foodborne disease surveillance networks (30 minutes).

Step 4. Develop general goals for each need (20 minutes).

Step 5. Set realistic, measurable 24-month objectives (30 minutes).

## **WG4: WHO Global Salm-Surv Regional Centres**

### **Purpose**

The purpose of this working group is to develop a 24-month action plan (June 2001-May 2002) to support the needs and determine the roles of the Global Salm-Surv regional centres.

### **Time**

Approximately 2 hours

### **Objectives**

In this working group, you will:

- Review the current status of the Global Salm-Surv regional centres.
- Establish the general scope of your discussion on Global Salm-Surv regional centres.
- Assess the top 5 needs for the Global Salm-Surv regional centres.
- Develop general goals for the Global Salm-Surv regional centres.
- Set measurable, realistic 24-month objectives for the Global Salm-Surv regional centres.

### **Background**

WHO Global Salm-Surv regional centres sponsor Global Salm-Surv regional training courses. Thus far, regional centres exist in Argentina and Thailand. We would like to assess the roles of regional centres in addition to the regional training courses.

### **Working Group Process**

Step 1. List the strengths and weaknesses of current regional centres (15 minutes)

Step 2. Establish the general scope of your discussion on Global Salm-Surv regional centres (15 minutes)

Step 3. Assess the top 5 needs for regional centres (30 minutes)

Step 4. Develop general goals for each top 5 need (20 minutes)

Step 5. Set realistic, measurable 24-month objectives (30 minutes)

**WG5: Epidemiology Activities in WHO Global Salm-Surv****Purpose**

The purpose of this working group is to develop a 24-month action plan (June 2001-May 2003) for developing epidemiology activities within WHO Global Salm-Surv.

**Time**

Approximately 2 hours

**Objectives**

In this working group, you will:

- Review epidemiology activities in WHO Global Salm-Surv regional training courses
- Establish the basic concept and scope of the discussion
- Assess the top 5 needs for epidemiology activities
- Develop general goals for epidemiology activities
- Set measurable, realistic 24-month objectives for epidemiology activities

**Background**

WHO Global Salm-Surv hopes to improve communication between epidemiologists and microbiologists. Currently, training courses focus on laboratory techniques and allow for active communication with microbiologists. Global Salm-Surv Level 3 training courses will provide introductory lessons in enteric disease surveillance and epidemiology.

WHO Global Salm-Surv would like to strengthen and enhance communications between microbiologists and epidemiologists. Additionally, Global Salm-Surv would like to facilitate communication between epidemiologists working in different regions.

**Working Group Process**

Step 1. Review existing epidemiology activities (15 minutes)

Step 2. Establish the basic concept and scope of the discussion on epidemiology activities (15 minutes)

Step 3. Assess the top needs for epidemiology activities (30 minutes)

Step 4. Develop general goals for each need (20 minutes)

Step 5. Set realistic, measurable 12-month objectives (30 minutes)

## **WG6: *Campylobacter* Laboratory Training in WHO Global Salm-Surv**

### **Purpose**

The purpose of this working group is to develop a 24-month action plan (June 2001-May 2002) for incorporating *Campylobacter* Laboratory Training into WHO Global Salm-Surv

### **Time**

Approximately 2 hours

### **Objectives**

In this working group, you will:

- Review the strengths and weaknesses of incorporating laboratory training of *Campylobacter* into WHO Global Salm-Surv
- Assess the top 5 needs to incorporate *Campylobacter* into Global Salm-Surv
- Develop general goals to incorporate *Campylobacter* into Global Salm-Surv
- Set measurable, realistic 12-month objectives for inclusion of *Campylobacter* into Global Salm-Surv

### **Background**

While WHO Global Salm-Surv laboratory training focuses on *Salmonella*, there is increasing interest in incorporating *Campylobacter*. As a pilot course, the first Level II Training Course provided introductory lessons in *Campylobacter* laboratory methods. We would like to evaluate this pilot course and, if appropriate, develop 24-month action plans to incorporate *Campylobacter* laboratory training into Global Salm-Surv.

### **Working Group Process (please refer to worksheets)**

Step 1. List the strengths and weaknesses of *Campylobacter* laboratory training in Global Salm-Surv (30 minutes)

Step 2. Not applicable

Step 3. Assess the top 5 needs for *Campylobacter* laboratory training (30 minutes)

Step 3. Develop general goals for each need (20 minutes)

Step 4. Set realistic, measurable 12-month objectives (30 minutes)

**WG7: WHO Global Salm-Surv Communications****Purpose**

The purpose of this working group is to develop a 24-month action plan (June 2001-May 2003) to increase the exposure and awareness of Global Salm-Surv regionally and globally.

**Time**

Approximately 2 hours

**Objectives**

In this working group, you will:

- Review the current status of Global Salm-Surv communications
- Define the scope of the discussion on Global Salm-Surv communications
- Assess the top 5 needs to improve Global Salm-Surv communications to various target audiences
- Develop general goals for Global Salm-Surv communications
- Set measurable, realistic 24-month objectives for Global Salm-Surv communications

**Background**

WHO Global Salm-Surv initiated the electronic discussion group in January 2000. The primary purpose of the discussion group is to foster communication between Global Salm-Surv members. Occasionally, Global Salm-Surv members have used the electronic discussion group to share information about national or international outbreaks; additionally, members have also requested information from other countries regarding an outbreak-related *Salmonella* serotype.

We would like to discuss how to improve the Global Salm-Surv electronic discussion group. Additionally, we would like to discuss the concept of an Alert mechanism for messages, including outbreaks and requests for information.

**Working Group Process**

Step 1. List the strengths and weaknesses of Global Salm-Surv's current communications (15 minutes)

Step 2. Establish the general scope of your discussion on Global Salm-Surv's communications (15 minutes)

Step 3. Assess the top 5 needs for Global Salm-Surv's communications (30 minutes)

Step 4. Develop general goals for each need (20 minutes)

Step 5. Develop realistic, measurable and specific 24-month objectives (30 minutes)

## **WG8: Global Salm-Surv Country Databank of *Salmonella* Serotypes**

### **Purpose**

The purpose of this working group is to develop a 24-month action plan (June 2001-May 2002) for the collection of national *Salmonella* data in the Global Salm-Surv country databank.

### **Time**

Approximately 2 hours

### **Objectives**

In this working group, you will:

- Review the current status of the Global Salm-Surv country databank
- Assess the top 5 needs for the Global Salm-Surv country databank
- Develop general goals for the Global Salm-Surv country databank
- Set measurable, realistic 24-month objectives for the Global Salm-Surv country databank

### **Background**

WHO Global Salm-Surv strives to improve access to global *Salmonella* summary data through its country databank. The databank will include the top 15 *Salmonella* serotypes isolated by national *Salmonella* laboratories. National institution representatives have been identified who will provide *Salmonella* summary data to Global Salm-Surv. Additionally, web-based software has been developed that will allow institution representatives to enter their data into the Country Databank.

### **Working Group Process (please refer to worksheets)**

Step 1. List the strengths and weaknesses of Global Salm-Surv's Country Databank (30 minutes)

Step 2. Not applicable

Step 3. Assess the top 5 needs for Global Salm-Surv's Country Databank (30 minutes)

Step 4. Develop general goals for each need (20 minutes)

Step 4. Set realistic, measurable 24-month objectives (30 minutes)

**Challenge to Working Groups Form**

**Step 1. Review current Global Salm-Surv activity or element (15-30 minutes)**

List things you like about this proposed Global Salm-Surv activity or element (10 minutes):

List things you think should be improved (10 minutes):

**Step 2. If appropriate, decide the scope and direction of the current discussion**

This discussion will include:

It will not include:

**Step 3. Assess the top 5 needs for the chosen Global Salm-Surv topic (30 minutes)**

List what is needed (15 minutes):

Raise your hand for the three needs you think are the most important.

Select the top 5 needs (those with the most votes), and list them below (15 minutes):

Need #1:

Need #2:

Need #3:

Need #4:

Need #5:

**Step 4. Develop general goals for each top 5 need (20 minutes)**

General goal(s) for Need #1:

General goal(s) for Need #2:

General goal(s) for Need #3:

General goal(s) for Need #4:

General goal(s) for Need #5:

**Step 5. Set realistic, measurable 12-month objectives (30 minutes)**

Specific, realistic and measurable objective(s) for Goal #1:

Specific, realistic and measurable objective(s) for Goal #2:

Specific, realistic and measurable objective(s) for Goal #3:

Specific, realistic and measurable objective(s) for Goal #4:

Specific, realistic and measurable objective(s) for Goal #5:

