



ECDC CORPORATE

Annual Report of the Director

2008

European Centre for
Disease Prevention and Control

Annual Report of the Director

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Abbreviations

AEFI	Adverse Events Following Immunisation	Enter-net	International surveillance network for the enteric infections Salmonella and VTEC 0157
AF	Advisory Forum	ENVI	Committee for Environment, Public Health and Food Safety of the European Parliament
AIDS	Acquired Immune Deficiency Syndrome	EOC	Emergency Operations Centre
AMR	Antimicrobial Resistance	EPIET	European Programme for Intervention Epidemiology Training
APSED	Asia-Pacific Strategy for Emerging Diseases	EpiNorth	Co-operation Project for Communicable Disease Control in Northern Europe
BCoDE	Present and Future Burden of Communicable Disease in Europe	ESAC	European Surveillance of Antimicrobial Consumption
BSN	Basic Surveillance Network	ESCAIDE	European Scientific Conference on Applied Infectious Disease Epidemiology
CCDC	Chinese Centre for Disease Control and Prevention	ESCMID	European Society of Clinical Microbiology and Infectious Diseases
CCHF	Crimean-Congo Haemorrhagic Fever	ESSTI	European Surveillance of Sexually Transmitted Infections
CDC	Centers for Disease Control and Prevention, USA	ESWI	European Scientific Working Group on Influenza
CFEP	Canadian Field Epidemiology Program	EU	European Union
DG JLS	Directorate-General for Justice, Freedom and Security	EUCAST	European Committee on Antimicrobial Susceptibility Testing
DG Research	Directorate-General for Research	EU-IBIS	European Union Invasive Bacterial Infections Surveillance
DG SANCO	Directorate-General of Health and Consumer Protection	EuroCJD	European and Allied Countries Collaborative Study Group of Creutzfeldt-Jakob Disease
DIPNET	European Diphtheria Surveillance Network	EuroHIV	European Centre for the Epidemiological Monitoring of AIDS
DIVINE-NET	Network for prevention of emerging (food-borne) enteric viral infections: diagnosis, viability testing, networking and epidemiology	EUROPOL	European Police Office
DSN	Dedicated Surveillance Network	EuroTB	Network for surveillance of Tuberculosis in Europe
DSPs	Disease-specific Programmes	EUVAC.NET	Surveillance Community Network for Vaccine Preventable Infectious Diseases
DTP	Diphtheria, tetanus and pertussis	EWGLINET	European Working Group for Legionella Infections
E3	European Environment and Epidemiology Network	EWRS	Early Warning and Response System
EAAD	European Antibiotic Awareness Day	EXC	Executive Committee
EACCME	European Accreditation Council for Continuing Medical Education	FEM	Field Epidemiology Manual
EAHIL	European Association for Health Information and Libraries	FP EU	Framework Programme for Research
EARSS	European Antimicrobial Resistance Surveillance System	FWD	Food- and waterborne diseases and zoonoses
ECCMID	European Congress of Clinical Microbiology and Infectious Diseases	HCU	Health Communication Unit
ECDC	European Centre for Disease Prevention and Control	HEDIS	Health Emergency & Diseases Information System
EDEN Project	Emerging Diseases in a changing European Environment	HIV	Human Immunodeficiency Virus
EEA	European Environment Agency	HPA	Health Protection Agency, UK
EEA/EFTA	European Economic Area/European Free Trade Association	HPV	Human Papillomavirus
EFSA	European Food Safety Authority	HSC	Health Security Committee of the EU
EISS	European Influenza Surveillance Scheme	ICT	Information and Communication Technology
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction		
ENIVD	European Network for Diagnostics of Imported Viral Diseases		

IHR	International Health Regulations
IPSE	Improving Patient Safety in Europe
IUSTI	International Union against Sexually Transmitted Infections
JRC	Joint Research Centre
KIS	Knowledge and Information Services
KM	Knowledge Management
MB	Management Board
MDR TB	Multidrug-Resistant Tuberculosis
MedISys	Medical Information System
MMR	Measles, mumps and rubella
MRSA	Methicillin-Resistant Staphylococcus aureus
NMFPs	National Microbiology Focal Points
PRU	Preparedness and Response Unit
RASFF	Rapid Alert System for Food and Feed
SARS	Severe Acute Respiratory Syndrome
SAU	Scientific Advice Unit
SCG	Scientific Consultation Group
SHIPSAN	Ship Sanitation Project
STI	Sexually Transmitted Infections
TB	Tuberculosis
TBE	Tick-borne Encephalitis
TEPHINET	Training Programs in Epidemiology and Public Health Interventions Network Inc
TESSy	The European Surveillance System
TTT	Threat Tracking Tool
VENICE	Vaccine European New Integrated Collaboration Effort
VIRGIL	European Surveillance Network for Vigilance against Viral Resistance
VTEC	Verotoxin-producing Escherichia coli
WHO	World Health Organization
WHO EURO	Regional Office for Europe of the World Health Organization
WHO HQ	Geneva Headquarters of the World Health Organization
XDR TB	Extensively Drug-Resistant Tuberculosis



Foreword from the Chairman of the Management Board

It is a great honour for me to have been elected Chair of the Management Board of ECDC. Having followed closely the activities of ECDC for many years, my deputy Chair, Professor Jacques Scheres, and I have been able to see the impressive results that the Centre has achieved in such a short period of time since its establishment. The efforts of the Director, the staff and all members of the Management Board — in particular my predecessor, Dr Marc Sprenger and his deputy Chair, Professor Minerva-Melpomeni Malliori — must be particularly acknowledged for these accomplishments.

Based on the work achieved by the Management Board, I consider now concluded ECDC's first period of consolidation, in which we mainly focused on securing funding and building up the organisation. The Centre must now move forward in a comprehensive way in order to engage decisively in the fight against health threats in Europe and become a fully-fledged agency for the benefit of Member States.

I envision ECDC as a 'Centre of Excellence' and also a guiding source for the scientific community. The range and volume of activities conducted in 2008 are already completely in line with this objective, as this Annual Report of the Director shows.

One of the main milestones for 2008 was the result of an independent evaluation, carried out as required by ECDC's Founding Regulation. This evaluation, prepared by the Dutch management consultancy ECORYS, found that the Centre has established a 'clear presence on the international stage' and made a 'significant contribution' to the fight against infectious diseases. There are two important conclusions from the evaluation. Firstly, that ECDC has done an excellent job. Secondly, that the EU Member States are satisfied with the work of ECDC. In order to discuss and comment on the results of this evaluation, the Management Board held an extraordinary meeting in September and left open the possibility of ECDC taking on new areas of responsibility from 2013 onwards, providing that long-term funding is available for these new activities.

The Management Board also adopted a list of indicators to monitor the implementation of the ECDC *Strategic Multi-annual Programme 2007–2013*. These were used as a pilot in 2008 and will be reported to the Board in March 2009. Adoption of the multi-annual staff policy 2009–2011 will also ensure that ECDC has full capacity to carry out its mission in the most efficient way.

In 2008, ECDC has clearly contributed to the prevention of communicable diseases and the protection of European citizens. This has been achieved through the organisation of a number of major events, like the ESCAIDE conference or the European Antibiotic Awareness Day; the publication of a number of major scientific studies that will help validate hypotheses and contribute to the fight against health threats with more efficiency; and also through the constant surveillance of communicable diseases and the monitoring of threats that might affect Europe. Last but not least, ECDC brought a major support to Member States in helping them to reinforce their resources in order to be better prepared and much more efficient.

It is not very often that an agency evolves with such positive, constructive results within the course of merely a few years as ECDC has done. ECDC has indeed the potential to become the heart of the health network in Europe.

Professor Dr Hubert Hrabcik
Chairman of the Management Board



Introduction by the Director

The year 2008 was one of both consolidation and expansion of ECDC activities. In addition to delivering increased output, the Centre has further developed its partnerships and consolidated its internal structures in order to address the need for a strengthened response to the threat of communicable diseases in Europe.

In 2008, the main priority for ECDC was to further consolidate its 'public health functions' in order to fully comply with the missions that have been assigned to the Centre in its Founding Regulation.

Therefore, ECDC has strengthened its surveillance role and launched TESSy, the European Surveillance System, in January. TESSy is today operational and efforts are made to ensure in the near future the full comparability of data collected by the Member States, as this is key to the timely prevention and control of communicable diseases. A long-term strategy for surveillance has also been adopted. Furthermore, the transfer of additional European external surveillance networks into ECDC has been carried on, with three new networks integrated into ECDC, in the areas of healthcare-associated infection, influenza and sexually transmitted infections.

In the field of scientific advice, ECDC produced scientific publications and organised major events in 2008, like the ESCAIDE conference in November, which gathered more than 500 health experts from all over Europe. Major scientific studies were launched, such as on the impact of climate change on epidemiology and on the future burden of communicable diseases in Europe. ECDC also delivered scientific guidance for the introduction of papillomavirus vaccines in Europe and on priority risk groups for influenza vaccination. As the centre does not have its own laboratory capacity, it has strengthened its network through meetings, a survey and the development of a database of microbiology reference laboratories in Europe.

In the area of preparedness and response, ECDC has now reached its full capacity, with the inauguration of the new Emergency Operation Centre (EOC) in March, in presence of Dr Miroslav Ouzký, member of the European Parliament. Since the end of 2007, the Early Warning and Response System (EWRS) has been fully supported by ECDC. In 2008, 251 threats have been monitored through the Threat Tracking Tool (TTT) system and 31 threat assessments have been prepared, covering 24 different diseases. ECDC also monitored threats during two major international events in 2008: the EURO 2008 football championship in Austria and Switzerland and

the Olympic Games in Beijing. Strengthening the EU and Member States' capacity for response in case of an outbreak remains a major priority for which ECDC organised two simulation exercises in 2008.

Training activities have also been carried on, following the strategy developed with Member States in 2005. In 2008, 41 fellows have been trained through the two-year ECDC EPIET programme. In addition, ECDC has organised short training modules for 250 health experts during the year. The training strategy is now been revised, in coordination with Member States.

Regarding health communication, which is crucial, in 2008 ECDC has established its infrastructure to improve the dissemination of scientific and technical information. Publications and internet are an integral part of this strategy, as well as the dissemination of toolkits and information campaigns. In 2008, the journal *Eurosurveillance* and the organisation by ECDC of the very successful first annual European Antimicrobial Awareness Day on 18 November were major flagships of this activity.

ECDC has also reinforced its capacities in 2008 in the area of specific diseases and will further strengthen them in 2009. Indeed, from 2010, according to the *Strategic Multi-annual Programme 2007–2013*, specific diseases should become ECDC's main focus. The seven disease-specific programmes that were built across the units have brought major input to all the units' activities.

Two major ECDC/WHO surveillance reports have been prepared. The first one, on HIV/AIDS in Europe, was published at the occasion of World Aids Day on 1 December 2008 and the second one, on tuberculosis, will be published for the World TB Day on 24 March 2009. A large number of other activities have been performed by the disease-specific programmes in 2008. In order to further reinforce their role in the organisation, and clarify their long-term strategy, a review and development of the strategies of each of these programmes is foreseen for 2009. Emergency assessment after the finding of antiviral resistance by influenza viruses, HIV testing and behavioural surveillance studies, the development of a communication toolkit for chikungunya fever and mapping of zones at risk for vector-borne diseases, the first estimate of the burden of healthcare-associated infections, and the development of an assessment of adverse events following immunisation are just few of the topics on which ECDC has brought its expertise in 2008. These are further detailed in this report.



Marc Sprenger, former Chair of the Management Board, ECDC Director Zsuzsanna Jakab and Dr Miroslav Ouzký, member of the European Parliament, at the inauguration of the ECDC Emergency Operation Centre, in March 2008.

For an organisation like ECDC, which operates at European level, partnerships are essential. In 2008 partnerships have been further developed with Member States at all levels of ECDC activities. Once a year, each unit gathers the Competent Bodies that are working in its area (scientific advice, communication, surveillance, preparedness and response), and all disease-specific programmes are coordinating networks in their own field of activity. By request of Member States, ECDC has also performed 22 country visits in 2008 to assist and assess their needs. ECDC is also working closely with the European institutions. To ensure the best complementarities and avoid overlaps, the ECDC work programme was prepared taking into account the work programme of the European Commission's DG SANCO.

ECDC has also supported some of the Commission's initiatives. Monitoring the implementation by Member States of the *Dublin declaration on the fight against HIV/AIDS in Europe*, contributing to the follow-up and implementation of the *Framework action plan to fight tuberculosis in the EU*, and providing technical support for the work held on immunisation against influenza and for the incoming recommendation of the Commission on childhood immunisation schedule, are just a few examples. ECDC has also worked to support the efforts of the EU Presidencies, in particular through involvement in the preparation of meetings, formal and informal Council of Health Ministers held under the Slovenian and French Presidencies, on issues such as antimicrobial resistance and influenza pandemic.

ECDC is working closely with other EU agencies. In 2008, further to the signature of a Memorandum of Understanding with the European Food Safety Authority (EFSA), ECDC contributed to the collection of data related to human health for the annual report on zoonoses published by EFSA. Close work and regular contact are also established with the European Parliament, especially the ENVI Committee, who visited ECDC in May.

Last but not least, ECDC and WHO are actively working together on surveillance reports. These joint ECDC/WHO efforts aim at avoiding duplication on work and extra burden on Member States and providing Europe with a shared overview. ECDC also supports WHO activities in many other areas.

The outcomes of the external evaluation of ECDC in 2008, conducted as required in the ECDC Founding Regulation, to assess ECDC's performance and scope of activities, have been very positive and showed that the Centre performed well. The report confirmed that ECDC is a centre of scientific excellence that made a significant contribution to the fight against communicable diseases in Europe. According to this evaluation, the funding of ECDC for the period 2007–2013 is adequate. The report considers that ECDC should focus on consolidation and deepen its current tasks, although it is the Commission's responsibility to propose an extension of ECDC mandate to Member States.

As initially foreseen, the budget allocated to ECDC has been increased from EUR 27 million in 2007 to EUR

40.2 million in 2008, and its staff has increased to 154 persons. In order to tackle all the tasks and requests addressed to ECDC in the most efficient way, the management of the Centre has been strengthened in 2008. Units have been subdivided into sections with the appointment of 15 heads of sections, to support ECDC growth and increased workload. In view of their expected increasing role, the disease-specific programmes have been reinforced. A general coordinator is now in charge of helping all the programme coordinators to harmonise their working processes, and the staff dedicated to the disease programmes have been increased and clearly identified.

The planning of activities for 2009 has been prepared during the summer and a more systematic monitoring of the activities for 2008 has been established. Work has been conducted to ensure the availability of a computerised Management Information System by mid-2009, to help prepare the planning of 2010 activities.

All these positive developments in 2008 have been possible thanks to the constant and remarkable support of our Management Board, Advisory Forum and all our Competent Bodies, as well as the support from our external partners, particularly the European Commission and the Parliament. This has been also possible as a result of a very positive team spirit and involvement of ECDC staff at all levels. These constitute some of ECDC's main strengths, on which we will continue to build up in the future.

Zsuzsanna Jakab
Director ECDC

Executive Summary

In 2008, a year of both consolidation and expansion of its activities, ECDC has further developed its partnerships and its internal structures in order to address the need for a strengthened response to the threat of communicable diseases in Europe. The main priority for ECDC in 2008 was to further consolidate its 'public health functions', in order to fully comply with the missions that have been assigned to the Centre in its Founding Regulation. The Centre also reinforced its capacities in the area of specific diseases, which will be further strengthened in 2009, as from 2010, according to the *Strategic Multi-annual Programme 2007–2013*, specific diseases should become ECDC's main focus. The overall ECDC management has been strengthened, and partnerships with Member States have been further developed at all levels of the Centre's activities.

I. Consolidation of Public Health Functions

Surveillance

A long-term vision and strategy on the future surveillance of communicable diseases in the EU has been developed and adopted in 2008. The evaluation of the Dedicated Surveillance Networks, which has started in 2006, was completed in 2008, except for one network. In 2008, three additional networks were transferred to ECDC. TESSy (The European Surveillance System) was launched at the end of January 2008 and training of the national experts took place in March. Every TESSy user in Member States has been offered training on-site or online. Work has been started to improve the data quality and comparability between Member States. Revised case definitions were published. The second annual epidemiological report, the EFSA's zoonoses report, quarterly zoonoses reports and the HIV/AIDS report were published.

Scientific support

Research symposia on different topics in infectious disease control and prevention took place in 2008. They include a meeting on new tools for TB control and the second meeting of the Scientific Consultation Group. ECDC was engaged in intensive activities focused on enhancing the capacity of mathematical modelling of infectious diseases in EU Member States. The Centre also initiated and coordinated studies on its own initiative, such as the European Environment and Epidemiology (E₃) Network, the Present and Future Burden of Communicable Disease in Europe (BCoDE) project, unforeseen infectious disease threats, and dual use life science research and its potential application in bioterrorism. ECDC produced scientific guidance on human papillomavirus vaccines in EU countries and on

priority risk groups for influenza vaccination. Knowledge Management activities were developed. Collaboration with microbiological laboratories was implemented in 2008, through National Microbiology Focal Points and a Public Health Microbiology Survey.

Preparedness and response functions

Operation of the Early Warning and Response System (EWRS) has been supported by ECDC since November 2007. During 2008, 251 threats were monitored using the Threat Tracking Tool (TTT). Two-thirds affected the EU/EEA/EFTA countries. ECDC supported two large mass-gathering events that took place in 2008: the EURO 2008 football championship, in Austria and Switzerland, and the Beijing Olympic Games. Following the detection of potential communicable disease threats to the EU, a total of 31 original threat assessments were prepared for 24 different diseases. ECDC supported and coordinated the investigation and response for a measles outbreak in Austria; a large outbreak of hepatitis A in the Czech Republic, Latvia and the Slovak Republic; and a case of Crimean-Congo haemorrhagic fever in Greece. The 24/7 on-duty Emergency Operation Centre of ECDC was inaugurated in March 2008. An outbreak assistance laboratory network was created and guiding principles for EU response to communicable disease threats were agreed with the Competent Bodies. ECDC coordinated a comprehensive assessment of the risk for infection from infectious persons in aircrafts. Two simulation exercises were organised by ECDC with participation of Member States, Commission and different partners.

Training

A consultation of the Competent Bodies for training was organised in October to review the relevance of the training strategy developed in 2005. In 2008, 41 fellows were coached through the EPIET programme. At the end of 2008, 50 new fellows had been enrolled in the programme for the 14th cohort. Furthermore, a total of 250 public health experts from EU Member States participated in ECDC short training modules. ECDC organised four 'training of trainers' workshops during the ESCAIDE conference in Berlin, and contributed to the organisation and facilitation of three regional workshops to identify best practice in joint operations between Law Enforcement and Public Health in EU Member States. ECDC supported Member States in conducting assessments of their training needs and resources in Portugal, Hungary, Slovenia and Romania.

Health communication

Seven series were created for scientific publications and a total of 21 scientific documents were published in 2008. A comprehensive dissemination strategy and target-group specific approach was adopted. After its



ECDC Director Zsuzsanna Jakab (centre) and ECDC team during the Green Field Exercise, an internal simulation exercise that took place in June 2008 to evaluate procedures to respond to an escalating public health event and test internal and external communications.

integration into ECDC in 2007, *Eurosurveillance* became a flagship publication of the Centre. The journal's new website was launched in April, which contributed to an increase of readership (14 000 readers by the end of 2008). The ECDC Intranet project was initiated in summer 2008, for launch in 2009. Thirteen press releases were published during the year. ECDC hosted two dedicated seminars for journalists, as well as live webcasts. With the participation of 32 European countries, the European Antibiotic Awareness Day, the first Europe-wide public information campaign on rational use of antibiotics, was successfully organised with considerable press impact. A communication toolkit on chikungunya fever was also produced. The impact of ECDC activity in the European press has been growing, as some measurement data suggests. Corporate communication tools were reinforced and a comprehensive and fully updated, multilingual interim website was prepared for future migration to the ECDC portal, which will be fully operational in 2009. A coordinated approach to country cooperation on development of health communication activities through cross-section projects and activities to promote integrated developments was also initiated.

II. Reinforcement of the disease-specific programmes

Influenza

The work focused on three areas: seasonal influenza and vaccination, pandemic preparedness and avian flu. Pandemic preparedness remained an important focus of ECDC activities, to support efforts of the Member States. The transfer of the EISS surveillance system to ECDC was started. In 2008, collaboration was further reinforced with Member States, the European Commission, WHO and other relevant international bodies and European networks. ECDC provided advice on seasonal influenza and immunisation to support the European Commission's

initiative to produce a recommendation on influenza immunisation, as well as technical support over the issue of sharing virus specimens ('virus sharing'). The Centre has also started a long-term project with Member States to develop a method for epidemiological assessment of the effectiveness of influenza vaccine in season. ECDC became the focal point for European and international work on resistance to antiviral such as neuraminidase inhibitors. Avian influenza continued to be monitored. About 100 articles to weekly update on influenza activities were published on the ECDC website and disseminated via *Influenza News*, as well as in *Eurosurveillance* (including a special edition).

Sexually transmitted infections, including HIV/AIDS and blood-borne viruses

ECDC took over the responsibility for HIV/AIDS surveillance, and prepared the ground for taking responsibility for the STI surveillance. As of 2008, the HIV/AIDS case reporting in Europe was carried out jointly by ECDC and WHO EURO with a joint annual report presented on World AIDS Day on 1 December 2008. Several studies have been initiated: on HIV testing policies and practices in the EU; on the implementation of behavioural surveillance in various populations in order to conduct second-generation surveillance; on the benefit of partner notification as a key prevention strategy; and on HIV/AIDS in migrant communities. Upon request from the European Commission, ECDC developed a framework for the monitoring of the implementation of the *Dublin declaration on partnership to fight HIV/AIDS in Europe and Central Asia* by Member States. In the field of sexually transmitted diseases, a review of Chlamydia control activities in Member States was performed, and a guidance document for the introduction of human papillomavirus vaccine in the EU was issued. On viral hepatitis, ECDC reviewed the current systems for surveillance of hepatitis B and C and the epidemiological situation across Europe, to prepare for surveillance activities.

Emerging and vector-borne diseases

In 2008, ECDC prepared a chikungunya communications toolkit, conducted a multidisciplinary risk assessment of the response vector-borne diseases threats in Europe, prepared a mosquito risk maps and a risk assessment for the introduction of chikungunya and dengue. The Centre has also reinforced its networking activities in the field of outbreak assistance and support laboratories, microbiology training and travel medicine clinics. Following the first confirmed case of Crimean-Congo haemorrhagic fever in Greece in June 2008, ECDC organised an expert consultation in order to assess the existing needs for prevention and control. ECDC also held a meeting on links between environmental and epidemiologic data, and contributed to the new 'Emerging Epidemics' programme funded by the European Commission.

Food- and waterborne diseases and zoonoses

The focus in 2008 has been on further developing surveillance for six priority diseases (salmonellosis,

campylobacteriosis, VTEC infection, shigellosis, listeriosis, and yersiniosis), strengthening the urgent inquiry network (for the early detection of dispersed international clusters/outbreaks), intensifying the collaboration with stakeholders (European Commission, Rapid Alert System for Food and Feed, EFSA, WHO), and the preparation of the human-related part of the EFSA's *Zoonoses Report 2007*.

Antimicrobial resistance and healthcare-associated infections

In 2008, ECDC integrated the surveillance of healthcare-associated infections as part of its surveillance activities. The Centre published estimates on the occurrence of *Clostridium difficile*-associated disease in Europe, as well as the first estimates of the burden of healthcare-associated infections for the EU. ECDC prepared the first pan-European prevalence survey on healthcare-associated infections to be carried on in 2009 in order to provide guidance for the control and prevention of methicillin-resistant *Staphylococcus aureus* (MRSA), the most common multidrug-resistant bacteria responsible for healthcare-associated infections. ECDC coordinated the first edition of the European Antibiotic Awareness Day, which was officially launched by the Health Commissioner, Androulla Vassiliou, at the European Parliament on 18 November 2008. ECDC has also set up a network of National Focal Points for antimicrobial resistance issues.

Tuberculosis

The *Framework action plan to fight TB in the EU* was officially launched on World TB Day 2008. On request of the Commission, ECDC has initiated preparatory work to support the follow-up and implementation of the plan in 2009, in particular the development of strategic and epidemiological indicators. ECDC took over the EuroTB surveillance network on January 2008. A situational analysis and feasibility study for the establishment of an EU TB Network was completed in 2008, which will be the basis for the launching of the EU TB Laboratory Network in 2009. The Centre continued to provide scientific advice and guidance on specific TB topics and to support assessment of threats related to international travellers with TB and the risk of related outbreaks (11 cases in 2008). Extensive work was also been carried out in the development of an evidence package for TB control among migrants in the EU.

Vaccine-preventable diseases

ECDC worked on improving knowledge on vaccine preventable diseases at EU level. The EU-IBIS dataset was integrated into TESSy in 2008. A series of laboratory activities regarding invasive bacterial diseases was conducted with the objective to start the epidemiological surveillance of *S. pneumoniae* invasive infection in the EU. ECDC signed a new contract with the Surveillance Community Network for Vaccine Preventable Infectious Diseases (EUVAC network) with the aim of continuing and improving the knowledge base on measles, mumps, rubella, pertussis and varicella. A second phase of the

VENICE project, which aims to encourage collection and dissemination of knowledge and best practice relating to vaccination, has started.

The Centre continued to develop a collection of scientific and technical guidance documents on vaccination issues, including on diphtheria, tetanus and pertussis vaccination (DTP) with a large review of evidence on childhood immunisation schedule and booster doses. A handbook on communication campaigns was developed as part of the migrant health initiatives. A training module on advanced epidemiology applied to vaccinology was carried out. ECDC also supported the health authorities of Austria and other countries involved in the 2008 large outbreak of measles to organise a field response team and concerted response. The Centre has carried out activities aimed at improving knowledge and sharing good practice in the area of vaccine safety, such as a protocol for the assessment of adverse events following immunisation.

III. Further strengthening of partnerships

External relations, partnerships and country cooperation

In 2008 ECDC continued to develop close, fruitful and effective working relations with the European Parliament, the Council of Ministers (including the EU Presidency) and the European Commission. This included a visit of the European Commissioner for Health and of the European Parliament ENVI Committee to ECDC. ECDC continued to build upon the foundations laid in 2005 (by the signing of the Memorandum of Understanding with WHO EURO) to maximise the synergies from close working relations and a strengthened partnership with WHO. Such synergies include the joint HIV and TB surveillance for all 53 WHO EURO countries and the publication of two joint surveillance reports. A similar initiative for joint influenza surveillance was developed in 2008 and operates for the first time in the 2008/2009 season. Full and mutual access for ECDC and WHO to the WHO International Health Regulation (IHR) and ECDC Early Warning Response System (EWRS) websites was granted. In addition, memoranda of understanding were signed with EFSA and with the Institute for the Protection and Security of Citizens of the Joint Research Centre of the European Commission.

Regarding cooperation with Member States, a country information system that contains comprehensive information on ECDC contacts and networks with the countries has been developed and is periodically updated. In order to develop the collaboration, Member States and Associated Countries have designated Competent Bodies to ECDC. The Centre also began to develop close working relations with the three candidate countries to the EU. In 2008, interdisciplinary teams from ECDC paid a first general country mission to the three countries. Furthermore, the EpiNorth project was evaluated.



The fourth meeting of the Management Board in 2008 was held in Paris, France, in November, at the invitation of the French Institute for Public Health Surveillance (InVS).

IV. Supporting activities

Governance

During 2008, the first external evaluation of the Centre was completed and the outcome served as a basis for the Management Board's recommendations on the future scope of the Centre's mission. The ECDC's Management Board met in March, June and November 2008, and had an extraordinary meeting in September, to discuss the results of the external evaluation of the Centre. In November 2008, Dr Hubert Hrabcik, Chief Medical Officer of Austria, was elected Chair of ECDC's Management Board and Professor Jacques Scheres, EP Representative, was chosen as Deputy Chair for a two-year period. The Director of ECDC convened four meetings of the Advisory Forum (AF) in 2008.

Management and strategic planning

ECDC's work programme for 2009 was prepared and adopted. This includes a detailed list of activities, with procurement and budget implications, and clear identification of the activity leader in order to ensure better accountability and ownership. Units have been subdivided into sections in order to ensure a more efficient management. The role of the Disease-specific Programmes was further clarified. A coordinator for the disease programme leaders has been appointed and monthly meetings were organised to ensure improved management and exchanges of views.

ECDC will develop a computerised management information system to help the planning and monitoring of activities. The specifications have been prepared, and a call for proposals launched in November 2008 led to the appointment of consultants.

Administrative services

The Administrative Services Unit facilitated the operational activities of the Centre to ensure that human and financial resources were properly and well managed. Administrative services include finance (budget and accounting), human resources (recruitment, personnel administration, and learning and development), missions/meetings/logistics, information and communication technologies (ICT), legal advice and procurement.

The budget of the Centre increased from EUR 27 million in 2007 to EUR 40.2 million in 2008. Budget execution reached 97% in terms of commitment appropriations. Major achievements in 2008 included the adoption of new financial rules and the development of the verification function.

In 2008 ECDC recruited 54 additional staff (temporary agents, contract agents and seconded national experts) and eight trainees. The total number of staffs (temporary and contract agents) in 2008 was 154. The ECDC internal organisation has been revised, with the subdivision of units into sections and appointment of 15 heads of section. The Centre held 293 meetings in 2008.

The ICT service also extended the network infrastructure and service provision, in particular with a new phone system and a high-speed internet connection, providing the basis for ECDC to host operational systems to support the surveillance and response to health issues in Europe.

In order to ensure control of its activities, ECDC has a full range of internal control and audits, with 24 internal control standards in place.

1. Public health functions

1.1 Communicable disease surveillance

Improving surveillance

Surveillance plays a crucial role when addressing communicable diseases. The overall goal is to contribute to reducing the incidence and prevalence of communicable diseases by providing, at European level, relevant public health data, information and reports to decision-makers, professionals and healthcare workers in an effort to promote actions that will result in the timely prevention and control of communicable diseases in Europe. High validity and good comparability of communicable disease data from the Member States are imperative to reach this goal.

Key products 2008

- long-term European surveillance strategy adopted with a road map for implementation;
- disease-specific strategies and objectives for future surveillance in place, which take the results of evaluations and assessments of networks into account;
- all countries contributing to the core surveillance, with basic analysis and regular output of the data (weekly bulletin, annual epidemiological report and website) in place;
- partnerships further developed with institutions acting in the field of data collection.

The emphasis of the work in 2008 was laid on improving the data collection and bringing The European Surveillance System (TESSy) into function.

Strategy 1. Improving data collection

Implementation of the long-term European surveillance strategy

A long-term vision and strategy on the future surveillance of communicable diseases in the EU has been developed and adopted in 2008 to help direct the decisions for the long-term development of the European Surveillance System. The time-span for this long-term strategy covers the years until 2013, in order to be aligned with *ECDC Strategic Multi-annual Programme*. This surveillance strategy attempts to define the terms and scope of surveillance, aims and objectives, the organisational requirements, the support to Member States and the outline of a roadmap to implement the strategy.

In the coming years this strategy will be the guiding principle for ECDC further surveillance developments. In order to keep this strategy and its objectives relevant, it will be revisited from time to time, with the Commission, Member States and key stakeholders, so that it may be adjusted to incorporate emerging strategies or new evidence as required.

Disease-specific strategies for future surveillance, taking the results of evaluations and assessments of networks into account

In addition to national surveillance systems, before ECDC entered into operation, EU-wide surveillance networks have been established and funded by the European Commission. It has been agreed that, after the evaluation of these networks, ECDC would become responsible for their operation following the expiration of their contracts. The evaluation of the Dedicated Surveillance Networks (DSNs), which has started in 2006, was completed in 2008, except for one network that will be evaluated in the first quarter of 2009 (DIPNET) (see Table 1). Further to the five networks already transferred to ECDC before 2008, another three were transferred in 2008/January 2009. These transfers require intense collaboration between the respective DSN hub and ECDC and include transferring databases, historical data and website content; establishing variables to be collected in TESSy; training Member States experts; outsourcing laboratory work with call for tenders; and agreeing with the Competent Bodies for surveillance on the disease-specific contact points. Some of the networks had to be outsourced by open call for proposals as the expertise at ECDC is not yet built up. ECDC is working with the experts of each transferred networks on the future development of the disease-specific surveillance through annual meetings and workshops (see Disease-specific activities, page 17).

Table 1: Overview of the evaluation and status of the 17 Dedicated Surveillance Networks (DSN)

DIVINE (Norovirus)	Not continued as surveillance
ESAC (antimicrobial consumption)	Outsourced* (3y) Aug 2010
EUCAST (harmonisation of antimicrobial susceptibility testing)	Outsourced (3y) Sep 2011
EuroCJD (vCJD)	Outsourced (3y) May 2011
EUVACNET (measles, rubella, mumps, pertussis, varicella)	Outsourced (2y) Jan 2011
EWGLINET (travel-associated Legionnaires' disease)	Outsourced (2y) end 2009
EARSS (antimicrobial resistance)	Outsourced (2y) end 2009
ENIVD (imported viral infections)	Outsourced as Outbreak Assistance Laboratories
DIPNET (diphtheria)	Commission Grant Agreement until end of 2009
ESSTI (STI)	Transfer to ECDC January 2009
EISS (influenza)	Transfer to ECDC September 2008
IPSE (healthcare-associated infections)	Transfer to ECDC July 2008
EuroTB (tuberculosis)	ECDC by end 2007
EuroHIV (HIV/AIDS)	ECDC by end 2007
EU-IBIS (invasive meningococcal +Haemophilus influenzae infections)	ECDC October 2007
Enter-net (food-borne infections)	ECDC October 2007
BSN (core set all diseases)	ECDC by end 2006

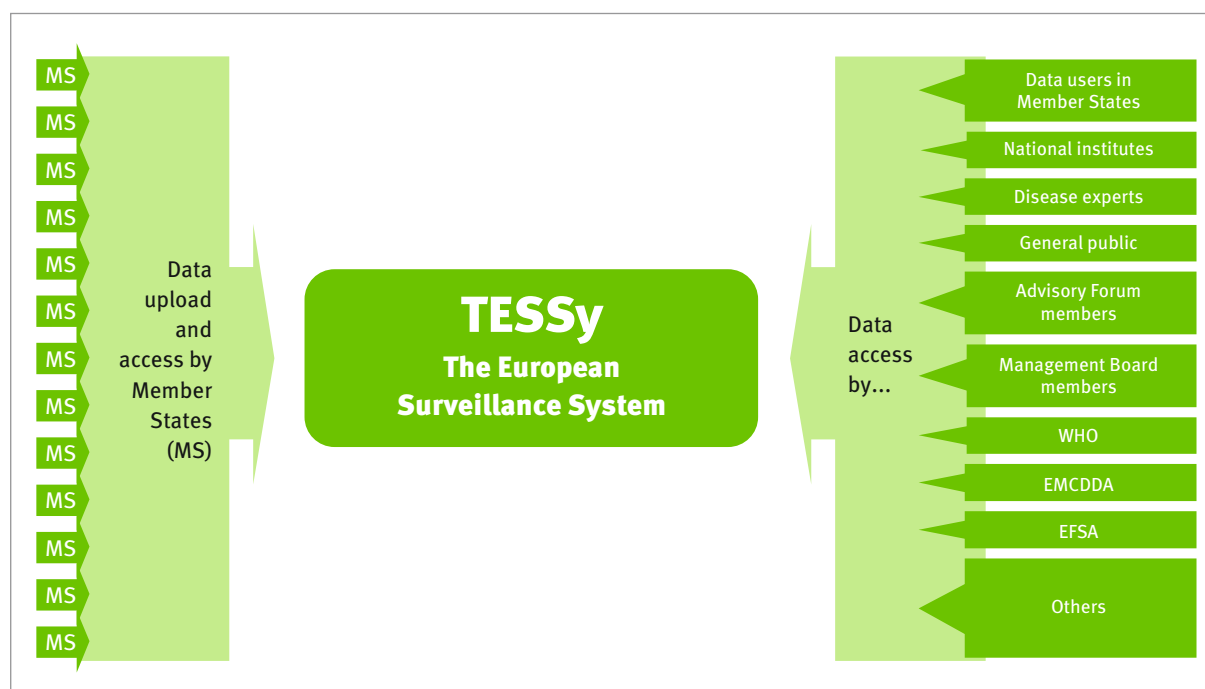
* Outsourcing is a temporary solution until the network is fully integrated into ECDC.

Further development of TESSy incorporating more enhanced surveillance and integrating DSN databases

The first version of TESSy was launched at the end of January 2008. TESSy is the central system that gathers data collection and dissemination of communicable disease surveillance data for core and enhanced surveillance.

The launch took place during a two-day training session for the National Contact Points for Surveillance on 29 and 30 January 2008.

The integration of EuroHIV, the DSN for HIV and AIDS, was accomplished by incorporating enhanced surveillance for HIV and AIDS into TESSy. The training of the national disease experts for HIV and AIDS took place on 13 and 14 March 2008. The integration of EuroTB DSN was accomplished by incorporating enhanced surveillance for tuberculosis into TESSy. The training of the national disease experts for tuberculosis took place on 22 and 23 April 2008. For both diseases, ECDC and WHO EURO are conducting joint surveillance throughout the European region.

Figure 1. The new European Surveillance System (TESSy)

With the addition of enhanced surveillance for zoonoses (brucellosis, campylobacteriosis, echinococcosis, listeriosis, rabies, salmonellosis, trichinosis, shiga/verotoxin producing *Escherichia coli* infections and yersiniosis) and invasive bacterial infections (*Haemophilus influenzae*, meningococcal disease) into TESSy, the integration of both the EU-IBIS and the Enternet DSNs were accomplished.

Online training for reporting of zoonoses and invasive bacterial infections was performed from 19 to 23 May 2008, and was followed by another online training for the contacts for invasive bacterial infections, which took place from 9 to 13 June 2008.

A specific nomination process has been put in place to ensure the inclusion of the appropriate national contact points and disease experts to represent Member States.

Some statistics on TESSy usage in 2008

- 115 users from 29 countries;
- 1.3 million records in the database;
- peak of 0.5 million new records in one month;
- 49 diseases covered;
- enhanced surveillance for 12 diseases;
- peak of 250 helpdesk requests per day.

Promotion of the new case definitions

The revised case definitions (which define who is included as a case for surveillance) were published on 28 April 2008.

Priority list of diseases for surveillance

As there cannot be enhanced (in-depth) surveillance on all diseases, priority diseases have to be defined, for which more information is needed. As a first step before the prioritisation of diseases for surveillance, the current list of diseases lined out for EU surveillance in the Decision No 2000/96/EC of the European Parliament and of the Council should be reviewed and revised if necessary. A proposal was brought to and accepted by the European Commission's Network Committee that

foresees a small group of technical experts preparing a set criteria for the inclusion of diseases into EU surveillance (taking the existing ones into consideration) and applying these criteria to the current disease list and a number of other (currently not included) infectious diseases. The result of this process will be discussed with the Competent Bodies for surveillance and the Advisory Forum before bringing it to the Network Committee for adoption. The work will be implemented in 2009. Based on the newly agreed list, priority diseases for enhanced surveillance can then be decided upon.

Development of disease-specific surveillance based on agreed objectives

A small working group comprising members of the Advisory Forum and of the Competent Bodies for surveillance presented an ECDC consolidated proposal for the future surveillance objectives to the Advisory Forum. The objectives are categorised in short and long-term objectives, signalling implementation within the next 2–3 years or in a longer term respectively. For disease-specific surveillance, some further specific objectives will be developed with the respective experts from the Competent Bodies for surveillance. These objectives will be used to guide the further development of surveillance in the EU.

Cooperation with external partners

In addition to a very intense exchange of information and data with the national surveillance institutes in the Member States, cooperation was continued and further developed with various institutions that also carry out data collections. As agreed in 2007 with WHO EURO, in order to avoid duplications, joint data collections for HIV/AIDS and tuberculosis (TB) took place in 2008, allowing publication of the HIV annual report for World AIDS Day (1 December) and of the TB report for the World TB Day, in March 2009. These reports, therefore, cover the whole European region and not only the EU.

For other diseases, discussions with WHO are ongoing as how to align the reporting, in order to reduce double work for Member States. The cooperation with the European Food Safety Authority (EFSA) regarding the *Community Zoonoses Report* continued as well as with the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) regarding HIV and Hepatitis B and C (see also Disease-specific activities, page 17).

Trends in HIV modes of transmission

TESSy has already contributed to highlight some trends in public health in Europe. The data on HIV for 2007, for example, showed that in the EU/EFTA the predominant modes of transmission for HIV infection appear to be sex between men followed by heterosexual contact. Around 40% of the cases reported to be heterosexually acquired were diagnosed in individuals originating from countries with generalised HIV/AIDS epidemics. In the three geographical areas of the WHO European Region, injecting drug use is still the

main mode of transmission in the East, while in the Centre the predominant mode of HIV transmission is heterosexual contact, although the number of HIV cases reported among men who have sex with men has also increased. In the West, the predominant mode is sex between men, followed by heterosexual contact, when cases in persons originating from countries with generalised epidemics are excluded (see also section on HIV/AIDS, page 40).

Strategy 2. Data analysis

Regular analysis of data, including improving the quality of the data

For the core data, as well as the enhanced surveillance, extensive validation rules were implemented in TESSy with the purpose of checking the quality of the data sent in. General and disease-specific data checks are sent back to the reporting country before the data is uploaded into the database, in order to help improving the quality of the data that are collected and reported.

The following data collections were performed in 2008:

- all diseases for the Annual Epidemiological Report covering 2006;
- zoonoses, for the EFSA report covering 2007;
- zoonoses, for quarterly reports covering 2008;
- HIV/AIDS for the annual report covering 2007;
- tuberculosis for the annual report covering 2007.

Strategy 3. Reporting and outputs

Periodic information dissemination on disease surveillance is fully operational

All the data collections performed in 2008 were targeted to the production of the periodic reports mentioned above. Apart from the disease-specific and Annual Epidemiological reports, online reports were produced with TESSy. These online reports give a more up-to-date overview of the data present in the system. Currently, only TESSy users are able to view them. The wider availability (also to the public) of the surveillance data will be part of an agreement with the Member States to be discussed in March 2009 with the Management Board.

The frequency of data collection and reporting (to be determined per disease) will be agreed upon in 2009. Based on this frequency, appropriate and timely reporting will be implemented.

In 2008, the following reports were published:

- Annual Epidemiological Report, covering 2006;
- EFSA Zoonoses report, covering 2006 (ECDC contributed with parts of it – data, analysis and interpretation – on human infections);
- Zoonoses quarterly reports, for the third and fourth quarters of 2007 and for 2008;
- HIV/AIDS annual report for 2007.

Strategy 4. Quality assurance of surveillance data

Supporting the development of the capacity within the MS surveillance systems

By the end of 2008, over 600 experts from the Member States and collaborating organisations were participating in the European Surveillance System. With the introduction of TESSy, every user in Member States has been offered training. Most persons were trained on-site, and

Second Annual Epidemiological Report



In 2008, ECDC published the second edition of its *Annual Epidemiological Report on Communicable Diseases in Europe*. The report featured a dedicated section and detailed commentary on healthcare-associated infections. Over three million people in the EU had a healthcare-associated infection in 2006, of whom approximately 37 000 died. The death toll from healthcare-associated infections is comparable to the number of people who die each year in road traffic accidents. The 2008 report also included an overview of communicable disease surveillance data from 2006 and a description of acute threats to human health from communicable diseases.

for the rest an online training was made available. One of the on-site trainings (for HIV/AIDS) was targeted to the WHO EURO region, as part of the joint surveillance activities with WHO EURO. This training involved parallel translation and translation of the training material into Russian.

In both online and on-site instructions, a pool of trainers was available to offer individual support. Additionally, ECDC experts were introduced to the system in an induction training.

The training program consists of two parts. One focuses on the introduction to TESSy; the other part focuses on using MS Office tools to do data transformations.

Besides the focused training programme, a helpdesk has been set up to support users in Member States. The TESSy helpdesk is the focal point for all surveillance-related support requests. Its activities and interaction with Member States cover not only questions about submitting data to TESSy, variables and coding, but also other topics required for the system operation, such as coordination of user account nominations and coordination of training material. The TESSy helpdesk also collaborates with disease-specific experts in ECDC to jointly address the technical or epidemiological questions it receives.

Improve data quality and data comparability between Member States

Although this is a long-term activity, work was started in 2008. Before each data submission is uploaded into TESSy, a set of disease-specific validation rules is automatically applied and feedback given to the data provider as to whether the data contain errors (then the submission is rejected) or minor implausibilities (then a warning is given, but submission is not blocked). These validation rules will be refined over time to increase the quality of the incoming data. During each analysis,

frequent communication takes place with the data providers to ensure completeness and correctness of the data.

Prior to the data submission into TESSy, each Member State had to update the description of the surveillance system(s) from which they intended to send data. Thus each data record contains a reference to the data source, which allows taking different properties of the respective system into account for the data interpretation. As such, there is no comparability, however, differences become a bit more transparent. There were more activities planned under this strategy, but, due to the huge effort put into the launch of TESSy, these activities had to be postponed to 2009.

1.2 Scientific support

During 2008, the Scientific Advice Unit (SAU) worked towards consolidating its activities along the lines of the five key strategies of the *ECDC Multi-annual Programme 2007–2013*:

- to function as a catalyst for public health research;
- to promote, initiate and coordinate scientific studies for evidence-based public health and to identify future threats;
- to produce guidelines, risk assessments and scientific answers, and work with Member States to implement evidence-based prevention and intervention;
- to serve as the prime source of scientific advice on communicable diseases in Europe;
- to provide public health microbiological laboratory support and coordination in EU.

Key products 2008

- held the second European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE) in November 2008, in Berlin;
- organised and conducted scientific symposia on New Tools for TB Control in February 2008 and the second Scientific Consultation Group in December 2008, in Stockholm;
- assessed dual use of life science research and its potential application in bioterrorism;
- produced scientific guidance: *Guidance for the introduction of HPV vaccines in EU countries*, *Guidance on priority risk groups for influenza vaccination*.
- held second and third meetings of the National Microbiology Focal Points, in March and September 2008, in Stockholm;
- conducted survey and built database of public health microbiology reference laboratories in EU.

Strategy 1. Becoming a public health research catalyst

As part of the scientific support activities, ECDC is involved with catalysing public health research. The aim is to identify 'directed' research needs (i.e. question- and need-based research goals) and to coordinate the application of results between key stakeholders.

New tools for TB control symposium

On 12 February 2008, the Scientific Advice Unit launched the first of a series of planned ECDC Research Symposia on different topics in infectious disease control and prevention, in the context of our mission and mandate in public health: to improve coordination and networking between researchers, funders, implementers, and policymakers. In this meeting the topic 'new tools for tuberculosis control' was discussed and follow-up actions for improved advocacy, coordination and funding investments proposed. Participants included project coordinators from six projects funded under the Sixth and Seventh Framework Programmes (FP6 and FP7) of the European Commission, as well as WHO representatives, and key European and international stakeholders.

Second meeting of the Scientific Consultation Group

In December 2008 the second meeting of the Scientific Consultation Group (SCG) was convened, with representatives from 36 pan-European scientific societies, federations, associations and organisations. ECDC aims at establishing close relations with learned societies in the SCG to advance public health in Europe through networking and cooperation with organisations that are firmly rooted in the research community in Europe. Two themes were selected for this meeting:

- priorities for research into infectious diseases in the EU; and
- the development of evidence-based guidelines in the area of communicable diseases.

In the meeting it was agreed that there is a role for ECDC to guide the process of setting priorities for future research in Europe in the area of infectious diseases with emphasis on the public health dimension and research into determinants (e.g. climate and socio-economic factors) and burden of infectious diseases, rather than disease-related clinical research.

Evidence-based guidelines were recognised as strong tools for further improving the quality of public health interventions in Europe. The participants voiced the need of an internationally recognised body, such as ECDC, to provide support to infectious diseases guidelines (e.g. by identifying areas where guidelines need to be formulated), becoming a clearing-house of evidence, a repository of guidelines, and to evaluate and endorse guidelines.

ESCAIDE

In November 2008, more than 500 health experts gathered at the second European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE) in Berlin. The conference — which was sponsored and jointly organised by ECDC, the EPIET Alumni Network and TEPHINET — achieved its goal of:

- strengthening networks of professionals involved in applied infectious disease epidemiology;
- sharing scientific knowledge and experience in this field in Europe and internationally;
- providing a dedicated platform for EPIET/Field Epidemiological Training Programme (FETP) fellows to present their work.

Four keynote plenary sessions addressed topical issues relating to communicable disease prevention and control: migration, vaccination, communication and vector-borne infections. In addition, over 200 abstracts were presented in 20 oral parallel sessions and posters sessions. The accreditation of ESCAIDE 2008



Johan Giesecke, Chief Scientist of ECDC, at the ESCAIDE conference, in November 2008.

by the European Accreditation Council for Continuing Medical Education (EACCME) for the first time permitted delegates to receive Continuing Medical Education credits for attending the conference. Following the success of the 2008 conference, planning is already underway for ESCAIDE 2009, which will be held in the autumn of 2009 in Stockholm. More information can be found at: <http://www.escaide.eu/>

Mathematical modelling of infectious disease

Based on observed characteristics of infectious diseases, epidemiologists attempt to construct mathematical models that would make it possible to better predict the pattern of spread of a communicable disease within the population. In 2008 the Scientific Advice Unit was engaged in a number of intensive activities focused on enhancing the capacity of mathematical modelling of infectious diseases in EU Member States, including multiple experts meetings, scientific seminars, and liaison activities.

Liaison with DG Research of the European Commission

The unit continued to maintain close links with DG Research, partly through informal contacts, but also more formally: the ECDC Director took part in meetings of the DG Research Advisory Board, where she presented the collected ECDC views on research priorities and thus exerted an influence on the preparation of proposals under the EU Seventh Framework Programme.

Strategy 2. Promote, initiate and coordinate scientific studies

In addition to its public health research catalyst function, the Scientific Advice Unit initiates and coordinates studies on its own initiative, taking into account European priorities and added value.

European Environment and Epidemiology (E₃) Network

Climate change is expected to have severe impact upon health, not least through altered patterns of infectious disease spread — vector expansion (such as mosquitoes or ticks for example) due to warmer temperatures increases the risks from diseases such as chikungunya, dengue and tick-borne encephalitis (TBE), whilst

increased temperatures are also strongly correlated with increase outbreaks of food- and waterborne diseases, such as salmonella.

ECDC is in the process of developing the European Environment and Epidemiology (E₃) Network. This network's objective is to connect epidemic intelligence and infectious disease surveillance (such as TESSy and Threat Tracking Tool (TTT), both currently housed at ECDC) with meteorological variables, water quality records, air quality measures, remote sensing information, geological information, etc. Linking this data will enable coordination between public health and environmental agencies. Identifying long-term trends will build the evidence base for informing strategic public health action. During two workshops co-organised by ECDC/European Environment Agency (EEA)/Joint Research Centre (JRC)/WHO EURO in 2008, expert participants provided ECDC with a series of strategic recommendations which, together with key European needs, form the basis for the ECDC strategic vision for the E₃ Network.

Present and Future Burden of Communicable Disease in Europe (BCoDE)

Ensuring comprehensive knowledge of the existing and future burden of infectious diseases in the EU is a challenge that ECDC will be addressing over the four coming years in order to provide baseline figures for planning and prioritising both EU and national efforts. Building on an earlier pilot study, ECDC's preparation for the BCoDE project accelerated substantially in autumn 2008, when the Centre launched a request for proposals. The project aims to develop a methodology, to measure and to report on the current and future burden of communicable diseases in EU and EEA/EFTA countries. It will look at as many of the 49 infectious diseases and health issues

listed in the Decision No 2119/98/EC of the European Parliament and of the Council as feasible and possibly other conditions and health issues as well. The project will also consider how to measure the impact of public health interventions such as vaccination, emerging trends (including demographic change and global climate change), and the burden of chronic diseases, which may be consequences of infections including infection-associated cancers. Key stakeholders of the project include ECDC, Member States, the Commission and WHO.

Unforeseen infectious disease threats

Preventing the transmission of emerging pathogens and the resurgence of others, as well as enhancing the rapid and coordinated response capability to these threats, is a responsibility shared among national health authorities and the European Commission. In order to limit the fallout of such an event, it is critical to compile a comprehensive threat assessment. Such a proactive approach can help mitigate the negative consequences of an infectious disease emergency for which the public health infrastructure is ill prepared. ECDC organised a workshop on emerging infectious disease threats on 4–5 July 2008. During this workshop emerging infectious disease threats to public health in Europe were identified according to pathways, sources, and drivers developed by the UK Foresight group. Ten potential scenarios of these threats were developed along with the potential intervention procedures to interrupt escalation of the threat described in the scenarios. A final report will be completed in the second quarter of 2009.

Dual use life science research and its potential application in bioterrorism

Recent and rapid developments in life science research, including genomics, proteomics, and synthetic biology, offer great potential for benefiting public health. Yet biomedical research and expertise is potentially 'dual use': the same beneficial advances might also be used for malevolent purposes. However, any attempt to restrict specific avenues of life science research might unintentionally prevent the accumulation of knowledge beneficial to public health, or might simply ensure that the research migrates to less restrictive regulatory environments. In order to build upon previous research in this area and contribute to ongoing discussions about the potential threats to public health that the dual use biomedical research might pose, ECDC is in the process of conducting a 'meta-assessment' — an assessment of the key recent assessments of dual use biomedical research and its potential application by bioterrorists. Specifically, ECDC is assessing which areas of life science research might be considered useful by would-be bioterrorists and the most prominent options designed to strengthen biosecurity. A final report will be submitted on 1 March 2009.

Strategy 3. Produce guidelines, risk assessments, scientific advice

The key function of ECDC Scientific Advice Unit is the provision of scientific advice, risk assessment and scientific guidance. Two examples of scientific guidance provided in 2008 are described in more detail below.

Scientific guidance

In 2008 SAU finalised the *Guidance for the introduction of the human papillomavirus (HPV) vaccines in EU countries*. This guidance was developed by an expert panel who laid down the scientific basis for the potential introduction of human papillomavirus (HPV) vaccines in order to help Member States to make policy choices. It highlights the issues to be considered and it provides a list of policy options for each of these issues.

In 2008 ECDC also issued *Guidance on priority risk groups for influenza vaccination*. This guidance identifies and describes population groups at increased risk for severe outcomes of influenza ('risk groups') and advocates vaccination for two major groups, namely: a) persons in the older age group, usually 65 years and older; and b) persons with chronic medical conditions.

Rapid scientific responses and technical documents

Also a large number of rapid responses to questions forwarded from the European Commission and other sources were given.

Detailed information on guidance and technical documents developed by SAU is available on the ECDC web portal. The list of ECDC scientific publications in 2008 is provided in Annex 6.

Strategy 4. Becoming the prime repository for scientific advice on communicable diseases

ECDC Scientific Library

In 2008 the ECDC Library strengthened the functionality of the services established in 2007, which were evaluated by collecting ECDC experts' opinions in the 'Customer Satisfaction Survey 2008'. The Library Report was launched with the aim to inform ECDC internally about the development of the Library project. The Library also joined the EAHIL (European Association for Health Information and Libraries) and participated in the *Eurosurveillance* Editorial Board Workshop, presenting the results of the scientific study for enhancing its quality. The Library offers a collection of more than 60 subscribed journals, provides access to a list of databases, including Embase.com and Scopus, and 200 book titles on public health, communicable diseases and the EU. The Library collection is electronic and also can be consulted in situ.

Knowledge Management

Knowledge Management (KM) activities in ECDC Scientific Advice Unit in 2008 included activities in three main areas of ECDC work plan:

- setting up KM services by developing and implementing modules of the Knowledge and Information Services (KIS). This included the set up of a Document Repository (upload of several thousand legacy documents), the set up of core Terminology Services, supporting the work of Library, the design and implementation of a European Expert Directory, and a pilot project for Knowledge Navigation. KIS services will undergo integration into the new ECDC intranet in 2009;



The ECDC Scientific Library provides access to more than 60 subscribed journals, a list of databases and 200 book titles on public health, communicable diseases and the EU.

- providing KM consultation and support for ECDC – by series of internal workshops, by operating a Scientific Consultation Group (KM WG), by authoring interoperability standard documents for ECDC, and by supporting various ICT projects in design and implementation issues;
- supporting Member States scientific community by participation and publications/presentations for high level conferences and meetings.

Strategy 5. Microbiological laboratory support

Microbiological laboratories play an important role in communicable diseases as they are the first tool for surveillance and early detection in case of an outbreak. Therefore, an important part of the ECDC remit is to build up collaboration between the Centre and the microbiological laboratories of the EU. ECDC does not have and will probably never have laboratory capacity of its own and therefore needs to establish close working relations with external laboratories or laboratory networks. The strategy for ECDC collaboration with microbiological laboratories was developed in 2006 and 2007 and has been implemented in 2008.

Working with National Microbiology Focal Points and Public Health Microbiology Survey

In 2008 ECDC held two meetings of the National Microbiology Focal Points (NMFPs). Nominated at national level, NMFPs represent the public health microbiology communities in the EU and the EEA/EFTA countries. At

the third NMFP meeting in September 2008, the preliminary results of a survey *Public Health Microbiology: Systems, Structures, Gaps and Needs* were unveiled. Two types of information were collected:

- data to map the public health laboratory resources in the EU;
- information about the needs of Member States in terms of training, defining core competencies and good practice models of reference laboratory selection and review. Survey results were used to develop a database of EU public health microbiology reference laboratories. Formal and informal exchanges of information are a key feature of the NMFP meetings.

Microbiology web section

In 2008 ECDC launched a microbiology section of its web portal. More information about ECDC microbiology-related activities can be found in this web section at: www.ecdc.europa.eu

1.3 Preparedness and response functions

Key products 2008

- 251 threats monitored using the Threat Tracking Tool (TTT);
- 52 weekly communicable diseases threat report produced;
- support to epidemic intelligence for two large mass-gathering events;
- preparation of 31 original threat assessments;
- inauguration of a new Emergency Operation Centre (EOC) operating on a 24/7 on-duty system;
- guiding principles for EU response to communicable disease threats agreed upon;
- organisation of two simulation exercises.

Strategy 1. Detecting and assessing threats

Detecting threats to the EU

Since November 2007, the operations of the Early Warning and Response System (EWRS) are fully supported by ECDC. Through this platform, EU/EEA/EFTA Member States exchanged 99 messages, 210 comments and 169 selective exchanges messaged in 2008. ECDC prepared in collaboration with the European Commission (DG SANCO C3) the annual report requested in the EWRS regulation.

During 2008, 251 threats were monitored using the Threat Tracking Tool (TTT). Two-third of these threats affected the EU/EEA/EFTA countries. Special attention was devoted to two large mass-gathering events that took place in 2008: the EURO 2008 football championship, in Austria and Switzerland, and the Beijing Olympic Games. For the duration of these two events, ECDC produced a daily threat bulletin focusing on the event, aiming at ensuring optimal detection of emerging threats in these contexts, and organised daily teleconferences with the Member States. Screening the news during the Beijing Olympic Games gave the Centre the opportunity of a fruitful collaboration with the Joint Research Centre of the European Commission in Ispra, Italy, to implement screening of Chinese language in the Medical Information System (MedISys), and with the Robert Koch Institute in Germany, which seconded a Chinese-speaking epidemiologist to ECDC. During the EURO Cup, an ECDC senior epidemiologist and an EPIET fellow provided on-site support for the enhancement of epidemiological surveillance.

Assessing threats to the EU

Following the detection of potential communicable disease threats for the EU, a total of 31 original threat assessments were prepared, for which an additional five updates were provided. The threat assessments

addressed 24 different diseases. For hepatitis A, botulism, tuberculosis, influenza, measles on an aircraft and rabies, two different threat assessments were finalised, related to two independent threats. Six of the original threat assessments were directly linked to potential exposure on an airplane or ship. While most assessments focused on infectious diseases, exceptionally and upon specific request by the European Commission, threat assessments were prepared for non-communicable diseases related events: the contamination of dairy product in China with melamine, and for the presence of abnormal quantities of cobalt-60 in imported stainless steel in Italy. The majority of the identified threats occurred within the EU, even though some international threats were also addressed, like dengue fever in Brazil, or influenza in Hong Kong. All these threat assessments were circulated through the EWRS to EU Member States, and the most relevant ones were published on the ECDC website.

Strategy 2. Support and coordination of investigation and response

A large measles outbreak was reported from Austria in the first half of the year. Because the EURO 2008 football championship of June took place in both Switzerland and Austria and was expected to draw many European and international visitors, ECDC collaborated with the Austrian health authorities to assess the risk to visitors.

Following the first confirmed case of Crimean-Congo haemorrhagic fever (CCHF) in Greece, ECDC organised an expert meeting to assess the existing needs for prevention and control of CCHF in the EU.



ECDC was present in Vienna during the EURO 2008 football championship to support the Austrian authorities in their activities of epidemiological surveillance.



The Emergency Operation Centre of the ECDC, inaugurated in March 2008, operates a 24/7 on-duty system, involving 38 staff and ensuring round-the-clock screening of emerging health threats in the EU.

Outbreak of hepatitis A

Support was provided to the Czech Republic, Latvia and the Slovak Republic in the context of a large outbreak of hepatitis A. While initially the cases in Latvia and the Czech Republic were limited to intravenous drug users, the outbreak later spread to the general population. ECDC, in collaboration with the Latvian Public Health authorities, organised an expert consultation in Riga in November 2008 to share experience in response activities to the hepatitis A outbreaks. In addition, an analysis with regards to the impact and risk of the epidemic on blood donations was carried out.

Coordinating emergency operations

The Emergency Operation Centre of the ECDC is the facility supporting all operations related to detection, assessment and response to emerging threats in the EU. The centre was inaugurated in March 2008 by Dr Miroslav Ouzký, member of the European Parliament.

The centre operates a 24/7 on-duty system, involving 38 staff and ensuring round-the-clock screening of emerging threats. In 2008, six training sessions were organised for on-duty operations, involving 54 ECDC staff members as well as six sessions on crisis management involving 61 staff members.

The centre is supported by state-of-the-art communication tools which were used in 2008 to monitor 557 videoconferences and 134 audioconferences. Nineteen delegations visited our operation centre in 2008, both from the EU and abroad. In order to strengthen the ECDC operation centre with partner institutions, ECDC carried out country visits to Hungary and Germany, as well as to China.

The annual meeting of Competent Bodies for threat detection and Emergency Operations Centre took place in October 2008. For the first time epidemic intelligence officers and technicians/logisticians running the communications equipments at national level met with ECDC staff to discuss tools and procedures for threat detection and supporting activities.

Strategy 3. Strengthening preparedness

EU capacity for response

In order to ensure adequate diagnostic capacity in outbreak situations, an outbreak assistance laboratory network has been created, with representation from all over the EU. Weekly contact with the network ensures support to ECDC threat detection activities and during outbreaks. In addition, the network provides a training site for the two microbiologists who have been integrated in EPIET for the first time.

During the annual meeting of the ECDC Competent Bodies for response activities, guiding principles for EU response to communicable disease threats were agreed upon. The further development of the disease-specific parts will continue in 2009.

Considering the increasing importance of international travel on one hand, and the ongoing environmental changes on the other, the (re-)emergence of communicable diseases is a priority for ECDC. The X/MDR TB case on a plane between the US and Europe in 2007, illustrated the specific risk for spread of infection from infectious persons in aircrafts. In 2008, ECDC coordinated a comprehensive assessment of the risk for infection in such particular setting. The review of literature and existing guidelines, as well as expert interviews, is now available and provides the basis for further defining guidance on how to respond when confronted with the potential spread of infection on aircrafts. This work will be finalised in 2009.

Finally, in order to assist the Member States in their full understanding of ECDC, and in particular its threat detection and response activities, the opportunity is provided to Member States delegates to spend one week at ECDC, when a series of comprehensive briefings on ECDC's in general and Preparedness and Response Unit's (PRU) activities in particular are provided. In this way, the visitors get well acquainted with our role and our capacity, which is useful for future ECDC-facilitated outbreak support activities. Considering the large interest in these briefing sessions, they will continue in 2009 as well.

Simulations exercises

As in the previous year, two simulation exercises were organised by ECDC with participation of Member States, Commission and different partners. The first simulation exercise was an internal command post exercise (Green Field Exercise) that took place in June 2008. The objective was to evaluate and refine standard operating procedures to respond to an escalating Public Health Event (PHE) and test internal and external communications. The second table-top exercise focused on testing guidelines to respond to outbreaks related with food- and waterborne diseases. Nine Member States participated as players as well as relevant EU and international stakeholders.

Besides, ECDC was involved either as a player or as an observer in exercises organised by the Commission to test the Commission's crisis communication platform (HEDIS) in June and the command post exercise Aeolus, which tested the functionality of current communication tools in sharing information at a national, EU and international level in a context of an international health threat. ECDC also contributed to the evaluation of a WHO HQ internal exercise in Geneva in June 2008.

1.4 Training

Key products 2008

- 41 fellows coached through the EPIET programme in 2008;
- 250 public health experts from 30 EU/EEA countries participated in ECDC short training modules;
- four 'training of trainers' workshops organised during the ESCAIDE conference in Berlin;
- support to four Member States in conducting assessments of their training needs and resources.

ECDC activities regarding training are conducted according to a training strategy developed with the Member States in 2005. A consultation of the Competent Bodies for training was organised in October to review the relevance of this training strategy with the current needs of the Member States. A meeting report was produced, highlighting priorities for further implementation of the training strategy.

Strategy 1. Development of European Union capacity

European Programme for Intervention Epidemiology Training (EPIET)

EPIET provides training and practical experience in intervention epidemiology. Fellowships last two years. The EPIET Programme Office has been gradually incorporated into ECDC, with the integration being completed on November 2007. In 2008, 41 fellows were coached through the EPIET programme. At the end of 2008, with the recruitment of the new 14th cohort, 50 fellows had been enrolled in the programme. A three-week introductory course was held for the new cohort in Mahon, Spain. In addition, five one-week modules were organised for the fellows, including external participants. These modules were organised in Portugal, Sweden, Norway, Lithuania and Cyprus. The EPIET programme team has visited the UK, Austria, France, Germany and Sweden as part of the review of training sites hosting fellows in the Member States.

Fellows participated in three field missions to assist countries: Austria, in the occasion of a measles epidemic, and through WHO in Burkina Faso, for meningitis surveillance, and for a mumps investigation in Moldova.

ECDC has hosted two observers from Iran during the 14th EPIET introductory course and provided an experienced trainer from the EPIET network to the introductory course of the newly created Field Epidemiology Training Programme (FETP) in Iran. EPIET has also continued the exchange of coordinators and trainers with the Canadian Field Epidemiology Program.

The scientific coaching of the fellows is conducted through a framework partnership agreement with Spain, France, Germany and the UK.

EPIET fellows delivered 30 oral presentations during the ESCAIDE conference and presented 28 posters. They published 12 manuscripts as first author in peer-reviewed journals in 2008, including *Eurosurveillance*.

In 2008, the contribution of EU/EEA/EFTA Member States remained very high and instrumental in the success of the activities. It is estimated that Member States

supervisors have provided 5 000 hours of guidance. In addition, experts from the various National Institutes of Public Health and EPIET Training Sites provided a total of 32 weeks of facilitation in EPIET courses during the last year without receiving honorarium or fees. Four modules were hosted by the Member States in 2008 and one case study developed.

More information on EPIET is available at www.epiet.org

Short training modules

In 2008 a total of 250 public health experts from EU Member States participated in ECDC training modules. Participants came from all 30 EU/EEA countries. An overview is given on Tables 2 and 3.

Table 2. Participants in short training modules in 2008, by topic

Title of Training Module	Hosting country	Participants
EPIET Computer Tools in Outbreak Investigations	Portugal	10
ECDC Laboratory and Epidemiology	Netherlands	30
ECDC Outbreak Investigations (five modules)	Netherlands, Spain, Hungary	120
ECDC Outbreak Management (two modules)	Sweden, France	29
ECDC Time Series Analysis	France	21
ECDC Vaccines	Netherlands	32
EPIET Introductory Course	Spain	8
Total		250

Table 3. Participants in short training module in 2008 by country

Country	Participants
Hungary	15
Lithuania	15
Portugal	14
Germany	13
Romania	13
Estonia	12
Slovenia	12
Sweden	12
Czech Republic	11
Netherlands	11
Slovak Republic	11
UK	11
Belgium	10
Latvia	10
Bulgaria	9
Poland	9
Spain	9
Malta	8
Austria	6
Ireland	6
Italy	6
Norway	6
France	5
Denmark	4
Cyprus	3
Finland	3
Iceland	2
Liechtenstein	2
Greece	1
Luxembourg	1

Strategy 2. Networking training programmes

ECDC coordinated a team of partners for the organisation of four 'training of trainers' workshops during the ESCAIDE conference in Berlin. Partners included the Canadian Field Epidemiology Program (CFEP), the Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET), the EPIET Alumni Network (EAN) and the Postgraduate Training for Applied Epidemiology (PAE) of Germany. Sixty trainers in applied epidemiology participated in one or two of the workshops covering 'skills in training facilitation', 'designing case-studies', 'coaching adult learners' and 'expert review of scientific manuscripts'.

ECDC contributed to the organisation and facilitation of three regional workshops to identify best practices in joint operations between Law Enforcement and Public Health in EU Member States. The workshops were held in Slovenia, Luxembourg and Portugal and were organised by the European Commission (DG SANCO, DG JLS), EUROPOL and ECDC. A total of six ECDC experts and EPIET coordinators joined the workshops as facilitators.

Strategy 3. Creation of a training centre function

At the request of Member States, ECDC supported Member States in conducting assessments of their training needs and resources in Portugal, Hungary, Slovenia and Romania.

A call for tender was issued on the development and implementation of a Field Epidemiology Manual (FEM) in WIKI format. The specific contract for the FEM was signed at the end of 2008 and development will start early 2009.



The *HIV/AIDS surveillance in Europe – 2007*, produced jointly with WHO EURO, was one of the 21 scientific documents published by ECDC in 2008.

1.5 Health communication

Key products 2008

- 21 scientific documents published in 2008;
- reinforcement of ECDC visibility;
- weekly publication of *Eurosurveillance*;
- organisation of the first European Antibiotic Awareness Day with participation of 32 countries;
- preparation of a communication toolkit on chikungunya fever;
- comprehensive and fully updated interim website prepared;
- technical consultation meeting on outbreak communications training.

The Health Communication Unit (HCU) is responsible for communicating the scientific and technical outputs of the Centre to European health professionals and to the general European public, as well as supporting the Member States on communication activities. After its creation as a new technical unit within ECDC in 2007, HCU has further consolidated and developed the channels and methods aimed at keeping the scientific community, the general public and the media informed on ECDC's activities.

The main focus in 2008 was the implementation of a technical communication infrastructure, providing a gateway to all ECDC scientific and technical outputs to health professionals and a wider public (internet), to external partners (extranet) and ECDC staff (intranet). A targeted group-specific communication approach was introduced in ECDC scientific publications, and efforts were made to improve the dissemination of scientific/technical information. *Eurosurveillance* is becoming of increasing importance in this regard. A competence and resource centre in risk/health communication will start to form and ECDC will play a growing role in providing support to Member States. The key communication events in 2008 were the launch of the Tuberculosis Action Plan, the launch of the second ECDC Annual Epidemiological Report and the European Antibiotic Awareness Day.

Within the unit there are dedicated teams working in the following three key areas:

- web services;
- scientific communication; and
- public communication and media.

Strategy 1. Competence Centre for scientific writing and publishing

The Health Communication Unit is responsible for editing and supervising the full publication process, including graphic layout and printing/posting on the website. In 2008 the professional editing and layout services

that guarantee a high quality of ECDC scientific reports and other relevant communications of the Centre were further strengthened and developed. Based on existing classifications for the scientific publications, seven comprehensive, clearly defined series were created and today information is available in the following categories: technical reports, technical documents, guidance, mission reports, meeting reports, surveillance reports and special reports.

Scientific publications in 2008

A total of 21 scientific documents were published in 2008, all of which are available electronically from ECDC's website with a short description of the respective content; selected reports are also available in print (see Annex 6 for a list of all reports edited and published by HCU).

Highlights comprise the *Framework action plan to fight tuberculosis in the European Union*, guidance on policy options for introducing vaccination against human papillomavirus (HPV) and the two surveillance reports: *Annual epidemiological report on communicable diseases in Europe 2008* and *HIV/AIDS surveillance in Europe – 2007*. The latter document was for the first time produced jointly with the WHO EURO and covers the situation in the EU and EEA countries, as well as that in additional 23 countries of the WHO EURO region.

Reinforcement of ECDC visibility

A focus of HCU's work in 2008 was to increase the European scientific community's and other stakeholders' (decision-makers, etc.) awareness of ECDC's scientific output and to disseminate the results to a wide professional audience. A comprehensive dissemination strategy and target-group specific approach was adopted to

ensure that the ECDC scientific output reaches the right audience in an appropriate format. In this respect HCU started a close collaboration with the Member States' Competent Bodies. For example, a monthly email with information about the latest available online publications and a link is sent to focal points in the Member States to be further disseminated nationally to a targeted audience. Furthermore, distribution lists for dissemination of hard copies to key stakeholders (European Commission, Competent Bodies, members of ECDC's governing bodies, focal points in networks) were compiled and are being used.

Besides translating corporate information aimed at the general public, HCU started translation of executive summaries of key publications into all 23 official EU languages plus Icelandic and Norwegian to facilitate access of policy makers and regional/local public health experts to the scientific documents. The translations produced during 2008 will be made available through the multilingual website dependent on quality checks of the translated materials.

Intranet

The ECDC Intranet project was launched in the summer 2008 and a project manager was appointed during the autumn 2008. The ECDC Intranet will be a strategic information and communications platform. One part of the ECDC Intranet is a document management system which, with defined document workflows and rich meta-data based on ECDC knowledge management, will have an impact on all users' day-to-day activities, making them more efficient in their work and delivering significant benefit in terms of quality, efficiency and accuracy of knowledge management related work.

Eurosurveillance



The scientific journal *Eurosurveillance* is a flagship publication of ECDC. After a smooth integration into the Centre in 2007, the journal is published online weekly and contains both peer-reviewed short articles, rapid communications on important outbreaks or public health events; and longer papers on the surveillance, prevention and control of

communicable diseases. The attractiveness of the journal was reinforced by the launch of a new reader-friendly website in April with a modern design and modern functionalities such as easy navigation between articles, the display of related articles, and an improved search function. A continuous rise in the number of subscribers to over 14 000 by the end of 2008 and in contributions from European scientists, as well as from a growing number of experts from abroad, proves that the editorial team worked successfully towards a further increase of the journal's scientific credibility.

The possibility of extremely rapid peer-reviewed communications (min. of 24 to 48 hours) remains a unique feature of *Eurosurveillance*. In several cases, it has facilitated the rapid exchange of information for public health action, such as in an outbreak initially reported from Denmark about infections with *Salmonella* Typhimurium in July, which was followed by reports from several countries (France, Germany and Switzerland) on outbreaks with *Salmonella* Typhimurium several months later. An article on oseltamivir resistance in seasonal influenza viral isolates published in January 2008 rapidly followed the detection of the phenomenon and prompted further research. Eight special issues and further six Euroroundups with contributions from high level scientists have highlighted issues of European importance from the perspective of several Member States.

In total in 2008, *Eurosurveillance* published 291 articles, 128 peer-reviewed rapid communications and 107 peer-reviewed long articles. The remaining 56 articles fall in the categories editorial, news, letters and meeting reports.

Strategy 2. Efficient public information and outreach services

Within this strategic challenge, HCU has been able to promote both proactive and reactive press and media services which included a number of press releases (13, including multimedia press releases), press conferences (seven), webcasts (four), and a diversity of events dealt with via the ECDC press query mailbox. Further development of proactive press and media services included, for the first time, hosting dedicated seminars for journalists (two) to provide in-depth briefing on ECDC activities and related issues, as well as live webcasts (one out of the four organised) to allow journalists from across Europe to ask questions to ECDC experts in real time.

Information campaigns and toolkits

In terms of public information campaigns, 2008 was the year of the first Europe-wide public information campaign on rational antibiotic use — European Antibiotic Awareness Day — which included the participation of 32 European countries. Some key deliverables included the campaign logo in all EU languages as well as an adapted slogan and key messages, a public website, a media toolkit and the launch event at the European Parliament in Strasbourg (see also Antimicrobial resistance and healthcare-associated infections, page 22).

This campaign in particular promoted a considerable press impact: publicity generated over 700 000 items on the internet and 355 articles in the media, reaching a potential audience of more than two million persons. EU political engagement was achieved through the involvement and support from the EU Commissioner for Health, the French EU Presidency and Members of the European Parliament attending the official launch event in Strasbourg. The participation by 32 Member States who held national events, including all 27 of the EU Member States, was also an important result and a demonstration of the added value of the campaign. An evaluation questionnaire to the Member States and public impact assessment are planned for 2009.

Also, a communication toolkit on chikungunya fever was produced in 2008. Associated key deliverables included: factsheets for general public, travellers and healthcare professionals (in five languages); a brochure for general public; a poster for travellers (in five languages); a presentation for general public and health practitioners and a questionnaire for health practitioners. An impact assessment is planned for 2009.

Measurement of ECDC communication impact

The impact of ECDC activity in the European press has been growing as some measurement data suggests: 1 287 ECDC related items published, with the topic Disease/Scientific Issues as the most prominent (1 194 articles). The most prominent press release mentioning ECDC was *Health experts call for vigilance against measles*, reaching a potential audience of 12 748 924 people with 230 media articles. As indicated before, the European Antibiotic Awareness Day generated a significant amount of coverage, with ECDC specifically mentioned in 102 of the 355 articles published on this topic.



Poster of the European Antibiotic Awareness Day campaign in the EU area of Brussels, Belgium, in November 2008.

Overall, the highest volume of coverage was recorded in Sweden, with 272 articles, and a potential audience of 18 912 256.

Corporate communication

In terms of information infrastructures, HCU continued with the quarterly publication of the newsletters *ECDC Insight* (launched in the second half of 2007, with four issues: March, June, September, December) and *Executive Science Update* (targeted at policymakers, with four issues: March, June, September, December). ECDC also showed an increasing presence at scientific conferences/meetings, with 20 info stands, including ECCMID, ESCAIDE and the 2008 International Conference on Emerging Infectious Diseases. Furthermore, the Centre hosted different visitors' groups, with a total of eight visits organised for a total of 103 visitors. A new infrastructure was developed in 2008, namely: ECDC TV, audiovisual footage documenting major ECDC meetings and initiatives. The INFO mail box — with 248 queries answered — is another infrastructure developed throughout 2008. This is a generic email address (info@ecdc.europa.eu) to which the general public or specialised audiences can send questions to ECDC and requests for further information.

The third Annual Report of the Director was published in June 2008, together with an executive summary and the ECDC's corporate brochure was made available in all EU languages plus Icelandic and Norwegian.

Web developments

Further to these developments, HCU implemented a comprehensive and fully updated, multilingual interim website and prepared its content for the future migration to the ECDC portal. In this process metadata with keywords were introduced. The content of the interim website has been continuously expanded and the content from the Disease Specific Networks (DSN) websites of EuroHIV, EuroTB and IPSE has been included. Also the usage of video material was extended and the structure and layout of the website was changed during 2008. At the end

of the year, the website in Swedish was launched containing corporate information and basic information of health topics covered by ECDC.

ECDC also achieved good progress in developing a new ECDC web portal/integrated information system, to be fully operational in 2009. After the selection of a contractor at the end of 2007 and a project manager in January 2008, the web portal project was launched. The portal will offer comprehensive disease information and an interface for the various ECDC data services for the general public. The ECDC extranet, to be integrated into the portal, will include privileged access areas for ECDC partners. The web portal will be launched in spring 2009.

Strategy 3. Capacity building in Member States and Competent Bodies

ECDC has an important role in promoting and supporting professional and specialised risk communication across Member States. This is particularly relevant for situations like outbreaks and pandemics, as both health professionals and citizens will seek information from different national and international sources. ECDC therefore works with the European Commission, Member States and other key partners in order to foster good practice and cooperation between risk management and risk communication, especially in public health crisis contexts. These aims are to be achieved through long-term processes of sharing good practice and evidence on health communication activities and research.

One new area of organisational development was initiated in 2008, with the inception of a coordinated approach to country cooperation on development of health communication activities through cross-section projects and activities to promote integrated developments. This activity, aimed at channelling ECDC outputs and the needs of Member States and Competent Bodies towards a common process of sharing good practice and disseminating evidence on health communication issues, is to be further developed in 2009.

Regarding risk communication — stemming from the conclusions and recommendations of the April 2008 meeting with Heads of Communication from Competent Bodies and given that one major aim of the Centre is to promote coherence in risk communication across Member States — HCU key deliverables included the full participation in ECDC- and Commission-led simulation exercises from which EU-wide technical experience for capacity building was promoted. The design and implementation of a technical consultation meeting on outbreak communications training, bringing together Member State experts to discuss the scope of training required, was another outcome of 2008. This meeting was held in Stockholm on 15–16 December 2008 with participants from Member States, European Commission, WHO and two other EU agencies, to serve as a basis for developing specific training and skills on outbreak communication.

2 Disease-specific activities

The disease-specific activities are managed in seven disease projects that run horizontally across ECDC's four technical units. They represent the cornerstone of the disease-specific scientific output of the Centre and cover all diseases and health topics under EU-wide coverage.

2.1 Influenza

In addition to dealing with its agreed work plan, the influenza programme in 2008 had to take on board a number of unanticipated events and commitments notably the Eurogrippe seminar, supporting the Commission on seasonal influenza immunisation and antiviral resistant viruses.

Routine outputs

Updates on Member States', European-wide ECDC and international development activities in relation to influenza were published weekly on the ECDC website and disseminated via *Influenza News*. This is a virtual weekly newsletter with a 'science watch' and information function. It includes information from global surveillance (for Europe output from the European Influenza Surveillance Scheme – EISS), scientific and public health developments and news. About 100 articles with commentaries were added to the database in 2008. For the first time a special edition of *Eurosurveillance* was dedicated to seasonal influenza immunisation. Other articles on influenza were published regularly in national and EU journals, in *Eurosurveillance* or on the ECDC website. A new section of the website was developed to act as a one-stop-shop for innovations and developments in pandemic preparedness.

Scientific advice and publications

During 2008, ECDC continued to provide advice on seasonal influenza and immunisation, particularly supporting the European Commission's initiative to produce a recommendation on influenza immunisation. Numerous briefings, background papers as well as articles in *Eurosurveillance* were published, on issues like antiviral resistance, pandemic influenza and children, research needs for informing infection control policies and practices, H5N1 cases in China and seasonal influenza activity. ECDC also provided technical support to the Commission and EU Presidencies over the issues around sharing of virus specimens – the so called 'virus sharing'.

External liaison and work

Numerous activities were performed in collaboration with Member States, the European Commission, WHO and other relevant international bodies and European networks, notably the European Influenza Surveillance Scheme. Formal meetings and video or teleconferences were held to ensure joint working with the European Commission (DG SANCO), WHO EURO, the Chinese Centre

for Disease Control and Prevention (CCDC) and the Public Health Agency of Canada. There is a continuous liaison with the United States' CDC through placement of a CDC staff member in ECDC. An ECDC staff member contributed to the steering committee for the Asia-Pacific Strategy for Emerging Diseases (APSED).

ECDC also assisted WHO in further developing the global protocol on rapid containment and gave input to several meetings and conferences, including the WHO Regional Outbreak Communications Workshop held in Brussels. The work with WHO in Geneva has accelerated this year with the recognition that ECDC has much to offer – notably ECDC has helped WHO to revise its guidance on pandemic preparedness (2009), especially concerning surveillance in a pandemic, countermeasures and intersectoral work, such as school closure. On H5N1 vaccines and increasing influenza vaccine use globally (WHO GAP programme), part of ECDC's contribution has been to identify expertise in Member States. In addition, there were numerous contributions from ECDC to European meetings, especially the ESWI Conference in Portugal in September 2008.

Pandemic preparedness

Pandemic preparedness remains important as influenza is the single biggest acute infectious disease threat that will inevitably hit Europe and one where preparation will make a major difference in its impact. Because of its aging population and interdependence, Europe has not been so vulnerable to a pandemic since the 19th century. At the same time, there are pharmaceutical countermeasures that have never been available before. However, there are still many uncertainties over which countermeasures European countries should or should not plan for.

While all 27 Member States and the three EEA/EFTA countries were visited in previous years (see status report of pandemic influenza preparedness from December 2007), in 2008 pandemic preparedness assessment visits were finalised for the three EU candidate countries: Turkey, Croatia and the Former Yugoslav Republic of Macedonia.

Two sub-regional workshops were organised in 2008. The first, Eurogrippe, co-organised with the French EU Presidency, took place in Angers, France, while the second was co-organised with WHO EURO, with the South Eastern Europe and Stability Pact countries in Romania in November. The main topic discussed at these workshops concerned interoperability of the different preparedness plans.

The country level assessment tool for pandemic preparedness was further developed in close collaboration with WHO and members of the FLU section of the Health

Security Committee of the EU (HSC). A total of 20 key indicators have been defined, ensuring comparability between Member States. These indicators will be applied in 2009 in order to finalise the 2009 status report on pandemic influenza preparedness in the EU/EEA.

Seasonal influenza and vaccination

Annual winter epidemics of seasonal human influenza is a major cause of preventable ill health, loss of productivity and premature death in Europe, especially in older people and those with chronic illnesses. As the populations of all European countries steadily become older, influenza will become more important and with it influenza immunisation, the most effective preventive intervention. Estimates suggest that influenza is responsible for around 40 000 to 220 000 excess deaths each year, depending on the severity of the annual epidemics. There is particular potential for health gain in Europe since immunisation coverage across the EU is hugely variable with the majority of EU countries unlikely to reach WHO 2010 target.

In 2008 ECDC started a long-term project with Member States to develop a method for epidemiological assessment of the effectiveness of influenza vaccine in season. One of the secondary objectives is also to have systems in place for working in a pandemic. The 2007/2008 season in Europe was monitored by EISS with weekly updates. It was mild and started rather late but the outstanding event was the unexpected emergence of the first fit viruses that were resistant to the main antiviral, oseltamivir, in late January (see box). The transfer of the EISS system to ECDC started successfully.

Emergency response: antiviral resistance

Until January 2008 many scientists thought that it would be unlikely that fully transmissible ('fit') influenza viruses could develop resistance to neuraminidase inhibitors like oseltamivir and be fully fit. So the finding of viruses with both qualities by the European Surveillance Network for Vigilance against Viral Resistance (VIRGIL) and EISS networks in late January 'changed the landscape'. It made people realise that it could not be assumed that the neuraminidase inhibitors were wonder drugs. Following the declaration of a public health emergency of international concern by Norway, ECDC quickly became the focal point for European and international work on this topic. ECDC conducted with WHO a global consultation and a cross-European investigation of the most affected countries.

Avian influenza

Animal influenzas like avian influenza ('bird flu') are of lower importance, but these remain a cause of concern for those responsible for public health because of the threat to individual's health and the possibility of a pandemic emerging from bird flu.

Work continued on this, though at a lesser pace than in 2007, reflecting that much of the work of developing guidance for Member States and EU bodies had been completed. The direct threat from the H5N1 virus to the EU remained in 2008 with the infection again identified in both wild birds and some domestic poultry during the year, although no cases of H5N1 infection were reported in humans.

2.2 Sexually transmitted infections, including HIV/AIDS and blood-borne viruses

The HIV epidemic remains of major public health importance in Europe, with evidence of increasing transmission of HIV in several countries. In the past few years, about 27 000 newly diagnosed cases were reported each year. It has to be acknowledged that this number is an underestimate because of incomplete reporting and reporting delays. In 2007, the predominant modes of transmission in the EU and EFTA countries are sexual contacts between men and heterosexual contact.

2008 was an important year for HIV and sexually transmitted infections (STI) surveillance and prevention as ECDC took over the responsibility for HIV/AIDS surveillance, in collaboration with WHO EURO and has prepared the ground for taking responsibility for the STI surveillance. Three Member States have been visited to review their programmes for prevention, control and surveillance of HIV and STI. EU-wide studies to evaluate HIV/STI prevention interventions were carried out or set up.

HIV/AIDS

As of 2008, the HIV/AIDS case reporting in Europe was carried out jointly by ECDC and WHO EURO. The national contact points for HIV/AIDS surveillance were given a two-day training before the 2007 data collection started. The annual meeting of the European network for HIV/AIDS surveillance was organised jointly by WHO EURO and ECDC in Copenhagen on 11–12 November 2008 to discuss the current status of the HIV epidemic, the objectives for surveillance for HIV and AIDS, and the future framework for HIV/AIDS reporting. The annual report was presented on World AIDS Day on 1 December 2008.

A project on HIV testing (contract with the University of Ghent) was initiated to review HIV testing policies, practices, outcomes and barriers in the EU. An expert meeting was held in Stockholm on 21–22 January 2008 to discuss the specific items and issues to be addressed in this study. An EU-wide survey was held and in-depth interviews were conducted in five selected countries. The report is expected to be published in early 2009. The results of this study will be the basis for producing evidence-based guidance on HIV testing in the EU in 2009/2010.

A tender aiming at proposing a standardised protocol for behavioural surveillance has been issued and an international team led by the University of Lausanne has

Workshop with Nobel Prize winners at ECDC

On 8 December 2008, ECDC hosted a scientific seminar with Professor Françoise Barré-Sinoussi and Professor Luc Montagnier, joint winners of the 2008 Nobel Prize in Medicine for their role in discovering the human immunodeficiency virus (HIV).

Barré-Sinoussi and Montagnier's work contributed significantly to the current understanding of HIV/AIDS, opening the way for diagnosis of HIV infection and screening of blood products. The knowledge that AIDS is caused by HIV led to the development of antiretroviral treatments, which have extended the lives of millions of HIV-infected people worldwide.

Senior experts from ECDC and Stockholm's Karolinska Institute met with the two Nobel Laureates to debate the challenges for HIV prevention. The seminar



Nobel Prize Laureates in Medicine, Professor Françoise Barré-Sinoussi (left) and Professor Luc Montagnier (centre), debate the challenge of HIV at ECDC Scientific Seminar, Stockholm, 8 December 2008. ECDC Director Zsuzsanna Jakab (right) is also pictured.

was organised by ECDC in close cooperation with the Embassy of France in Sweden, the Karolinska Institute and the Nobel Foundation.

been contracted. This protocol will support the Member States on implementing behavioural surveillance and surveys in various populations in order to conduct second-generation surveillance as part of an enhanced HIV/AIDS surveillance. An EU-wide survey on available behavioural surveillance and surveys was carried out for eight sub-populations. Results will be discussed in an expert meeting in February 2009 and the final results will be presented in a meeting with all Member States in June 2009. A special workshop was held in March 2008 to address the behavioural indicators related to men who have sex with men.

A tender aiming at an evaluation of the public health benefit of partner notification as a key prevention strategy resulted in a contract with an international team led by the University of Bern. The mandate comprises the establishment of an inventory of policies, legal frameworks, professional guidelines and recommendations. A survey to gather additional and qualitative information will be carried out. Results will be presented at an expert meeting in September 2009.

Upon request from the European Commission, ECDC has developed a framework for the monitoring of the *Dublin declaration on partnership to fight HIV/AIDS in Europe and Central Asia*, which was presented at the EU Think Tank on HIV/AIDS in April 2008. Subsequently, a tender was contracted for the monitoring activities related to the Dublin Declaration. The final monitoring report is expected to be published in 2010.

In the field of tuberculosis, HIV and vaccine preventable diseases with respect to migrant health, an expert meeting was held in Stockholm on 18–19 September 2008. Additionally, two different HIV projects were initiated: an epidemiological review determining the burden of HIV/AIDS in migrant communities and ethnic minorities to suggest improving epidemiological surveillance and

monitoring of HIV in migrant populations. The second project reviewed the practices and barriers in access to HIV prevention, and treatment and care among migrant populations (including undocumented migrants) in the EU.

Sexually transmitted infections

A review of Chlamydia control activities in Member States to fill gaps in existing knowledge, commissioned to the University of Bern, was published in May 2008. A technical expert group has been set up to start preparing the evidence-based guidance for Chlamydia prevention and control in the EU; the guidance will be published in 2009.

The guidance document for the introduction of human papillomavirus (HPV) vaccine in the EU was issued in January 2008.

In collaboration with the European Network for Surveillance of Sexually Transmitted Infections (ESSTI), a set of variables for enhanced STI and a reporting protocol for STI reporting in the EU has been prepared. A transition plan for the coordination from ESSTI to ECDC has been prepared, as ECDC takes over responsibility for STI surveillance as from 2009.

ECDC supports the revision of the International Union against Sexually Transmitted Infections (IUSTI) guidelines to provide harmonised guidelines in sexually transmitted diseases (STD) patient management across Europe.

Country visits

ECDC has embarked on a series of country visits to review, together with country experts, the status of HIV and STI surveillance, prevention and control in order to:

- identify priority areas where ECDC can provide support and propose actions for improvement; and
- identify good practices in HIV/STI prevention and control.

Three country visits were conducted: in Bulgaria (April), Poland (July) and Portugal (September).

Viral hepatitis

ECDC has started to prepare the surveillance of hepatitis in Europe by reviewing the current systems for surveillance of hepatitis B and C and the epidemiological situation across Europe. A paper was published at the occasion of World Hepatitis Day (18 May) on the review of past and current activities. An EU-wide survey was carried out to update and validate the available information on surveillance and prevention of hepatitis B and C. Furthermore, ECDC participated in a round table discussion on viral hepatitis at the European Parliament in Strasbourg on 19 May 2008 that convened scientific experts, patient group representatives and key policymakers.

2.3 Emerging and vector-borne diseases

The programme on emerging and vector-borne diseases (EVD), formerly called 'Other diseases of environmental and zoonotic origin' (EZO), focuses on a wide range of pathogens and diseases, notably vector-borne and travel-related diseases. Specific diseases covered include: chikungunya fever, dengue virus infections, hantavirus infections, legionellosis, Lyme disease (borreliosis), malaria, plague, Q-fever, severe acute respiratory syndrome (SARS), smallpox, tick-borne encephalitis, tularemia, viral haemorrhagic fevers, West Nile fever and yellow fever.

The programme contributes to a strengthening of EU-wide preparedness and response capabilities by providing Member States with access to expertise, a wide range of decision support tools and the latest scientific knowledge.

Vector-borne diseases are a specific group of infections that represent an emerging (or re-emerging) threat to Europe, requiring particular attention. The continuous increase of international travel is one important factor for the importation of new pathogens to the continent. Changes in climate may enhance the probability of previously absent vectors appearing in Europe, or of the further spread of vectors previously present in only limited locations and numbers. These environmental factors, as well as behaviour and socio-economic factors, could contribute to an increased risk for vector-borne disease transmission, representing a threat for outbreaks and the health of European citizens.

Magnitude and importance of vector-borne diseases in Europe

A multidisciplinary risk assessment was prepared in collaboration with members of the European-funded EDEN project (Emerging Diseases in a Changing European Environment) to identify the achievements and shortcomings in the response to the threat posed by vector-borne diseases in Europe. This project has been completed and deliverables, including literature reviews, disease factsheets, risk assessments and *Aedes albopictus* risk maps, have been already published on the ECDC website or will be available soon.

Chikungunya communication toolkit

In response to the increasing presence of *Aedes albopictus* mosquitoes in Europe — mosquitoes that can transmit chikungunya but also other diseases, like dengue — ECDC has prepared a chikungunya communications toolkit. It provides background information and practical advice on the prevention and control of chikungunya fever. Communicators in the Member States can adapt these materials, which include factsheets, brochures, posters and presentations, for use at national level. The toolkit is available on ECDC web portal.

Aedes albopictus risk maps and risk assessment for the introduction of chikungunya and dengue

Risk maps depicting the current distribution of the mosquito *Aedes albopictus* in Europe, as well as maps depicting the risk for its establishment in case of introduction, were developed. Additionally, a risk assessment for the introduction of chikungunya and dengue was prepared. These products are already, or will soon be available, on the ECDC website.

Outbreak assistance and support laboratories

In October 2008 ECDC started a collaboration (framework contract) with the Collaborative Laboratory Response Network of the European Network for Diagnostics for 'Imported' Viral Diseases (ENIVD-CLRN) involving the following activities: epidemic intelligence, response, quality assurance and training. An article introducing this network in detail has been submitted for publication in *Eurosurveillance*.

Pilot programme for public health microbiology training

The first two trainees for public health microbiology training were selected in collaboration with EPIET and started their training at two laboratory training sites, the Rijksinstituut voor Volksgezondheid en Milieu (RIVM), in the Netherlands, and the Health Protection Agency (HPA), in the UK. A training curriculum and a skills assessment tool are under development.

Network of travel medicine clinics

A framework contract has been signed with the TropNet European collaborative network of clinical experts in tropical and travel medicine (EuroTravNet) to assist ECDC in detection, verification, assessment and communication of communicable diseases that can be associated with travelling and specifically with tropical diseases. The work will start in 2009.

Expert consultation on Crimean-Congo haemorrhagic fever

Following the first confirmed case of CCHF in Greece in June 2008, ECDC organised in September an Expert consultation on Crimean-Congo haemorrhagic fever in order to assess the existing needs for prevention and control of CCHF in the EU. The report was published on the ECDC website in early 2009.

Climate change and infectious diseases

Following the first international workshop in 2007 – which was jointly organised with WHO, the European Environmental Agency (EEA), and the European Commission Joint Research Centre (JRC), and explored the importance of climate change in infectious disease transmission – ECDC held a second meeting in May 2008 focused on linking environmental and epidemiologic data. The report was published on the ECDC website.

ECDC experts have contributed to the new ‘Emerging Epidemics’ programme funded by the Commission’s DG Research through participation in research workshops and by being involved in evaluation panels for calls of the EU Seventh Framework Programme. Future collaborations with projects funded by DG Research will be an important link to key scientists in fields that work with pathogens and diseases relevant for this programme.

2.4 Food- and waterborne diseases and zoonoses

The focus of the Food- and waterborne diseases and zoonoses (FWD) programme in 2008 has been on developing the surveillance further for six priority diseases (salmonellosis, campylobacteriosis, VTEC (verotoxin-producing *Escherichia coli*) infection, shigellosis, listeriosis, and yersiniosis), strengthening the urgent inquiry network (for the early detection of dispersed international clusters/outbreaks), intensifying the collaboration with stakeholders (European Commission, Rapid Alert System for Food and Feed (RASFF), European Food Safety Authority (EFSA), WHO), and the preparation of the human-related part of the EFSA’s *Zoonoses Report 2007*.

European surveillance network for food- and waterborne diseases and zoonoses

The new European network for food- and waterborne diseases and zoonoses surveillance was formalised through nominations of epidemiology and laboratory experts for

six priority diseases. The first annual meeting of the new network was held at ECDC on 1–2 October 2008. Surveillance objectives and variables for six diseases were discussed, as well as the development of the urgent inquiry network and the Epidemic Information Sharing (EPIS) system.

Coordination of urgent inquiries

The FWD programme has coordinated an urgent inquiry network. A total of 33 urgent inquiries were sent out in 2008. Of these, 24 international *Salmonella* or VTEC infection clusters/outbreaks were verified. One international outbreak, an outbreak of *Salmonella* Agona originating from a meat company in Ireland, resulted in full outbreak investigation by Irish public health and food authorities with coordination support from the ECDC FWD team. This collaboration has strengthened the identification of dispersed multinational outbreaks and improved the case finding in these outbreaks.

Simulation exercise on foodborne outbreak

A simulation exercise with stakeholders from the Member States, WHO, RASFF, European Commission and EFSA was held in November 2008 to test the internal procedures as a response to an international foodborne outbreak. The internal and external collaboration worked well and the exercise provided valuable ideas to improve the internal response further.

External collaboration

The cooperation with different key stakeholders was strengthened in 2008. ECDC and the EFSA signed a Memorandum of Understanding. ECDC and RASFF have developed a very good collaboration and a mutual agreement on information sharing is under preparation. With strong support from the US CDC, WHO Geneva and WHO EURO, ECDC has planned and prepared a joint workshop together with the WHO Global Salm-Surv network (capacity-building programme that promotes integrated, laboratory-based surveillance and intersectoral collaboration among human health organisations), which is to be held in May 2009.

Controlling and preventing the spread of communicable diseases in cruise ships

During the year, ECDC has followed intensively the progress of SHIPSAN (Ship Sanitation project, funded by the European Commission’s DG SANCO), which examines the prevention and control of public health threats to passengers and crew of cruise ships and ferries within the EU and provides the basis for the development of an integrated EU Ship Sanitation Programme. ECDC is prepared for a more active collaboration with SHIPSAN in the work related to control and prevention of communicable diseases in cruise ships.

Surveillance reports

Data for the EFSA's *Zoonoses Report 2007* was collected from the Member States within the framework of TESSy. The report was published in January 2009. The Food- and waterborne diseases and zoonoses programme has also contributed to the preparation of the *Annual Epidemiological Report 2008* by providing content for 20 diseases. Quarterly reports for salmonellosis, campylobacteriosis and VTEC infection have been produced.

Some activities have been postponed to 2009 due to lack of human resources (three persons left the programme during the year): review of major factors affecting comparability of data and the use of seroepidemiology to assess a true incidence of salmonellosis and campylobacteriosis.

2.5 Antimicrobial resistance and healthcare-associated infections

European Antibiotic Awareness Day

There is a need to improve awareness of the general public throughout Europe about antimicrobial resistance and antibiotics. In 2008, ECDC coordinated the first occurrence of a recurrent annual European public health initiative that provides an opportunity to raise public awareness throughout Europe about the risks associated with inappropriate use of antibiotics and how to take antibiotics responsibly.

This first edition of the European Antibiotic Awareness Day (EAAD) is currently being evaluated and the second

edition is in preparation. In 2009, the EAAD will focus its activities on both the general public and doctors. For preliminary data on the evaluation of European Antibiotic Awareness Day, see also Health communication, page 13)

Clostridium difficile-associated disease

Clostridium difficile is a common cause of antibiotic-associated diarrhoea, mainly in hospitals and other healthcare facilities. Since 2004, a new strain (PCR ribotype 027 toxinotype III) has emerged. This strain, resistant to fluoroquinolones, is causing a much more severe disease and is resulting in more severe complications and often death. It was first reported in Canada and the United States, and then in Europe.

An update on the occurrence of this strain in Europe, published by ECDC in collaboration with European experts, showed that, by June 2008, it had been responsible for outbreaks in Belgium, Finland, France, Germany, Ireland, Luxembourg, Netherlands, Switzerland and the UK, and had also been reported in Austria, Denmark, Hungary, Norway, Poland, Spain and Sweden. To get a pan-European overview of *C. difficile* infections, as well as to build capacity for diagnosis and typing, ECDC launched a European *C. difficile* infection survey (ECDIS), which was performed throughout Europe in November 2008. The results of this survey will be available in 2009.

Additionally, to complete the background document published in 2006, the ECDC working group, with participants from some Member States and the ESCMID Study Group on *C. difficile*, published in 2008 a guidance document (review of scientific evidence) on infection control measures to limit the spread of *C. difficile*.

Promoting responsible use of antibiotics

The European Antibiotic Awareness Day is an initiative of ECDC, working in partnership with the European Commission, the National Focal Points for antimicrobial resistance, WHO, the European Society of Clinical Microbiology and Infectious Diseases (ESCMID) and the Standing Committee of European Doctors (CPME). ECDC provided support material to the countries in the form of a logo (translated into all EU languages), slogans, visuals, key messages, a media toolkit and a short film. A dedicated website was launched (<http://antibiotic.ecdc.europa.eu>). The first-ever European Antibiotic Awareness Day was officially launched by Health Commissioner Androulla Vassiliou at the European Parliament on 18 November 2008.

The EAAD was celebrated simultaneously in 32 countries (all 27 EU Member States, plus Iceland and Norway, and the EU candidate countries: Croatia, the Former Yugoslav Republic of Macedonia and Turkey). Antibiotic awareness activities, which took place in the countries on or around 18 November 2008 included press conferences,



The first European Antibiotic Awareness Day was officially launched by Health Commissioner Androulla Vassiliou (fourth from the left) at the European Parliament on 18 November 2008.

launch of new national initiatives, national TV and radio spots, interviews of national and local opinion leaders in the media, articles in medical journals and newspapers, billboards and posters on public transports, distribution of public information leaflets, posters for hospitals and primary care centres, and competitions for school children, among others.

Burden of healthcare-associated infections

In 2008, ECDC published, as part of its *Annual Epidemiological Report*, the first estimates of the burden of healthcare-associated infections for the EU.

It is estimated that 4.1 million Europeans each year will acquire an infection while hospitalised (nosocomial infection) and that approximately 37 000 will die as a direct consequence of this infection. In many more cases, the infection will indirectly contribute to death of the patient – it is estimated that nosocomial infections contribute to an additional 110 000 deaths each year in the EU.

Nosocomial infections generate approximately 16 million extra days of hospital stay per year (an average of four days per infection), at a considerable cost, and are creating a significant burden for healthcare systems in Member States. Assuming an average hospital cost of EUR 435 per day, the total annual healthcare cost of nosocomial infections for the EU can be estimated at EUR 7 billion per year, considering neither any indirect costs linked to loss of income as the result of illness and death, nor the intangible costs associated with physical and emotional pain and suffering.

In 2008, ECDC integrated the surveillance of healthcare-associated infections as part of its core surveillance activities. While consolidating networks for the ongoing surveillance of infections in specific hospital areas (e.g. intensive care, surgery), ECDC will prepare in 2009 the first pan-European point prevalence survey on healthcare-associated infections and provide guidance for the control and prevention of methicillin-resistant *Staphylococcus aureus* (MRSA), the most common multi-drug-resistant bacteria responsible for healthcare-associated infections.

Coordination and country support

ECDC has assembled a network of National Focal Points for antimicrobial resistance issues (one per country). Two meetings of the National Focal Points were organised in 2008 to discuss and coordinate activities in Member States. The candidate countries (Croatia, the Former Yugoslav Republic of Macedonia and Turkey) have now nominated their National Focal Points for antimicrobial resistance and have participated in the second of these meetings.

ECDC has also worked out some indicators that are used as a basis for discussions with different stakeholders during country visits to discuss antimicrobial resistance issues. There is an emphasis on the need for functional national, regional and local coordination of efforts within this complex field. Feedback of surveillance data on antimicrobial usage and resistance to prescribers is essential. Systems for evaluating adherence to guidelines and prudent use of antibiotics are advocated. In total, eight countries have been visited since the start of the project. During 2008, follow-up visits were performed in Greece and in Hungary.

2.6 Tuberculosis

During 2008, major objectives have been achieved in the field of tuberculosis (TB), with contributions from a large network of scientists, relevant Member States contact points and a solid collaboration with WHO EURO.

The activities carried out in 2008 are in line with the long-term strategy of enhancing tuberculosis control and progressing towards tuberculosis elimination in the EU. The activities are underpinned to the strategic direction provided by the *Framework action plan to fight tuberculosis in the EU*.

More specifically, in 2008 key achievements were recorded in the areas below.

Framework Action Plan to Fight TB in the EU

The *Framework action plan to fight TB in the EU*, drafted in 2007, was officially launched on World TB Day 2008. Following the launch and on request of the Commission, ECDC has initiated preparatory work in support of the follow-up and implementation of the plan. Initial consultations with the Commission, WHO EURO and partners have been initiated to define the aims and content of the follow-up of the plan in preparation for specific work in 2009. Technical preparatory work for the development of strategic and epidemiological indicators linked to the plan has been initiated in 2008 and will be delivered in early 2009.

Surveillance of tuberculosis in the EU

In the context of ECDC assuming the responsibility of coordinating surveillance at EU level, the planned transfer of the EuroTB network was completed and officialised on 1 January 2008. To maintain the EU-wide coverage in surveillance, a joint approach with WHO EURO has been established, with the first joint data collection successfully completed in 2008. A corollary of activities in support of the joint TB surveillance system have been carried out including the organisation of the National Correspondent meeting and the meeting of the Advisory Committee. Outcome of the 2008 data collection are expected to be launched in early 2009.

EU TB Laboratory Network

The situational analysis and feasibility study for the establishment of an EU TB Network was completed in 2008. The study provided background information and analysis of the current EU situation with regards to diagnostic and reference laboratory activities for tuberculosis, including specific aspects on laboratory methods, infrastructure, organisation and available human resources. The outcome of the work represents the basis for the launching of the EU TB Laboratory Network in 2009.

Scientific advice

ECDC has continued to provide scientific advice and guidance on specific TB topics. The Tuberculosis Programme has continued interaction with selected Member States

and experts in providing technical support on BCG vaccination strategies. The first Scientific Workshop on New tools for TB Control was carried out in 2008 with wide participation of European and international experts. The outcome of the workshop will be used to strategically direct ECDC's work on new tools in future years.

Extensive work has been carried out in 2008 in the development of an *Evidence package for TB control among migrants in the EU* that will be part of the *Migrant health and communicable diseases report* to be launched by ECDC in 2009. The TB technical package aims at providing evidence and support in the technical aspects of BCG vaccination, screening, active case finding and forecasting TB among migrants. Preliminary results of the work were presented at the 2008 World Lung Health Conference (Paris) in a joint ECDC/US CDC symposium on migration and tuberculosis.

Risk assessment and outbreak response

ECDC has continued to provide support in assessing threats related to international travellers with TB and the risk of related outbreaks. Overall in 2008, 11 TB-related threats were assessed by ECDC. Guidance for management of TB related events on aircraft have been drafted and will be subject of consultation in 2009.

Country visits

The first TB country visit was carried out in 2008 to Bulgaria. The visit was conducted jointly by ECDC and WHO EURO in collaboration with Bulgarian authorities. The exercise provided a supportive analysis of the Bulgarian Tuberculosis Programme and represents a model for future country visits to be carried out in the next biennium.

Partnerships

Close collaboration, liaison and work with the European Commission have continued, particularly in the development of the Action Plan.

The ECDC Tuberculosis Programme has also established a close and fruitful collaboration with counterparts in the WHO EURO allowing successful joint work in the field of surveillance, country visits and several other TB-related activities. It is of note that the plans developed by the two organisations were jointly presented at the 2008 Wolfeheze meeting addressing regional National Tuberculosis Programme managers. The presentation and interaction provided a platform for identification of synergies.

ECDC is also providing support to WHO in the development of a monitoring framework to the 2007 *Berlin Declaration on Tuberculosis*, which calls for urgent action to halt and reverse the high levels of tuberculosis in Europe.

Finally, the ECDC Tuberculosis Programme has remained involved in several international task forces under the auspices of the Stop TB Partnership and WHO, contributing to numerous aspects of TB control.

2.7 Vaccine-preventable diseases

During 2008 major objectives have been achieved in the field of vaccine preventable diseases and immunisation, also thanks to the contribution from a large network of scientists and relevant contact points throughout Europe.

Improving knowledge on vaccine preventable diseases at EU level

ECDC continued to collect surveillance data and other information in order to improve the knowledge base related to vaccine preventable diseases in the EU. The integration of EU-IBIS dataset (European Invasive Bacterial Infections Surveillance Network) into the TESSy system has been achieved during 2008. At the same time, a series of laboratory activities regarding invasive bacterial diseases — including standardisation of methods and quality assurance — have been outsourced. Relevant information has been collected with the aim of starting in the near future the epidemiological surveillance of *S. pneumoniae* invasive infection at EU level. Close links with the Diphtheria Surveillance Network (DIPNET) have been established in the view of the future transition plan.

ECDC signed a new contract with the Surveillance Community Network for Vaccine Preventable Infectious Diseases (EUVAC network) with the aim of continuing and improving the knowledge base on measles, mumps, rubella, pertussis and varicella. Finally, a second phase of the VENICE project, which aims to encourage collection and dissemination of knowledge and best practice relating to vaccination and to further develop collaboration and partnership between Member States, has been started. It provides ECDC with a powerful tool to perform rapid Euroroundups and to share relevant information about immunisation practices in the EU.

Scientific advice, communication and training

ECDC is continuing to develop a collection of scientific and technical guidance documents on vaccination issues. A major achievement has been the finalisation of a document on diphtheria, tetanus and pertussis vaccination (DTP) that includes a large review of evidence on the main issues related to the childhood immunisation schedule and the booster doses required during the adolescence. At the request of the European Commission (DG SANCO), which is preparing an initiative on 'cross border issues related to the childhood immunisation schedule', ECDC prepared, together with the aforementioned document on DTP, a larger portfolio including reports on the main childhood vaccinations (polio, MMR, hepatitis B and Hib).

ECDC has also identified health communication as an area of preeminent importance for supporting vaccination activities in the EU. During 2008 several activities — focusing on MMR vaccination programmes — have been carried out jointly with WHO under the umbrella of the European Immunisation Week. A handbook on how to plan communication campaigns to reach the hard-to-reach groups has been developed as part of the initiatives belonging to the migrant health programme. The first training module on advanced epidemiology applied to vaccinology has been carried out, addressed to public health officers coming from all Member States.

Risk assessment and outbreak response

Measles has been a priority in the EU in 2008. Large outbreaks involving different countries have been a threat to the elimination target planned for 2010. In particular, a large outbreak, started in Switzerland and spread to neighbouring regions in Austria and Germany, was cause of concerns in view of the EURO 2008 football championship. ECDC supported the Austrian health authorities in organising a field response team and a meeting with relevant stakeholders, and facilitated a concerted response by all countries involved in the outbreak.

Vaccine safety monitoring and managing

ECDC carried out several activities aimed at improving knowledge and sharing good practice in the area of vaccine safety. A protocol for the assessment of adverse events following immunisation (AEFI) monitoring systems has been developed and it will be offered to those Member States that want to check the quality of their own reporting system. Pilot tests are planned in 2009. Scientific guidance on analytical methods to assess causality relationship in case of AEFI, both at population and individual level, has been produced. Some preliminary work on health communication related to AEFI has been initiated.

3 External relations, partnerships and country cooperation

Key products 2008

- continuation of close and productive cooperation with all EU structures whose activities can contribute to communicable diseases prevention and control;
- further development of ECDC programmes of cooperation on communicable diseases with each Member State;
- first general country mission to all EU candidate countries;
- effective working relationships with WHO, including the joint publication of surveillance reports;
- development of relationships with other inter-governmental organisations, civil society organisations, scientific institutions and foundations;
- development of good working relations with other international stakeholders to build ECDC presence on the international stage;
- evaluation of the EpiNorth project.

Global health threats can make the world seem very small. Collaboration with EU, national and international partners is increasingly important. The aim of the ECDC external relations and country cooperation work is therefore to support ECDC in achieving its objectives given the fast pace and complexity of developments at global level. The ECDC's Founding Regulation provides a clear basis for these activities.

In the health sector there is widespread and growing recognition of the need to develop partnerships that thrive on the shared strengths and mutual benefits of their participants. The challenges and opportunities faced by the health sector cannot be met by any one organisation or agency alone. Effective collaboration with other agencies and stakeholders is an imperative. ECDC identifies and fosters a number of strategic relationships with institutions which have complementary or overlapping missions and tasks to establish more linkages globally.

3.1 External relations and partnership programmes

Further strengthening of the relations with the EU institutions

In 2008 ECDC continued to focus its external relations activities to develop close, fruitful and effective working relations with the European Parliament, the Council of Ministers (including the EU Presidency) and the European

Commission. On 30 June, the European Commissioner for Health, Androulla Vassiliou, paid her first visit to ECDC's headquarters in Stockholm. The programme included a meeting with the senior management team, a briefing on ECDC's latest developments and a tour of ECDC's Emergency Operations Centre.

On 15–16 May, a delegation from the European Parliament's Environment, Public Health and Food Safety (ENVI) Committee paid its second visit to ECDC's headquarters in Stockholm. The delegation led by John Bowis, MEP, included Members of the Parliament and Parliament's representatives on the ECDC Management Board. The ECDC Director took the opportunity to brief the delegation on the latest developments of ECDC's work.

ECDC continued to work closely with the European Commission, particularly with DG SANCO and especially with its Health Threats Unit (C3), based in Luxembourg. ECDC worked closely with the Council of Health Ministers and in particular with the French and Slovenian EU Presidencies on areas under its mandate. Work has begun with the Czech and Swedish Presidencies on coordination of activities in 2009.

The EpiNorth project

The northern countries of the EU have been facing in the last years serious challenges in the field of communicable diseases — particularly for HIV/AIDS, sexually transmittable diseases, tuberculosis and antimicrobial resistance — and this problem is shared with countries in the neighbouring region, such as Russia, Belarus and, to a certain extent, Ukraine. The EpiNorth project was launched in 2000, based on a joint cooperation between Nordic countries, Baltic States and north-west Russian oblasts. During 2008 a team composed of representatives of the ECDC Management Board and Advisory Forum conducted an evaluation of the EpiNorth project. The evaluation concluded that the project brings added value to the surveillance, prevention and fight against communicable diseases, as these have no boundaries, and therefore contributes to the strengthening of Europe's defences against communicable diseases.

Building bridges with other EU agencies

On 3 April 2008, ECDC Director Zsuzsanna Jakab and Catherine Geslain-Lanéelle, Executive Director of the European Food Safety Authority (EFSA), signed a Memorandum of Understanding between ECDC and EFSA. This will provide a framework for intensifying cooperation and exchanging scientific information on topics of mutual interest including food safety, control of communicable diseases, infectious diseases prevention and emergency response.

A Memorandum of Understanding was also signed during 2008 with the Institute for the Protection and Security of Citizens of the Joint Research Centre of the European Commission. Within the overall objective of achieving good for the EU, the two EU institutions agreed to exchange information and methodologies related to crisis management, to information tracking



ECDC Director Zsuzsanna Jakab and EFSA Executive Director Catherine Geslain-Lanéelle signed a Memorandum of Understanding between the two EU agencies in April 2008.

systems, georeference tools, development of information systems, and to epidemiological approaches modelling.

Relations with WHO

ECDC continued to build upon the foundations laid in 2005 (by the signing of the Memorandum of Understanding with WHO EURO) to maximise the synergies from close working relations and a strengthened partnership with WHO. The 2007 progress at the political, strategic and operational levels was further consolidated in 2008.

Links outside the EU geographical area are forged when they have a direct and meaningful impact on the health protection of European citizens. ECDC continues to work closely with WHO at all levels. Furthermore, a number of the collaborative efforts (started in previous years) also bore fruit with very visible and practical results whilst avoiding duplication and extra burden on Member States. The main examples were the joint HIV and TB surveillance for all 53 WHO EURO countries and the publication of two joint surveillance reports. A similar initiative for joint influenza surveillance was developed in 2008 and operates for the first time in the 2008/2009 season. A significant item of collaboration (with WHO HQ) was full and mutual access for ECDC and WHO to the WHO International Health Regulation (IHR) and ECDC Early Warning Response System (EWRS) websites.

Several delegations at high level from institutions with whom ECDC signed memoranda of understanding (e.g. Chinese Centre for Disease Control and Prevention, Public Health Agency of Canada and US CDC) visited ECDC in 2008. Detailed technical cooperation is ongoing with these agencies.

ECDC has a Liaison Officer in place from WHO and also from the US CDC. Agreement was reached for a secondment from ECDC to WHO EURO as well, to start in 2009.

3.2 Country cooperation with the Member States

The EU Member States are the most important stakeholder for the ECDC. Country cooperation is at the heart of all the work of ECDC. The Centre launched in 2008 two projects to further develop and enhance its response to the needs and wishes of its constituent countries. These projects are the Country Cooperation project and the Country Information project, which will further strengthen the capacity and capability of ECDC to meet the needs of the Member States.

Clear, concise, comprehensive and up-to-date information on countries is crucial for the success of ECDC work. Therefore a country information system has been developed and is periodically updated. It contains comprehensive information on ECDC contacts and networks with the countries.

During 2008, a working group composed by Advisory Forum members was created in order to reflect on the relations between ECDC and the Competent Bodies. This working group made very valuable recommendations in this regard.

In its work, ECDC must develop a close cooperation with the Member States and — as the Centre's work also includes the three EEA/EFTA countries — with Norway, Iceland and Liechtenstein. The Centre heavily depends on the expertise from Member States, and this pooled knowledge could also be useful when supporting individual countries on specific issues. In order to develop this collaboration, and in accordance with the ECDC Founding Regulation, the Member States and Associated Countries have designated Competent Bodies.



ECDC paid a first general country visit to the Turkish Ministry of Health in July 2008.

Initiation of cooperation with EU candidate countries

ECDC began to develop close working relations with Croatia, Turkey, and the Former Yugoslav Republic of Macedonia, and further building on this work is planned in 2009. The relations with the candidate countries were established with budgetary support from the European Commission's DG Enlargement to ECDC.

During 2008 interdisciplinary teams from ECDC paid a first general country mission to Turkey, Croatia and the Former Yugoslav Republic of Macedonia, due to funding received from DG Enlargement. The main purpose was to establish contacts with key stakeholders (decision-makers, professional bodies, public health institutions) for future collaborations and for day-to-day working relations on a technical level and to prioritise areas for cooperation. Further aims of these visits were to obtain a first overview of the epidemiological and public health situation in the respective countries and to identify areas where further action is needed and where ECDC can provide support to the countries. High representatives of the countries' ministries of health welcomed ECDC experts and introduced their staff. The teams have also visited the institutes of public health in these countries. All meetings produced a set of future priorities for enhancing cooperation between these countries and ECDC.

The three candidate countries have nominated representatives for the full range of ECDC activities, for example antimicrobial resistance (AMR) activities, and participated in many of these activities.

4 Leadership

4.1 Governance

Key products 2008

- quality support to ECDC governing bodies through efficient preparation for meetings;
- superior communication with the Management Board, the Advisory Forum and Member States;
- close and harmonious collaboration with the Governing Bodies;
- solid support to the outcome of the first external evaluation of ECDC.

In accordance with Article 14 of ECDC's Founding Regulation, a clear governance structure has been established for ECDC through a Management Board with one representative designated by each Member State, two by the European Parliament and three by the European Commission. During 2007–2013, in addition to its routine overseeing functions, the Management Board (MB) has and will continue to play a vital role in commissioning every five years an independent and external evaluation of ECDC. Based on the results of this evaluation, the Management Board considers whether any changes should be recommended to the Centre's mission, scope or working practices. The Founding Regulation also specifies the composition and functions of the Advisory Forum that supports the Director of ECDC in ensuring the scientific excellence and independence of activities and opinions of the Centre.

The Governance Programme aims, in the medium-term, to fully strengthen its components in order to ensure that they function effectively and respond to the needs of the Governing Bodies. During 2008, the first external evaluation of the Centre was completed and the outcome has served as a basis for the Management Board's recommendations on the future scope of the Centre's mission. In 2009, work will develop in the follow-up of the results of this process. With the designation of the Competent Bodies in 2007, the Governance function and the Country Relations and Cooperation function have been working closely to ensure adequate communication channels and coordination of work. These activities will further develop in 2009.

The European added value of the Governance Programme is to ensure that ECDC's work has a pan-European perspective and operates within EU rules and regulations.

The Governance Programme provides comprehensive, top-notch support to the Management Board and

Advisory Forum (AF) through timely preparation and efficient execution of meetings (including auxiliary meetings and workshops) and otherwise to maintain superior communication with the Member States. As it is the MB that compiles the list of Competent Bodies in the Member States, the Governance function will need to work closely with the Country Relations and Cooperation function to ensure that address lists are updated and communication lines are established. With the innovative ECDC web portal in place, and in close collaboration with the Web Services Section of ECDC's Health Communications Unit, new collaborative workspaces will be developed to communicate and share information more effectively with members of the Management Board and the Advisory Forum, such as restricted areas in the portal to share documents, presentations and relevant information. The aforementioned support services include:

- the facilitation of conference and working facilities for up to at least seven meetings annually;
- liaison with Parties, Observer States, the European Commission and NGOs;
- security and protocol arrangements;
- registration of participants to sessions and meetings;
- travel arrangements for delegates;
- planning, formatting, revising, follow-up and dispatch of meeting documentation; and
- the coordination of document registration, translation, reproduction, dissemination and storage.

Management Board

The ECDC's Management Board met in March, June and November 2008, and had an extraordinary meeting in September, which focused on the MB's recommendations on the results of the first external evaluation of the Centre. The March, June and September meetings were chaired by Dr Marc Sprenger, the Netherlands, and Professor Minerva-Melpomeni Malliori, representative of the European Parliament, who acted as Vice Chair (see list of MB members in Annex 2). During the November 2008 meeting, Dr Hubert Hrabcik, Chief Medical Officer of Austria, was elected Chair of ECDC's Management Board (replacing Dr Sprenger) and Professor Jacques Scheres, EP Representative, was chosen as Deputy Chair (replacing Professor Malliori). Dr Hrabcik and Professor Scheres were elected by their peers for a two-year term, which may be extended.

The second MB meeting of 2008 was held in Helsinki, Finland, at the invitation of the Ministry of Social Affairs and Health, and the fourth meeting was held in Paris, France, at the invitation of the French Institute for Public Health Surveillance (InVS). During the fourth meeting,



The ECDC Management Board in September 2008, when it had an extraordinary meeting to discuss the results of the first external evaluation of the Centre.

the Management Board endorsed the external evaluation, which found that the Centre had established a 'clear presence on the international stage' and made a 'significant contribution' to fighting infectious diseases.

In 2008, the Management Board, in particular:

- elected Dr Hubert Hrabcik (Austria) as new Chair and Professor Jacques Scheres (European Parliament representative) as new Deputy Chair of the Management Board;
- approved ECDC's Annual Work Programme 2009;
- approved ECDC implementing rule on the appraisal of the Director, subject to agreement by the European Commission;
- approved the Budget and Establishment Table 2009;
- approved a request for the internal transfer of EUR 1.8 million in the 2008 budget and the related revision of the Work Programme 2008;
- nominated the members of the new Audit Committee and approved the new mandate of the Audit Committee;
- adopted the new Financial Regulation and Implementing Rules;
- approved the Annual Report of the Director on the Centre's activities in 2007;
- adopted the revised version of ECDC's indicators for the ECDC *Strategic Multi-annual Programme 2007–2013*;
- approved the Strategic Audit Plan for ECDC 2008–2010;

- approved the supplementary and amending budget 2008, as well as the proposed allocation of these additional funds;
- adopted the revised version of ECDC *Multi-annual Staff Policy Plan 2009–2011*;
- adopted the document *Conclusions and Recommendations of the Management Board based on the External Evaluation of ECDC*.

Advisory Forum

The Director of ECDC convened four meetings of the Advisory Forum (AF) in 2008: in February, May, September and December. A listing of the 2008 membership of the Advisory Forum is included in Annex 3. The minutes of the meetings of the AF are available on ECDC's website.

The Advisory Forum has been closely involved in advising the Director on mainly technical and scientific issues that were dealt with by the Centre in 2008. To highlight a few, the AF actively supported the work carried out with respect to the childhood immunisation schedule. The AF noted that the European Action Plan on TB Control was finalised, including the HIV and TB networks' co-ordination agreements with the WHO, and agreed that there is a need for accurate contact information in the system used in crisis situations. The AF also provided extensive input into the second edition of ECDC's *Annual Epidemiological Report on Communicable Diseases in Europe*, which featured a dedicated section and detailed commentary on healthcare-associated infections.

On surveillance issues, the Advisory Forum regularly reviewed the progress made in the evaluation and assessment of the surveillance networks and in the development of The European Surveillance System (TESSy), as well as on the long-term strategy for surveillance of communicable diseases in the EU. The work of the scientific panels was regularly reported to and discussed with the AF. The Forum continued to be involved in the implementation of the work plans of the seven horizontal disease-specific programmes and on the development of the Centre's programme of work for 2008.

4.2 Management and strategic planning

Key products 2008

- the work programme for 2009, adopted in accordance with the multi-annual strategy 2007–2013;
- upgraded management system and improved management performance;
- secretarial support for the ECDC Director and Cabinet;
- work on management information system has been initiated.

ECDC Work Programme 2009

In June 2008, the Management Board and the Advisory Forum reviewed a preliminary document on 2009 programme priorities (document MB 13/8). This document was based on the priorities established in the *ECDC Strategic Multi-annual Programme 2007–2013*, adopted by the Management Board in June 2007.

During the summer, the units, the disease-specific programmes (DSPs) and the Cabinet prepared the detailed work plan, based on the document on priorities, under the coordination of the newly appointed Planning and Monitoring manager at the Cabinet of the Director. The list of activities has been established in detail, including procurement and budget implications, with one activity leader clearly identified in order to ensure better accountability and ownership.

A meeting and a videoconference took place in September and October with the European Commission (DG SANCO C3), in order to ensure that the priorities were in line with the Commission's priorities and to avoid overlaps. ECDC's Executive Committee approved the final programme in order to get endorsement by the Management Board.

The Management Board adopted the Work Programme for 2009 at its 14th meeting held on 13–14 November in Paris (document 14/5).

Management

The Executive Committee (EXC) — the advisory body to the Director, chaired by her and comprised of the five heads of units — met weekly in 2008. The EXC is the prime forum for discussion of major strategic, horizontal, technical, managerial and financial matters. A few meetings of the EXC have been also extended to the seven coordinators of the Disease-specific Programmes (DSP) for the discussion of matters related to the management of ECDC horizontal programmes.

During 2008, and in consequence of the growing of ECDC, the five units have been subdivided into sections in order to ensure a more efficient management, and 15 heads of sections have been nominated.



The ECDC Advisory Forum in October 2008, during its 15th Meeting.

New management information system

In order to improve its planning and monitoring activities and ensure the best implementation of its activities, ECDC has decided to establish a computerised programme management system. Some specifications based on the planning of 2009 activities and the monitoring of the 2008 work programme have been prepared, and a call for proposals has been launched in November 2008 in order to appoint consultants to analyse ECDC's needs, draw recommendations and develop a customised system. The system will cover the planning, monitoring and evaluation of ECDC activities. It should be user-friendly, with a web-based

interface, which will allow integration into the future ECDC intranet. It will serve both the ECDC management team, who will have an overview of the implementation of activities, and each activity leader, who will be able to better plan, implement and monitor the activities under their responsibility.

The consultants have been appointed and will start working on the establishment of the new system in early January 2009. The system is expected to be ready in June 2009 for the planning of 2010 activities.

Systematic feedbacks from the EXC to unit meetings, monthly general staff meetings, as well as expert meetings and regular unit retreats, ensured continuous feedback of important developments throughout ECDC.

A growing emphasis has been given to the DSPs. The structure of the DSPs and the list of staff from the different units that dedicate part of their time for the horizontal programmes have been clearly identified, and deputy coordinators have been nominated. This has also led to the setting up of monthly meetings between DSPs coordinators, in order to ensure a better organisation, improved management and exchanges of views. A coordinator for the DSP leaders has been nominated.

Activities included in the 2008 work programme have been systematically monitored during the year by the units and DSPs in order to ensure the largest implementation possible of the activities planned at the beginning of the year.

The rapidly expanding activities of ECDC put considerable pressure on all staff. The extensive involvement of staff from different categories in the planning was important in spreading the message that ECDC's daily work has to be constantly seen in the broader perspective of its long-term goals. Consequently, priorities had to be chosen accordingly.

4.2 Internal control system and audits

In order to ensure control of its activities, ECDC has a full range of internal control and audits in place.

ECDC has a set of 24 internal control standards in place. They specify the necessary requirements, actions and expectations in order to build an effective system of internal control that could provide a reasonable assurance on the achievement of objectives. These control standards have been developed along the lines of the European Commission's ones, which are based on the international COSO standards. The standards cover the areas of control environment, performance and risk

management, information and communication, control activities and audit and evaluation.

The internal control system is supported by a number of internal procedures. These procedures are approved by the Director of the Centre and include, for example, financial workflows for commitments and payments, guidance on conflicts of interests, a code of good administrative behaviour and the procurement procedures to follow. A new procedure was just introduced on handling requests for scientific advice.

ECDC is audited every year by the European Court of Auditors. The audit provides a statement on the reliability of the accounts and the legality and regularity of the underlying transactions. ECDC has received a positive statement every year.

ECDC is also audited by the Internal Audit Service from the European Commission and by its own Internal Audit Capability. All findings and recommendations are taken into account and appropriate actions are taken. The implementation of these actions is being followed up regularly.

The Management Board has also set up an Audit Committee, who follows closely the audits performed and the management's response, follow-up and actions. In particular, in relation to the European Court of Auditors recommendation as regards budget implementation, the Centre has recruited a Planning and Monitoring Officer in July 2008 thus reinforcing the planning and monitoring of budget implementation and is developing a new management information system which should enable further progress in this field.

Furthermore, in October 2008 a management risk assessment exercise was performed and an action plan is being put in place.

Given the control system in place and the lack of critical findings from the Court of Auditors, Internal Audit Service or Internal Audit Capability there is no reason to question the control system in place.

5 Administrative services

The mission of the Administrative Services Unit is to provide services and facilitate the operational activities of the Centre, to ensure that human and financial resources are properly and well managed and to make the Centre a good working environment.

Administrative services include finance (budget and accounting), human resources (recruitment, personnel administration, and learning and development), missions/meetings/logistics, information and communication technologies, legal advice and procurement.

5.1 Finance

The principal objective is to ensure that the financial resources of the Centre are properly and well managed and reported in a clear and comprehensive manner

Major achievements in 2008 included in particular the adoption of new financial rules and the development of the verification function. The monthly reporting to the management team on the budget status was enhanced and preparatory discussions were held in December with the European Commission on the implementation of ABAC (the EC integrated budgetary and accounting system) that will replace in 2009 the current applications used by the Centre.

The budget of the Centre increased from EUR 27 million in 2007 to EUR 40.2 million in 2008. Budget execution reached 97 % in terms of commitment appropriations. The Finance section verified more than 460 commitments throughout the year, an increase of 27 % compared to 2007 (360 commitments). The payment orders issued by the Director and the authorising officers by delegation during 2008 exceeded 4 600 (compared to approx 3 400 in 2007) while the total amount of payments executed increased by 51 % and reached EUR 33.2 million (EUR 22 million in 2007).

In December 2008 the ENVI committee of the European Parliament issued its opinion with regard to the Discharge of the Director for the year 2007, recognising the positive developments in the financial area and expressing 'its satisfaction with the successful second year of operation of the European Centre for Disease Prevention and Control, which was also characterised by an effective implementation of the 2007 budget both in terms of commitments and payments.'

5.2 Human resources

The principal tasks in the area of human resources are to ensure the recruitment of staff (temporary agents, contract agents, seconded national experts, interim and



ECDC staff in May 2008.

trainees), to ensure personnel administration, to organise and support learning and development activities, and to provide information to staff on these matters and related fields.

In 2008 ECDC recruited 54 additional staff (temporary agents, contract agents and seconded national experts) and eight trainees

The ECDC internal organisation has been revised, with the subdivision of units into sections and appointment of 15 heads of section.

Nine implementing rules have been adopted, a new induction programme for newcomers has been developed and implemented, and an increased number of training days has allowed further development of staff. The first reclassification process for temporary agents has been launched. A new system (SAP) for time management, personnel administration and organisational management has also been implemented.

Table 4. Number of staff and selection procedures

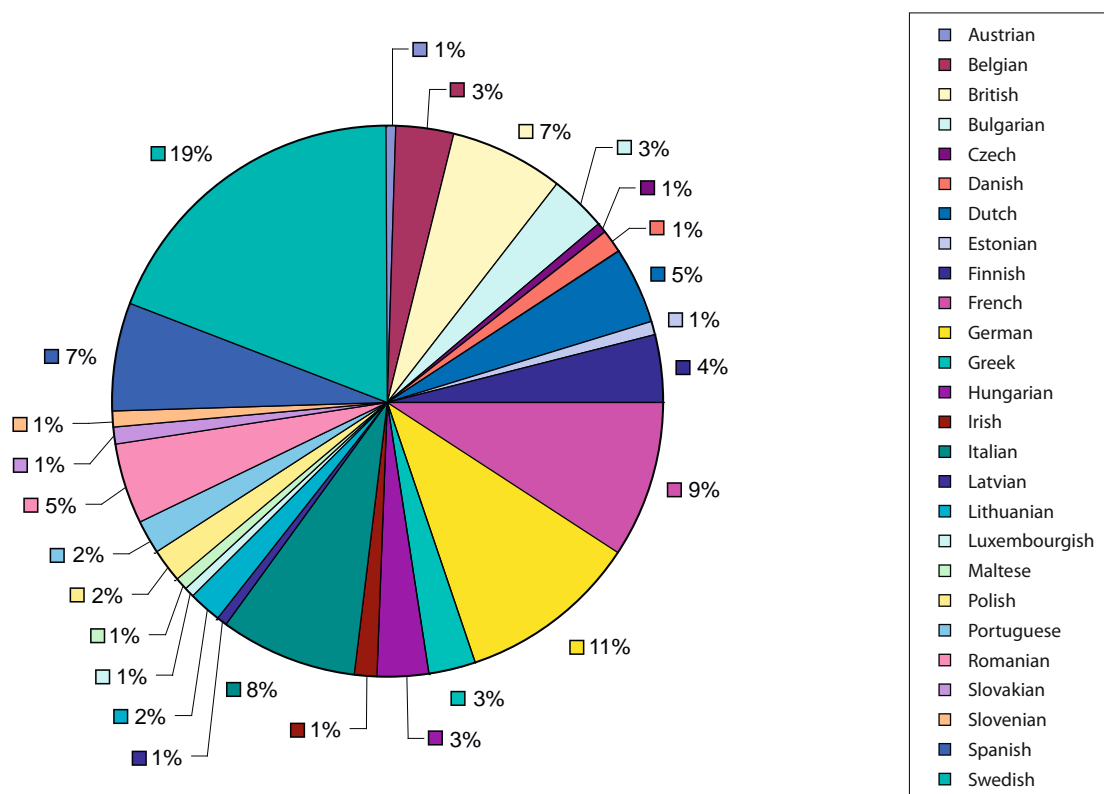
	2006	2007	2008
Total staff	76	131	154
Selection procedures*	41	76	97

* The number of selection procedures is higher than that of new staff as it includes replacements as well as republications.

Table 5. Breakdown of staff by nationality (temporary agents and contract agents)

Nationality	number	%
Austrian	1	1
Belgian	5	3
British	10	7
Bulgarian	5	3
Czech	1	1
Danish	2	1
Dutch	7	5
Estonian	1	1
Finnish	6	4
French	14	9
German	16	11
Greek	4	3
Hungarian	5	3
Irish	2	1
Italian	12	8
Latvian	1	1
Lithuanian	3	2
Luxembourgish	1	1
Maltese	1	1
Polish	3	2
Portuguese	3	2
Romanian	7	5
Slovakian	2	1
Slovenian	1	1
Spanish	10	7
Swedish	32	21
Total	149	100

Figure 2. Breakdown of staff by nationality (temporary agents and contract agents)



5.3 Missions, meetings and logistics

This area covers a wide range of services, including the organisation of travel and hotel arrangements for staff, interviewees and meeting participants and experts invited to ECDC (as well as related reimbursement of expenses), office space allocation, security, reception, technical assistance to meeting rooms, inventory, office equipment and supplies, maintenance, refurbishment and fitting-out.

In 2008, new contracts following procurement procedures for office supplies and ICT consumables have been established. New office spaces have been allocated following the removal of certain units into the newly leased premises, and a new server room has been constructed. The Inventory Management has been implemented in the SAP application.

It has been agreed that an ECDC cafeteria will be built, in order to allow space for ECDC staff informal meetings and team building.

The figures below show the increased activity in the field of missions and meetings linked to the growth of the Centre.

Table 6. Missions and meetings

	2007	2008
Mission claims	660	983
Meetings at ECDC	325	293
Reimbursement requests regarding meeting participants	2 269	2 492

5.4 Information and communication technologies

ICT tasks cover the development, maintenance and operation of capacities for networking and communication, for back and front office infrastructure as well as the support to the development of integrated corporate applications.

In 2008, the section grew from two staff members to nine. The growth gave the ability for some important improvements for the IT infrastructure and support provision, in order to reinforce ECDC operating capabilities.

In 2008, a new phone system was deployed, based on new IP telephone technologies, adequate to be operational also in crisis situation.

The previous internet connection was replaced by a high speed, reliable one, providing the basis for ECDC to host operational systems to support the surveillance and response to health issues in Europe. In addition, the previous outsourced mail system was migrated to ECDC, which resulted in a major improvement in stability.

For the Early Warning and Response System (EWRS), a secondary site was established with a mirrored system that can operate independent from the ECDC site and the failover between the two sites ensures the highest level of technical service contingency.

The ICT service also extended the network infrastructure and the service provision to the newly leased premises in 2008.

A 'project office', a support organisation for the operational projects, was set up and became fully operational. A network of project managers ensures cooperation and consistency at project level. In cooperation with the Health Communication Unit, an Information System Steering Committee guarantees integrity in the information strategy and service provision to partners and Member States. This Committee has an overview of all IT related projects developed at ECDC in order to ensure the best allocation of resources and to prevent overlaps. The project management methodology provided by the project office was adopted and is increasingly used at ECDC.

5.5 Other support

In 2008 the procurement office supported over 43 open procedures and 27 negotiated procedures as well as six calls for proposals. The CPCG (Committee on Procurement, Grant and Contracts) gives advice to guarantee compliance with rules and regulations and improved quality.

Significant work has been carried out to comply with rules and regulations regarding data protection, including the adoption of related implementing rules, the development of a register, and the notifications to the European Data Protection Supervisor of processing operations of sensitive data.

The legal office also provided advice and assistance in legal and financial issues to all units, and was also involved in the preparation of the Commission Communication on ECDC activities adopted on 13 November 2008.

Annexes



Annex 1: ECDC’s organisational structure

Overall structure and organisational chart

As of December 2008, ECDC had a matrix organisation with four technical units, an administrative unit and seven horizontal disease-specific programmes. The whole organisation is lead by the Director and her Cabinet.

The Director and the Director’s Cabinet

Strategic focus

The long-term strategic focus of the Director’s Cabinet is to ensure that ECDC has a clear long-term strategy for its programme development that responds to its founding regulation and the needs of the EU and its Member States; a medium- and short-term programme planning, implementation and evaluation that turns that strategy into effective operational outcomes; an efficient and enlightened management of its human and financial

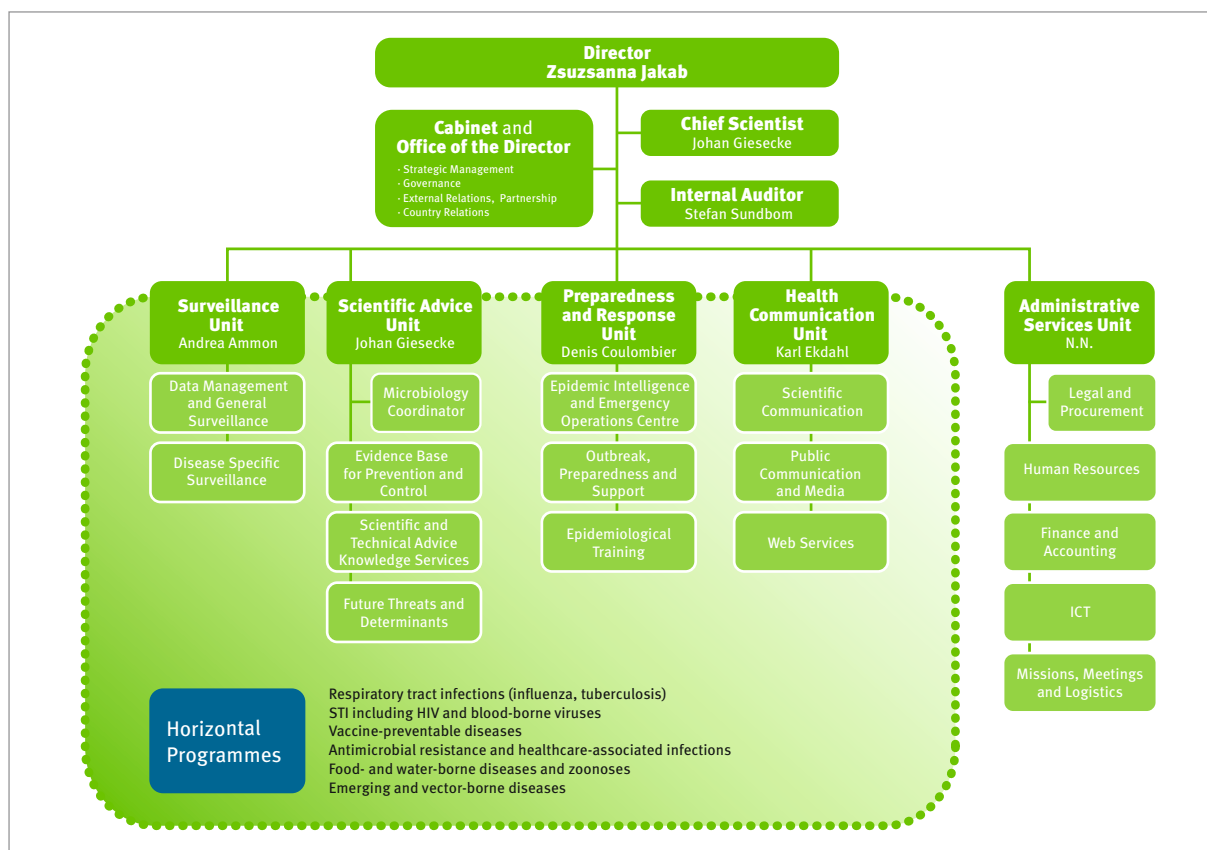
resources; an effective cooperation with the EU Member States and institutions; a wise choice of international partnerships; and a close and harmonious collaboration with its governing bodies.

Organisation

The Director has overall responsibility for the operations, resources and management of the Centre. The Director is supported in this task by the Cabinet and the five Heads of Units who manage the Surveillance, Scientific Advice, Preparedness and Response, Health Communication and Administrative Services units. The Director is the Chair of the Executive Committee, which advises her on strategic and overarching issues as well as the overall management that promotes effectiveness, efficiency, teamwork and a stimulating work environment.

The Director’s Cabinet supports the Director in the overall leadership function. However, the Cabinet also functions as an organisational unit responsible for the following programmes: Governance, Strategic

Figure 3. ECDC’s organisational chart, 2008



Management, Country Coordination and Relations, and External Relations and Partnerships. The Governance programme is responsible for organising all meetings and other contacts with the Management Board and the Advisory Forum. The Strategic Management programme provides the overall organisational framework for ECDC's long-, medium- and short-term planning, monitoring and evaluation, and it is responsible for ensuring that managerial tools and processes are well suited to ECDC's needs. The Country Coordination and Relations programme makes sure that systems, tools and practice for country work function efficiently, and that ECDC's support to individual Member States is well coordinated. The External Relations and Partnership programme deals with ECDC's cooperation with other EU structures, WHO and other intergovernmental organisations, international non-governmental organisations and major national centres for disease control.

Scientific Advice Unit

Strategic focus

The long-term strategic focus for the unit is to firmly establish its reputation for scientific excellence and leadership among its partners in public health, and that ECDC becomes a major source for scientific information and advice on communicable diseases for the Commission, the European Parliament and the Member States.

Organisation

The main task of the unit is to provide best possible evidence-based scientific advice for Member States to put to use in their prevention activities. Building on a large cadre of internal and external experts, the unit is prepared to address all kinds of requests for scientific opinions from its constituency. However, for many such requests, the full scientific background is still lacking — especially as regards concrete, practical public health actions — and it is also the task of the unit to try to stimulate such research, in cooperation with funders in the EU and with scientific institutions.

Internally, one part of the unit is involved to deliver scientific opinions, risk assessments and guidance. Another part deals with ECDC's internal knowledge and information system, including the scientific library. A third part is responsible for the overall cooperation between ECDC and the microbiological laboratories in the EU. As is stated below in the description of the horizontal disease projects, the unit also coordinates four of them.

Surveillance Unit

Strategic focus

The long-term strategic focus of the Surveillance Unit is to have established ECDC as the central focal point in Europe for disease surveillance and as a reference point for the strengthening and upgrading of national surveillance systems among EU Member States.

Organisation

The main tasks of the unit are to search, collect, collate, evaluate and disseminate data, and to coordinate the integrated operations of the Dedicated Surveillance Networks (DSN). The unit is subdivided into the following areas: database development and management, generic surveillance and disease-specific activities.

The unit is working towards an integrated surveillance system. To achieve this aim a first step was the evaluation of the DSNs and preparation of the corresponding transition plans, while also developing a European Surveillance System for public health action (TESSy).

Preparedness and Response Unit

Strategic focus

The long-term strategic focus of the unit is to establish ECDC as the reference support point in the EU by the year 2013 for: (A) the detection of public health threats related to communicable disease or of unknown origin, their assessment, investigation and control; (B) the coordination of risk assessment activities in relation to public health threats through the ECDC Emergency Operation Centre (EOC); (C) strengthening preparedness of EU Member States for the prevention, surveillance and control of communicable diseases; (D) strengthening and building the capacity of the EU Member States for these threats through training; and (E) the provision of technical advice and support on (A), (C) and (D) to third countries (including acceding, candidate and non-EU) upon request.

Organisation

The Preparedness and Response Unit is organised into three sections: intelligence, outbreak response and training. The epidemic intelligence section keeps track and assesses emerging threats through scanning various sources of epidemic intelligence information. It prepares a daily briefing to review incoming information, a weekly threat report and the Epidemic Intelligence Weekly Report (EIWR) for the C₃ Unit of DG SANCO. The outbreak response section deals with request for support from Member States and WHO, liaises with Member States to identify required expertise and coordinate teams mobilised to provide support. The training section coordinates ECDC training activities and the EPIET programme.

Administrative Services Unit

Strategic focus

The Administrative Services Unit and its staff are committed to providing services and facilitating the operational activities in the Centre, to ensuring that human and financial resources are properly and well managed, and to making the Centre a good working environment.

Organisation

The unit comprises five established sections: human resources, finance, information and communication technology, missions and meetings and logistics services. Besides these five sections, a horizontal function provides support on legal issues and other transverse tasks.

Health Communication Unit

Strategic focus

The long-term strategic focus of the Health Communication Unit is to ensure that ECDC's communication output is the main European source of authoritative and independent scientific and technical information in its field, and ECDC is the reference support point in the EU for risk communication in the area of communicable diseases. This unit is in charge of providing high quality services to the Cabinet, the other units and the disease-specific projects.

Organisation

To address the specific areas of work within the unit, it was further subdivided into three sections: Scientific Communication, Public Communication and Media, and Web Development.

The Scientific Communication section works mainly with communicating the scientific and technical output of the ECDC to professional audiences through different publications. These include technical and meeting reports, as well as the production of the independent scientific journal *Eurosurveillance*. The Public Communication and Media section works with press and media issues, risk communication, public health messages, as well as with the development of information and visitor services for stakeholders and the general public. The Web Development section is in charge of continuously maintaining and updating ECDC's interim website, both in content and graphic appeal. Additionally, it has launched a project to develop a state-of-the-art web portal and integrated information system.

Horizontal disease programmes

Organisation

Seven disease-specific projects cover all the 49 communicable diseases and related conditions that fall within the remit of ECDC. Each of the seven is organised around a coordination team that ensures any necessary input from other programmes — irrespective of their organisational affiliation. The supervisory responsibility for each of the seven individual projects is allocated to one or the other of the Heads of Units. Team members of each project come from all the technical units.

- **Programme on influenza**

The programme covers all aspects of influenza; seasonal influenza, pandemic influenza, and avian influenza.

- **Programme on tuberculosis**

The programme was set up in 2006 and covers all aspects of tuberculosis (TB), a disease that remains an important threat to human health worldwide. Despite the fact that the situation concerning TB in the EU has dramatically improved over the past decades, TB continues to be a threat to the health of European citizens. It is considered a re-emerging disease of European importance.

- **Programme on food- and waterborne diseases and zoonoses**

The programme covers the following diseases: anthrax, botulism, brucellosis, campylobacteriosis, variant Creutzfeldt Jakob disease and other TSE, cholera, cryptosporidiosis, echinococcosis, giardiasis, hepatitis A, infection with STEC/VTEC, leptospirosis, listeriosis, salmonellosis, shigellosis, toxoplasmosis, trichinellosis, tularaemia, typhoid/paratyphoid fever, and yersiniosis.

- **Programme on emerging and vector-borne diseases**

The programme focuses on a wide range of pathogens and diseases, notably vector-borne and travel-related diseases. Specific diseases covered include: chikungunya fever, dengue, hantavirus infections, legionellosis, Lyme disease (borreliosis), malaria, plague, Q-fever, severe acute respiratory syndrome (SARS), smallpox and other poxvirus, tick-borne encephalitis, viral haemorrhagic fevers, West Nile fever and yellow fever.

- **Programme on vaccine preventable diseases and invasive bacterial infections**

The programme covers general issues concerning vaccination and the following diseases: diphtheria, infections with *Haemophilus influenzae* type b, measles, meningococcal disease, mumps, pertussis, pneumococcal infections, poliomyelitis, rabies, rotavirus infection, rubella, tetanus, human papillomavirus (HPV) infections, and varicella.

- **Programme on STI, including HIV and blood-borne viruses**

The programme covers the following diseases: Chlamydia, gonorrhoea, hepatitis B, hepatitis C, HIV infection and syphilis.

- **Programme on antimicrobial resistance and healthcare-associated infections**

The programme covers antimicrobial resistance issues in the community and in hospitals, as well as all infections associated with healthcare. It includes activities such as surveillance of antimicrobial-resistant bacteria, surveillance of antimicrobial consumption, surveillance of various types of healthcare-associated infections, provision of scientific advice on the prevention and control of antimicrobial resistance and healthcare-associated infections, communication and training.

Annex 2: Members of the ECDC Management Board

Members and Alternates		
Austria	Professor Dr Hubert Hrabčík (Elected Chair of the Management Board as of 13 November 2008)	Member
	Dr Reinhild Strauss	Alternate
Belgium	Dr Daniel Reynders	Member
	Mr Chris Vander Auwera ¹	Alternate
Bulgaria	Dr Snejana Altankova	Member
	Professor Mira Kojouharova	Alternate
Cyprus	Dr Chrystalla Hadjianastassiou	Member
	Dr Irene Cotter	Alternate
Czech Republic	Professor Dr Roman Prymula	Member
	Dr Jan Kynčl	Alternate
Denmark	Dr Else Smith	Member
Estonia	Dr Tiiu Aro	Member
	Mr Martin Kadai ²	Alternate
Finland	Dr Tapani Melkas	Member
	Dr Merja Saarinen	Alternate
France	Dr Françoise Weber ³	Member
	Ms Anne Catherine Viso	Alternate
Germany	Mr Franz J. Bindert	Member
	Dr Lars Schaade	Alternate
Greece	Dr Aristidis Calogeropoulos-Stratis	Member
	Mr Athanasios Skoutelis	Alternate
Hungary	Dr Melinda Medgyaszai ⁴	Member
	Dr Marta Melles	Alternate
Ireland	Dr Eibhlin Connolly	Member
	Dr Colette Bonner	Alternate
Italy	Dr Donato Greco	Member
	Dr Fabrizio Oleari ⁵	Alternate
Latvia	Ms Dace Viluma	Member
	Ms Gunta Grīse ⁶	Alternate
Lithuania	Dr Audrius Ščeponavičius ⁷	Member
	Ms Loreta Ašoklienė ⁸	Alternate
Luxembourg	Dr Pierrette Huberty-Krau	Member
	Dr Pierre Weicherding ⁹	Alternate
Malta	Mr Mario Fava ¹⁰	Member
	Mr Renzo Pace Asciani ¹¹	Alternate
Netherlands	Dr Dirk Ruwaard ¹²	Member
	Dr Philip van Dalen ¹³	Alternate
	Dr Marc Sprenger (member and Chair of the Management Board until 13 November 2008)	
Poland	Dr Pawel Gorynski	Member
	Dr Pawel Grzesiowski	Alternate
Portugal	Dr Maria da Graça Gregorio de Freitas	Member
	Dr Arlinda Frota	Alternate
Romania	Professor Dorel Lucian Radu	Member
	Professor Emilian Popovici	Alternate
Slovak Republic	Dr Margareta Sláčiková	Member
	Mr Ján Mikas	Alternate
Slovenia	Dr Mojca Gruntar Činč	Member

¹ As of July 2008.

² Replaced Dr Inna Sarv as of June 2008.

³ Replaced Professor Gilles Brückner as of February 2008.

⁴ Replaced Dr Katalin Rapi as of July 2008.

⁵ Replaced Dr Maria Grazia Pompa as of September 2008.

⁶ As of June 2008.

⁷ Replaced Dr Vytautas Bakesenas as of August 2008.

⁸ Replaced Dr Romualdas Sabaliauskas as of August 2008.

⁹ Replaced Mr Patrick Hau as of August 2008.

¹⁰ Replaced Dr Malcolm P Micallef as of September 2008.

¹¹ Replaced Mr Mario Fava as of September 2008.

¹² Replaced Dr Marc Sprenger as of November 2008.

¹³ Replaced Dr Dirk Ruwaard as of November 2008.

Members and Alternates		
Spain	Dr Marija Seljak ¹⁴	Alternate
	Dr Ildefonso Hernández Aguado ¹⁵	Member
	Dr Karoline Fernández de la Hoz Zeitler ¹⁶	Alternate
Sweden	Ms Iréne Nilsson-Carlsson	Member
	Dr Johan Carlson	Alternate
United Kingdom	Ms Elizabeth Woodeson	Member
	Dr Ailsa Wight	Alternate
European Parliament	Professor Minerva-Melpomeni Malliori (Deputy Chair of the Management Board until 13 November 2008)	Member
	Professor Dr Jacques Scheres (Elected Deputy Chair of the Management Board as of 13 November 2008)	Member
European Commission	Mr Ronald Haigh	Alternate
	Mr Andrzej Jan Rys	Member
	Mr John F. Ryan ¹⁷	Member
	Ms Isabel de la Mata ¹⁸	Alternate
	Mr Tapani Piha	Alternate
	Mr Alain Vanvossel ¹⁹	Member
	Dr Anna Lönnroth	Alternate
Observers		
EEA/EFTA		
Iceland	Dr Sveinn Magnússon ²⁰	Member
	Mr Helgi Már Arthursson ²¹	Alternate
Liechtenstein	Dr Sabine Erne ²²	Member
Norway	Mr Jon-Olav Aspås	Member
	Mr Jan Berg	Alternate

¹⁴ Replaced Dr Alenka Kraigher as of August 2008.

¹⁵ Replaced Dr Carmen Amela Heras as of July 2008.

¹⁶ Replaced Mr Oscar González Gutiérrez-Solana as of October 2008.

¹⁷ As of July 2008.

¹⁸ As of July 2008.

¹⁹ Replaced Mr Octavio Quintana Trias as of July 2008.

²⁰ Replaced Mr David Á Gunnarsson as of September 2008.

²¹ Replaced Dr Sveinn Magnússon as of September 2008.

²² Replaced Dr Eva Maria Hiebl as of September 2008.

Annex 3: Members of the ECDC Advisory Forum

Members and Alternates		
Austria	Professor Dr Manfred P. Dierich	Member
	Professor Dr Franz Allerberger	Alternate
Belgium	Professor Dr Herman Van Oyen ²³	Member
	Dr Sophie Quoilin ²⁴	Alternate
Bulgaria	Dr Angel Kunchev	Member
	Dr Radosveta Filipova	Alternate
Cyprus	Dr Olga Kalakouta-Poyiadji	Member
	Dr Despo Pieridou-Bagatzouni	Alternate
Czech Republic	Dr Jozef Dlhý	Member
	Dr Pavel Slezak	Alternate
Denmark	Dr Kåre Mølbak	Member
	Dr Steffen Glismann	Alternate
Estonia	Dr Kuulo Kutsar	Member
	Dr Natalia Kerbo	Alternate
Finland	Professor Petri Ruutu	Member
	Dr Outi Lyytikäinen	Alternate
France	Dr Jean-Claude Desenclos	Member
	Professor François Dabis	Alternate
Germany	Dr Gérard Krause	Member
	Dr Osamah Hamouda	Alternate
Greece	Professor Helen Giamarellou	Member
	Dr Evaggelia Kouskouni	Alternate
Hungary	Dr Ágnes Csohán	Member
	Dr István Szolnoki	Alternate
Ireland	Dr Darina O'Flanagan	Member
	Dr Derval Igoe	Alternate
Italy	Dr Stefania Salmaso	Member
	Dr Giuseppe Ippolito	Alternate
Latvia	Dr Jurijs Perevoscikovs	Member
	Dr Irina Lucenko	Alternate
Lithuania	Dr Kestutis Zagminas	Member
	Dr Rolanda Valinteliene	Alternate
Luxembourg	Dr Robert Hemmer	Member
	Dr Danielle Hansen-Koenig	Alternate
Malta	Dr Charmaine Gauci	Member
	Ms Tanya Melillo Fenech	Alternate
Netherlands	Professor Roel Coutinho	Member
	Dr Marianne van der Sande	Alternate
Poland	Professor Andrzej Zielinski	Member
	Dr Malgorzata Sadkowska-Todys	Alternate
Portugal	Dr Maria Teresa d'Avillez Paixão	Member
	Dr Ana Maria Correia	Alternate
Romania	Dr Florin Popovici	Member
	Dr Ioan Bocsan	Alternate
Slovak Republic	Dr Mária Avdičová	Member
	Professor Henrieta Hudečková	Alternate
Slovenia	Dr Irena Klavs	Member
	Dr Marta Vitek Grgic	Alternate
Spain	Dr Maria José Sierra Moros	Member
	Dr Odorina Tello Anchueta	Alternate
Sweden	Professor Ragnar Norrby	Member
	Professor Anders Tegnell	Alternate
United Kingdom	Professor Mike Catchpole	Member
	Professor John Watson ²⁵	Alternate

²³ Replaced Dr Germain Hanquet (who in turn replaced Dr René Snacken in June 2008) as of October 2008.

²⁴ Replaced Professor Dr Herman Van Oyen (who in turn replaced Dr Germain Hanquet in June 2008) as of October 2008.

²⁵ Replaced Professor Peter Borriello as of November 2008.

Members and Alternates		
Observers		
EEA/EFTA		
Iceland	Dr Haraldur Briem	Member
	Dr Gudrun Sigmundsdottir	Alternate
Liechtenstein	Dr Sabine Erne	Member
Norway	Dr Preben Aavitsland	Member
	Dr Hanne Nøkleby	Alternate
Non-governmental Organisations (appointed by the European Commission)		
Standing Committee of European Doctors	Professor Dr Reinhard Marre ²⁶	Member
Pharmaceutical Group of European Union	Mr José Antonio Aranda da Silva	Alternate
European Public Health Association	Dr Ruth Gelletlie	Member
European Society of Clinical Microbiology and Infectious Diseases	Dr Elisabeth Nagy	Alternate
European Patient Forum	Ms Jana Petrenko	Member
European Federation of Allergy and Airways Disease Patient's Association	Dr Anna Doboszyńska	Alternate
European Commission	Dr Paolo Guglielmetti	
WHO Regional Office for Europe (invited by the Director)	Dr Nedret Emiroglu	

²⁶ Replaced Dr Bernhard Grewin as of June 2008.

Annex 4: Analysis and assessment of Authorising Officer's Annual Report

The Management Board has analysed and assessed the Authorising Officer's (Director) Annual Report for the financial year 2008, in accordance with article 40(2) of ECDC Financial Regulation.

The Management Board highly appreciates the results achieved by the Centre and notes in particular the following:

- that ECDC has achieved impressive results in a short period of time since its establishment;
- that 2008 saw the consolidation and expansion of ECDC activities;
- that ECDC has been delivering increased output and has further developed its partnerships and consolidated its internal structures in order to address the needs for a strengthened response to the threat of communicable diseases in Europe;

- that the first external evaluation of ECDC in 2008 confirmed this and found that the Centre has made a significant contribution to the fight against infectious diseases in Europe.

The Management Board also notes that recommended improvements to the information and project management systems are already underway and that further improvements to the efficiency is being made by establishing more coordination and interaction between the functional units and horizontal disease specific programmes.

In addition, the Management Board recommends that future annual reports be further developed in particular with regards to the risks associated with operations and the efficiency and effectiveness of the internal control systems.

Annex 5: ECDC budget summary 2008

Title 1 – Staff

Title Chapter	Heading	Appropriations 2009	Appropriations 2008	Execution 2007
1 1	Staff in active employment	20 358 000	13 573 490	7 814 194,98
1 3	Missions and travel	1 000 000	870 000	800 000,00
1 4	Socio-medical infrastructure	125 000	85 000	26 839,90
1 5	Exchanges of civil servants and experts	620 000	562 000	615 000,00
1 7	Representation expenses	35 000	27 000	33 000,00
1 8	Insurance against sickness, accidents and occupational disease, unemployment insurance and maintenance of pension rights	612 000	413 000	238 800,59
Title 1 – Total		22 750 000	15 530 490	9 527 835,47

Title 2 – Buildings, equipment and miscellaneous operating expenditure

Title Chapter	Heading	Appropriations 2009	Appropriations 2008	Execution 2007
2 0	Investments in immovable property, renting of buildings and associated costs	2 728 000	2 668 000	1 740 105,91
2 1	Data processing	2 697 000	2 373 924	2 549 890,19
2 2	Movable property and associated costs	200 000	70 000	687 641,58
2 3	Current administrative expenditure	375 000	166 000	111 686,23
2 4	Postage and telecommunications	250 000	243 000	268 960,44
2 5	Expenditure on meetings and management consulting	450 000	450 000	556 527,76
Title 2 – Total		6 700 000	5 970 924	5 914 811,91

Title 3 – Operations

Title Chapter	Heading	Appropriations 2009	Appropriations 2008	Execution 2007
3000	Networking, surveillance and data collection on Communicable diseases	5 025 000	4 045 000	2 493 962,19
3001	Preparedness, response and emerging health threats	1 445 000	1 225 000	1 107 237,25
3002	Scientific opinions and studies	3 705 000	3 250 000	1 836 258,72
3003	Technical assistance and training	2 020 000	2 630 000	2 061 391,62
3004	Publications and Communications	2 015 000	2 095 000	911 725,60
3005	ICT to support projects	3 950 000	2 993 000	1 747 680,64
3006	Build up and maintenance of the Crisis Centre	200 000	167 000	4 987 718,66
3007	Translations of scientific and technical reports and documents	520 000	400 000	265 000,00
3008	Meetings to implement the work programme	1 700 000	1 530 000	1 314 027,24
3009	Country operation and partnership	485 000	340 000	368 822,88
3010	Scientific Library and Knowledge services	185 000	464 000	261 078,28
Title 3 – Total		21 250 000	19 139 000	12 865 903,08
Grand Total		50 700 000	40 640 414	28 308 550,46

Annex 6: ECDC publications in 2008

This list only includes ECDC official publications in 2008. However, ECDC staffs published or collaborated to a lot of scientific articles and publications, including in *Eurosurveillance*, which are not listed here.

Technical Report

May

Review of Chlamydia control activities in EU countries

ECDC Guidance

January

Guidance for the introduction of HPV vaccines in EU countries

August

Priority risk groups for influenza vaccination

Surveillance Reports

December

Annual epidemiological report on communicable diseases in Europe 2008

HIV/AIDS surveillance in Europe 2007

Mission Report

August

Measles outbreak in Austria: risk assessment in advance of the EURO 2008 football championship

Special Reports

March

Framework action plan to fight tuberculosis in the European Union

May

Surveillance of communicable diseases in the European Union. A long-term strategy: 2008–2013

July

ECDC strategic multi-annual programme 2007–2013

Meeting Reports

January

Networking for public health (27–28 February 2007)

February

Consultation on vector-related risk for chikungunya virus transmission in Europe (22 October 2007)

Infectious diseases and social determinants (26–27 April 2007)

March

Now-casting and short-term forecasting during influenza pandemics (29–30 November 2007)

Second consultation on outbreak investigation and response in the EU (15 November 2007)

Third meeting of the Chairs of Commission and Agency scientific committees/panels involved in risk assessment (6–7 November 2007)

May

Environmental change and infectious disease (29–30 March 2007)

June

Training strategy for intervention epidemiology in Europe (11–12 September 2007)

October

Annual meeting on TB surveillance in Europe (3–4 June 2008)

HIV testing in Europe: from policies to effectiveness (21–22 January 2008)

December

Workshop on linking environmental and infectious diseases data (28–29 May 2008)

Technical Documents

January

Core competencies for public health epidemiologists working in the area of communicable disease surveillance and response, in the European Union

Corporate Publications

Quarterly (March, June, September, December)

ECDC Insight

Executive science update

June

Annual report of the Director 2007

December

Keeping Europe healthy: ECDC in action

Protecting health in Europe: our vision for the future

Annex 7: List of Competent Bodies

Austria	Austrian Agency for Health and Food Safety Spargelfeldstraße 191 A-1220 Vienna http://www.ages.at/	Scientific Advice
Austria	Medical University Vienna Institute of Social Medicine, Centre of Public Health Rooseveltplatz 3 A-1090 Vienna http://www.meduniwien.ac.at/ZPH/index.html	Scientific Advice
Austria	Ministry of Health, Family and Youth Public Health and Pharmaceutical Products Service Radetzkystr 2 A-1030 Vienna http://www.bmgfj.gv.at	Communication Preparedness Preparing Guidelines Response Surveillance Threat Detection Training
Belgium	Scientific Institute of Public Health Department Pasteur rue Engeland, 642 B1180 Brussels http://www.iph.fgov.be	Preparing Guidelines Scientific Advice Surveillance Threat Detection Training
Belgium	Public Health, Food Chain Safety and Environment Directorate-General Primary Healthcare and Crises Management Victor Horta Place, 40 box 10 1060 Brussels	Communication Preparedness Response
Belgium	Flemish Agency for Care and Health Infectious diseases and vaccination Ellipse building, Koning Albert II-laan 35 box 33 B-1030 Brussels http://www.zorg-en-gezondheid.be/	Communication
Belgium	Ministry of the French Community Boulevard Leopold II, 44 1080 Brussels http://www.cfwb.be/	Communication
Belgium	Ministry of the German-Speaking Community Gospertstraße 1 4700 Eupen http://www.dglive.be/	Communication
Bulgaria	National Center of Infectious and Parasitic Diseases 26, Yanko Sakazov Blvd. 1504 Sofia www.ncipd.org	Scientific Advice Surveillance Training
Bulgaria	Ministry of Health National State Health Inspection Sveta Nedelja Sq. 5 1000 Sofia http://www.mh.government.bg/	Preparedness Preparing Guidelines Response Surveillance
Bulgaria	National Center of Health Informatics 15, Acad.Ivan Geshov str. 1431 Sofia	Surveillance IT part
Bulgaria	Directorate of Public Health Department of Communicable Diseases 5, Sveta Nedelja Sq. 1000 Sofia	Communication Response Surveillance HIV/AIDS Threat Detection
Cyprus	Directorate Medical and Public Health Services Unit for Surveillance and Control of Communicable Diseases 1, Prodromou str 1448 Nicosia http://www.moh.gov.cy/moh/moh.nsf/index_en/index_en	Communication Preparedness Preparing Guidelines Response Scientific Advice Surveillance Threat Detection Training
Czech Republic	National Institute of Public Health Šrobárova 48 100 42 Praha 10 http://www.szu.cz	Preparing Guidelines Surveillance
Czech Republic	School of Military Health Sciences Faculty of Military Health Sciences Třebesska 1575 CZ-500 01 Hradec Kralove www.pmfhk.cz	Scientific Advice Training
Czech Republic	Ministry of Health Palackeho namesti 4 128 01 Prague 2 http://www.mzcr.cz	Communication Preparedness Preparing Guidelines Response Threat Detection
Czech Republic	Institute of Postgraduate Medical Education Ruská 85 100 05 Praha 10 http://www.ipvz.cz	Preparing Guidelines Training
Denmark	Statens Serum Institute Artillerivej 5 DK-2300 Copenhagen S http://www.ssi.dk	Response Scientific Advice Surveillance Threat Detection Training

Denmark	National Board of Health Islands Brygge 67 2300 Copenhagen S http://www.sst.dk	Communication Preparedness Preparing Guidelines Response
Denmark	The National Food Institute Moerkhoej Bygade 19 2860 Soeborg www.food.dtu.dk	Scientific Advice
Estonia	Health Protection Inspectorate Paldiski mnt. 81 10617 Tallinn http://www.tervisekaitse.ee/?lang=3	Communication Preparedness Preparing Guidelines Response Scientific Advice Surveillance Threat Detection Training
Estonia	National Institute for Health Development Hiiu 42 11619 Tallinn http://www.tai.ee/?lang=en	Surveillance TB and HIV/AIDS
Estonia	Ministry of Social Affairs Gonsiori 29 15027 Tallinn http://www.sm.ee	Communication Training
Finland	National Institute for Health and Welfare P.O. Box 30 Mannerheimintie 166 FI-00300 Helsinki http://www.thl.fi	Communication Preparedness Preparing Guidelines Response Scientific Advice Surveillance Threat Detection Training
Finland	Ministry of Social Affairs and Health Dept. for Promotion of Welfare and Health PO BOX 33 Government FIN-00023 Helsinki http://www.stm.fi	Communication Preparedness Preparing Guidelines Response Training
France	National Institute for Surveillance 12, rue du Val d'Osne 94415 Saint-Maurice cedex http://www.invs.sante.fr/	Communication Scientific Advice Surveillance Threat Detection Training
France	Ministry of Health, Youth, Sport and Association Activity Health General Directorate 14, avenue Duquesne 75350 Paris 07 SP http://www.sante.gouv.fr	Communication Implementing Guidelines Preparedness Preparing Guidelines Response
France	National Institute for Prevention and Health Education 42, bd de la Libération 93203 Saint Denis Cedex http://www.inpes.fr/	Communication
Germany	Robert Koch-Institute Nordufer 20 D 13353 Berlin http://www.rki.de	Communication Communicable diseases Preparedness Preparing Guidelines Response Scientific Advice Surveillance Threat Detection Training
Germany	Federal Centre for Health Education Ostmerheimer Str.220 51109 Koln http://www.bzga.de	Communication Public campaigns
Greece	Ministry of Health and Social Solidarity Directorate of Public Health 17, Aristotelous Street GR-101 87 Athens http://www.mohaw.gr/	Communication Scientific Advice Threat Detection Training
Greece	Hellenic Center for Disease Control and Prevention 9 Polytechniou St. 10433 Athens http://www.keelpno.gr/en/	Preparedness Public Health Preparing Guidelines Scientific Advice Surveillance Threat Detection Training
Greece	Hellenic Organization Against Drugs 21 Averof Street 10433 Athens http://www.okana.gr	Communication General Public
Hungary	National Centre for Epidemiology Gyáli ut 2-6 H-1097 Budapest http://www.oek.hu	Communication Preparedness Preparing Guidelines Response Scientific Advice Surveillance Threat Detection Training
Hungary	Koranyi National Institute of Tuberculosis and Pulmonology Pihenó ut 1 1529 Budapest http://www.koranyi.hu/	Communication for TB only Preparing Guidelines for TB only Response for TB only Scientific Advice for TB only Surveillance for TB only Threat Detection for TB only Training for TB only

Iceland	Centre for Health Security and Infectious Disease Control Directorate of Health Austurströnd 5 170 Seltjarnarnes http://www.landlaeknir.is	Communication Implementing Guidelines Policy Issues Preparedness Preparing Guidelines Response Scientific Advice Surveillance Threat Detection Training
Ireland	Health Protection Surveillance Centre 25–27 Middle Gardiner Street Dublin 1 http://www.ndsc.ie	Communication Communicable diseases Implementing Guidelines Preparedness Preparing Guidelines Response Scientific Advice Surveillance Threat Detection Training
Italy	National Health Institute Viale Regina Elena 299 00161 Rome http://www.iss.it	Scientific Advice Surveillance HIV/AIDS Training
Italy	Ministry of Labour, Health and Welfare Directorate General of Health Prevention Viale Giorgio Ribotta 5 00144 Rome http://www.ministerosalute.it	Communication Preparedness Preparing Guidelines Response Surveillance other diseases Threat Detection Training
Italy	National Institute for Infectious Diseases “L. Spallanzani” Viale Portuense, 292 00149 Rome http://www.inmi.it	Scientific Advice Training
Latvia	State agency “Latvian Infectology Centre” Linezera iela 3 LV-1006 Riga http://www.infectology.lv/	Scientific Advice for public health
Latvia	State agency “Public Health Agency” Klijanu str. 7 LV-1012 Riga http://www.sva.lv/eng/	Communication Preparedness Preparing Guidelines Response Scientific Advice for public health Surveillance Threat Detection Training
Latvia	State agency of Tuberculosis and Lung Diseases P/O Cekule, Stopinu p. LV-2118 Riga http://www.tuberculosis.lv	Scientific AdviceTB SurveillanceTB TrainingTB
Latvia	Centre of Emergency and Disaster Medicine Pilsonu str. 13, building 21 LV-1002 Riga http://www.emergency.lv/index.php?lang=en	Response for disasters
Liechtenstein	Office for Public Health Aeulestrasse, 51 FL-9490 Vaduz http://www.llv.li/home.htm	Communication Preparedness Preparing Guidelines Response Scientific Advice Surveillance Threat Detection Training
Lithuania	Institute of Hygiene Didzioji str. 22 LT-01128 Vilnius http://www.hi.lt	Communication HCAI & AMR Scientific Advice HCAI & AMR Surveillance Healthcare
Lithuania	Centre for Communicable Diseases Prevention and Control Kalvariju str. 153 LT-08221 Vilnius http://www.ulpkc.lt/en.index.php	Communication Communication on CD Preparing Guidelines Surveillance Threat Detection
Lithuania	National Tuberculosis and Infectious Diseases University Hospital Birutes str. 1/20 LT-08117 Vilnius http://www.rtiul.lt/	SurveillanceTB Surveillance
Lithuania	Lithuanian AIDS centre Nugalėtojų str 14D LT-10105 Vilnius http://www.aids.lt/	Communication HIV/AIDS and STI Surveillance HIV/AIDS and STI Threat Detection HIV/AIDS and STI
Lithuania	Ministry of Health of the Republic of Lithuania Health Emergency Situations Centre Didzioji str. 7 LT-01128 Vilnius http://www.essc.sam.lt/en/Heat.html	Preparedness Response Training
Luxembourg	Ministry of Health Health Directorate 5A, rue de Prague L-2348 Luxembourg http://www.ms.etat.lu/	Communication Preparedness Preparing Guidelines Response Scientific Advice Surveillance Threat Detection Training

Luxembourg	National Health Laboratory 42, Rue du Laboratoire L-1911 Luxembourg http://www.lns.public.lu/	Scientific Advice Surveillance
Luxembourg	Central Hospital of Luxembourg Service National des maladies infectieuses 4, Rue Barble L-1210 Luxembourg http://www.chl.lu/anim_home.html	Scientific Advice Surveillance
Malta	Public Health Regulation Division Health Promotion and Disease Prevention 5A, The Emporium, De Brocktorff Street MSD 1412 Msida http://www.sahha.gov.mt/	Communication Preparedness Preparing Guidelines Response Scientific Advice Surveillance Threat Detection Training
Malta	Ministry for Social Policy Palazzo Ferreria, 310 Republic Street VLT 2000 Valletta http://www.msp.gov.mt/	Policy Issues
Netherlands	Ministry of Health, Welfare and Sport Public Health Department P.O. Box 20350 2500 EJ The Hague http://www.minvws.nl/	Policy Issues Preparedness Influenza
Netherlands	National Institute for Public Health and the Environment Centre for Infectious Disease Control PO Box 1 3720 BA Bilthoven http://www.rivm.nl/en/	Communication Preparedness Preparing Guidelines Response Scientific Advice Surveillance Threat Detection Training
Norway	Norwegian Institute of Public Health PO BOX 4404 Nydalen N-0430 Oslo www.fhi.no	Communication Preparedness Preparing Guidelines Response Scientific Advice Surveillance Threat Detection Training
Poland	National Institute of Public Health National Institute of Hygiene Chocimska 24 00-791 Warsaw http://www.pzh.gov.pl	Preparing Guidelines Scientific Advice Surveillance Threat Detection Training
Poland	Centre for Postgraduate Medical Training – School of Public Health Kleczevska 61/63 00-826 Warsaw	Training
Poland	Chief Sanitary Inspectorate Długa 38/40 00-238 Warsaw www.gis.gov.pl	Communication Preparedness Response Threat Detection
Poland	National Tuberculosis and Lung Disease Institute Plocka 26 01-138 Warsaw http://www.igichp.edu.pl/	Scientific AdviceTB
Portugal	Directorate General of Health Communicable Diseases Division Alameda D. Afonso Henriques, 45 1049-005 Lisbon www.dgs.pt	Communication Preparedness Preparing Guidelines Response Scientific Advice Surveillance Threat Detection Training
Portugal	National Institute of Health Av. Padre Cruz 1649-016 Lisbon http://www.insarj.pt	Scientific Advice Threat Detection Laboratory issues
Portugal	Ministry of Health The Office of the High Commissioner for Health (Alto Comissariado da Saúde) Avenida João Crisóstomo, 9, 7 ^o piso 1049-062 Lisbon http://www.acs.min-saude.pt/acs	Surveillance HIV / AIDS
Romania	National Institute of Research and Development for Microbiology and Immunology "Cantacuzino" INCDMI Cantacuzino; Splaiul Independentei 103 050096 Sector 5 Bucuresti www.cantacuzino.ro	Response Scientific Advice Surveillance
Romania	Ministry of Public Health Public Health Authority Intr. Christian Popisteanu, nr.1-3, sector 1 010024 Bucuresti http://www.ms.ro	Communication Preparedness Preparing Guidelines Response Threat Detection Training
Romania	Centre for Prevention and Control of Communicable Diseases Institute of Public Health Bucharest National Str. Dr. A. Leonte Nr. 1-3 050463 Bucuresti http://www.cpcbt.ispb.ro/	Response Surveillance Threat Detection Training

Romania	HIV/AIDS Institute of Infectious Diseases "Prof. Dr. Matei. Bals" Str.Dr.Grozovici nr.1, sector 2 021105 Bucuresti	Surveillance HIV/AIDS
Romania	Institute of Pneumology Marius Nasta Sector 5, Sos. Viilor nr. 90 050159 Bucuresti http://www.mariusnasta.ro/	SurveillanceTB
Slovak Republic	Comenius University Jessenius Faculty of Medicine Záborského 2 036 45 Martin http://eng.jfmed.uniba.sk/	Scientific Advice
Slovak Republic	Ministry of Health Department of International Relations Limbova 2 PO Box 52 837 52 Bratislava 37 http://www.health.gov.sk	Communication Preparedness Preparing Guidelines Response Threat Detection
Slovak Republic	Public Health Authority of the Slovak Republic Trnavská 52 826 45 Bratislava http://www.uvzsr.sk	Communication Preparing Guidelines Response Surveillance
Slovak Republic	National Institute for Tuberculosis, Lung Diseases and Thorax Surgery National Register of Tuberculosis 05984 Vysne Hagy	SurveillanceTB
Slovak Republic	Slovak Medical University Limbova 12 833 03 Bratislava http://www.szu.sk	Training
Slovak Republic	Regional Public Health Authority Cesta k Nemocnici 1 975 56 Banská Bystrica	Surveillance
Slovenia	National Institute of Public Health Centre for Communicable diseases Trubarjeva, 2 1000 Ljubljana http://www.ivz.si	Communication Preparedness Preparing Guidelines Response Scientific Advice Surveillance Threat Detection Training
Slovenia	University Clinic Golnik University Clinic for Pulmonary and Allergic diseases Golnik Golnik 36 4204 Golnik http://www.klinika-golnik.si	SurveillanceTB
Spain	High Council of scientific research C/ Serrano, 117 28006 Madrid www.csic.es	Scientific Advice
Spain	Health Institute Carlos III C/ Sinesio Delgado, 6 28029 Madrid http://www.isciii.es/htdocs/en/index.jsp	Scientific Advice
Spain	Ministry of Health and Consumption General Directorate of Public Health Paseo del Prado 18-20, 3ª planta 28071 Madrid www.msc.es	Preparedness Preparing Guidelines Response Threat Detection
Spain	Ministry of Health and Consumption S.G. International Relations Paseo del Prado, 18-20 28071 Madrid www.msc.es/en/organizacion/ministerio/home.htm	Communication
Spain	National Centre of Epidemiology Sinesio Delgado 6 28029 Madrid http://cne.isciii.es	Surveillance Training
Sweden	National Board of Health and Welfare Rålambsvägen 3 SE-106 30 Stockholm http://www.socialstyrelsen.se	Communication Preparedness Preparing Guidelines Response Scientific Advice Threat Detection Training
Sweden	Swedish Institute for Infectious Disease Control Nobels vag 18, Solna 171 82 Stockholm http://www.smittskyddsinstitutet.se	Communication Scientific Advice Surveillance Training
United Kingdom	Health Protection Agency Centre for Infections 61 Colindale Ave NW9 5EQ London www.hpa.org.uk	Communication Preparedness Preparing Guidelines Response Scientific Advice Surveillance Threat Detection Training
United Kingdom	Department of Health Richmond House Richmond House – 79 Whitehall SW1A2NS London www.dh.gov.uk	Policy Issues

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