



Keeping Europe healthy

Risk communication in theory and in practice

Ben Duncan, Corporate Communications Officer, European Centre for
Disease Prevention and Control

Presentation to EpiSOUTH, Madrid, 16 June 2009

Road map

- Brief introduction to the theory of risk communication



Road map

- Brief introduction to the theory of risk communication
- Perspective of a communications practitioner
 - Experience from recent infectious disease outbreaks



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- Brief introduction to the theory of risk communication
- Perspective of a communications practitioner
 - Experience from recent infectious disease outbreaks
- A few words about ECDC



Key facts about ECDC

- EU funded scientific agency
- operational since May 2005
- approx 300 staff by end 2009
- € 50.7 million budget for 2009
- based in Stockholm

ECDC's mission and activities

"Identify, assess & communicate current & emerging health threats to human health from infectious diseases" (EC Regulation 851/2004)

- **(Risk assessment role** and it has advisory role to the EC and MS on risk management issues)
- **Detection of health threats:** surveillance and epidemic intelligence;
- **Provide evidence-based scientific opinions/advice;**
- **Strengthen preparedness and response**
 - Operate the early warning system and response
 - Support MS in outbreak investigation and RA;
 - Build capacity through training
- **Health Communication**

**ECDC:
scientific and
technical
institute**



The science of risk communication

- Many (most?) human decisions are based on “gut reaction” rather than logic



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Human reaction to risk is not logical



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Human reaction to risk is not logical

Risk = Hazard + Outrage

There is real science behind this



The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2002



Daniel Kahneman

1/2 of the prize
USA and Israel
Princeton University
Princeton, NJ, USA
b. 1934
(in Tel Aviv, Israel)

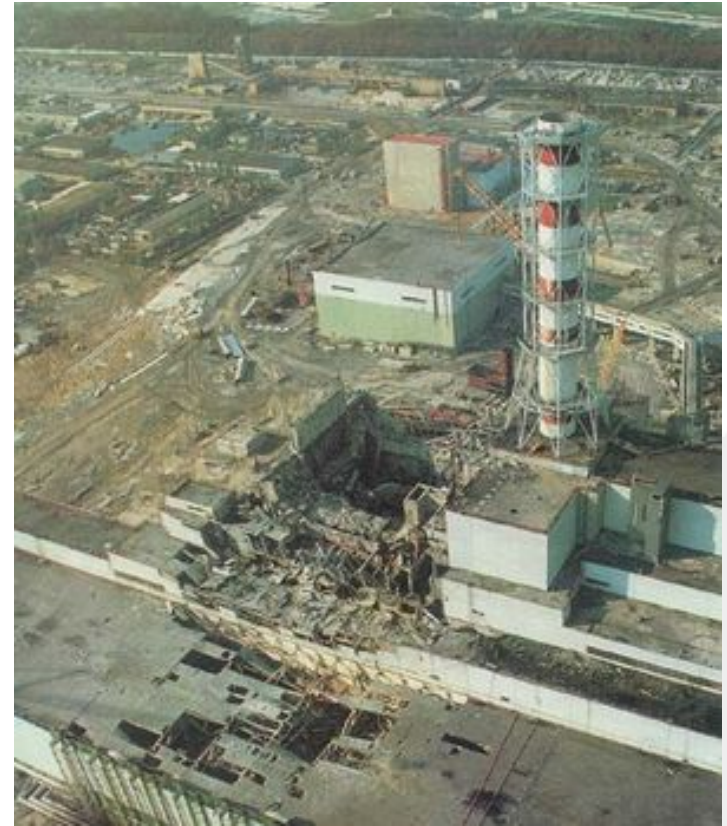
"for having integrated insights from psychological research into economic science, especially concerning human judgment and decision-making under uncertainty"



1970s – 1980s



Three Mile Island



Chernobyl

1990s



"British beef is safe."



2000s

SARS in 2003
spread
internationally
at alarming
speed



2000s

SARS in 2003 spread internationally at alarming speed



Doctors told: get ready for flu crisis

● Deadly virus enters Europe for first time ● GPs preparing for epidemic to strike 14 million

by ANNEKA HAYMAN, Jo Neill and Helena Smith Alzara

THE BIRD flu crisis moved a step closer to Britain's shores yesterday as the country's most senior medical adviser demanded that all doctors draw up emergency plans to distribute 14 million doses of drugs to combat the disease.

As the deadly virus entered Europe for the first time with confirmed cases in Romania, Sir Liam Donaldson said that all of Britain's 34,000 GPs would be told to prepare for a massive influx of patients if a bird flu pandemic hit the country.

Donaldson, the Chief Medical Officer, who advises the government, will tell every practice in the country to gear up for the 'inevitable' event. He said that doctors will be needed to hand out more than 14 million doses of antiviral drugs and ensure home visits for patients to free hospital beds and minimise deaths.

This is public health every number one, Donaldson told *The Observer*. It is at



Veterinary workers in Mafkat, Romania, begin a cull of chickens after the most lethal strain of bird flu was confirmed. (AP/Wide World)

Winter 2005-2006 – "bird flu"

Academic experts and “Gurus”

- George Cvetkovich
- Baruch Fischhoff
- Lynn Frewer
- George Gaskell
- Joye Gordon
- Ragnar Löfstedt
- Ortwin Renn
- Peter Sandman
- Robert Ulmer

*Risk Communication and
Public Health,*
P. Bennett and K. Calman eds.,
OUP, UK, 1999

*IPTS Report Special issue:
Perspectives on Crisis and
Risk Communication,*
IPTS, Seville, March 2004

<http://www.jrc.es/home/report/english/articles/vol82/welcome.htm>

Peter Sandman's website:

<http://www.psandman.com>

Facilitating an evidence informed approach to risk communication

The role of outrage (and fear) in risk perception:

Peter Sandman's model of how the public assesses most hazards

"safe"

Natural
Voluntary
Controlled by self
Trustworthy sources
Responsive process
Familiar
Not memorable
No moral relevance
Not dreaded
Chronic

"risky"

Industrial
Involuntary
Controlled by others
Untrustworthy sources
Unresponsive process
Unfamiliar
Memorable
Moral relevance
Dreaded
Catastrophic

Facilitating an evidence informed approach to risk communication



Age (and fear)
Level of how the public



- Responsive process
- Familiar
- Not memorable
- No moral relevance
- Not dreaded
- Chronic



- Interventive
- Controlled by others
- Trustworthy sources
- Responsive process
- Familiar
- Memorable
- Moral relevance
- Dreaded
- Chronic

WHO Outbreak Communication Guidelines, Geneva, 2005



WHO Outbreak Communication Guidelines, 2005 - PLANNING GUIDE, 2008



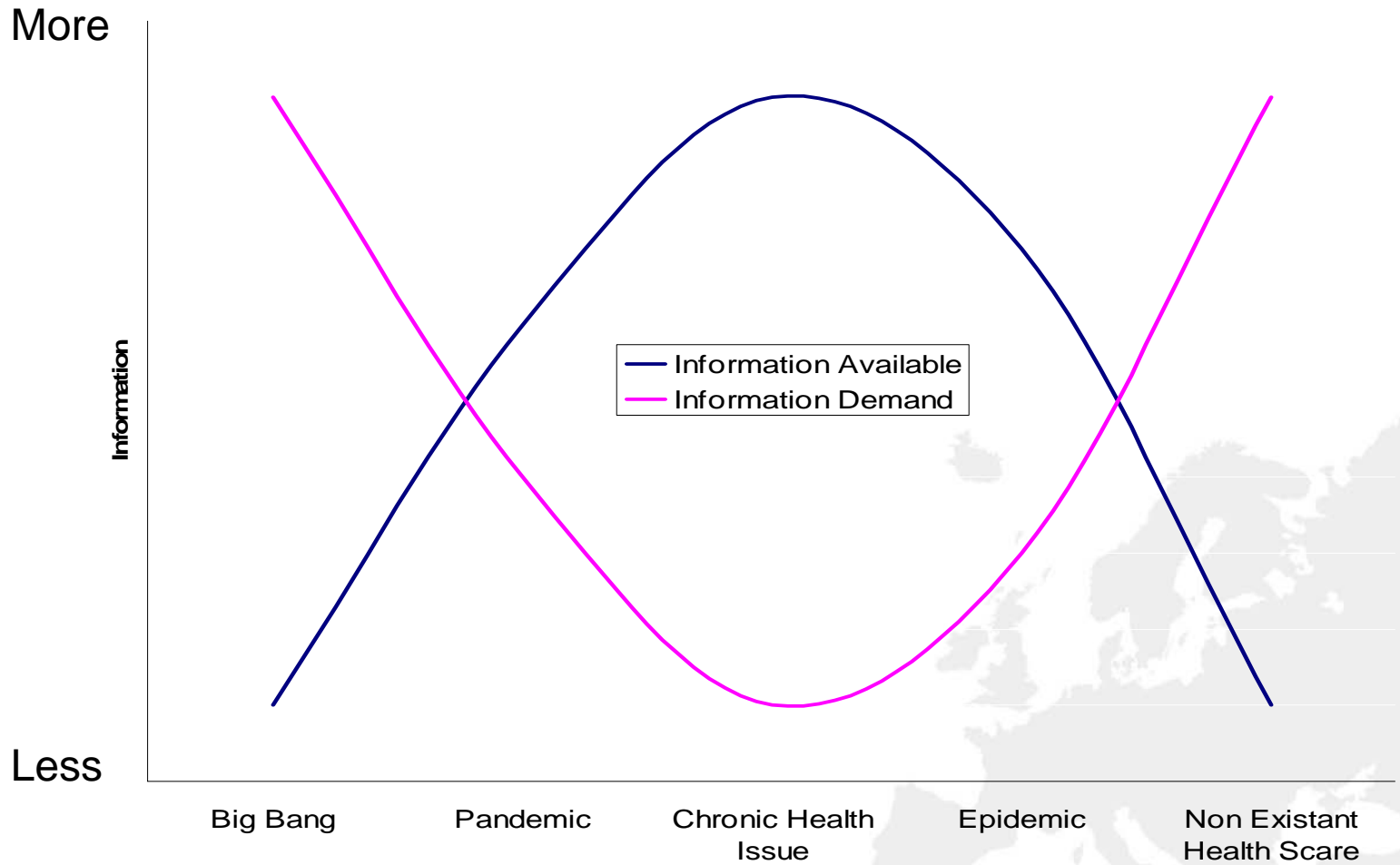
Three reasons to be cheerful

- Outbreaks are “natural” events – public accepts they will happen
 - Most infectious diseases are “low dread”
 - Doctors and health system are usually perceived as “high trust”
-
- Outrage starts if public perceive that authorities are:
 - Slow to respond
 - Less well prepared than they should be
 - Trust can be lost if authorities perceived as withholding information

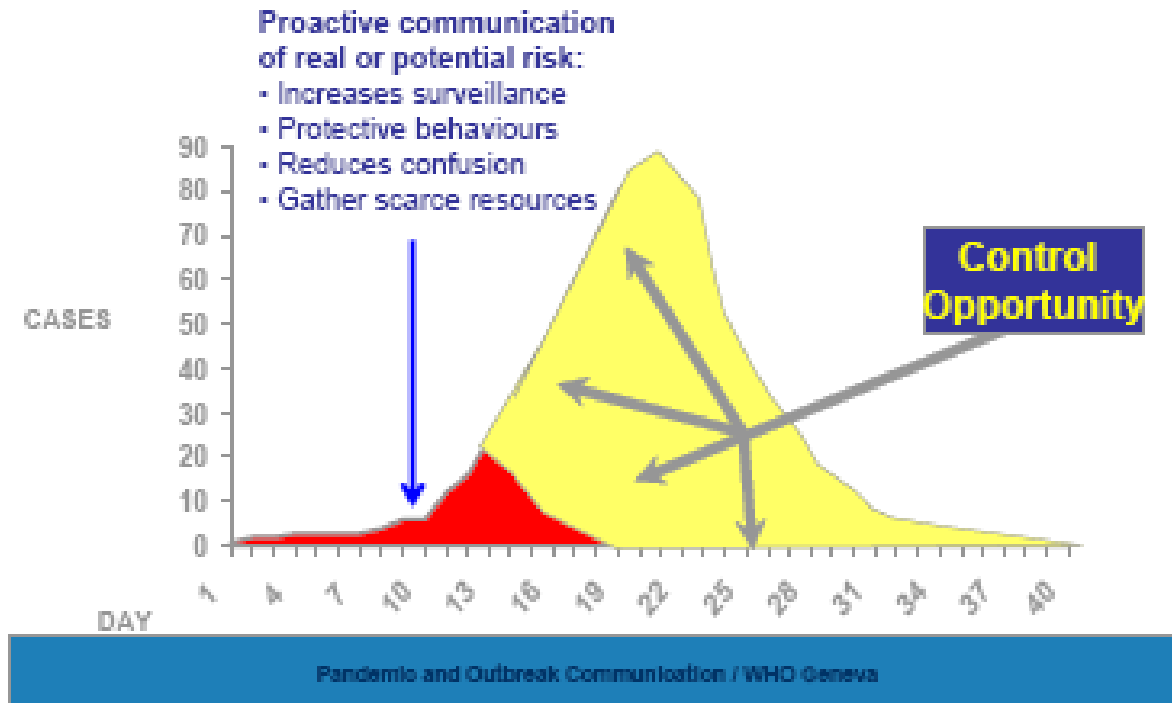
What do the media (and public) want to know?

- What has happened?
- How many people are sick / dead?
- How concerned should we be? ← Risk assessment
- How can people protect themselves?
- What are the symptoms?
- What are the authorities doing to address the situation? Risk management
- What happens next?





Outbreak communication



This diagram illustrates a common epidemic curve that forms during infectious disease outbreaks. Proactive and effective public communication plays a direct role in reducing illness and saving lives.



Thank you!

www.ecdc.europa.eu

Tel: +46.858601125

Ben.duncan@ecdc.europa.eu



How things work during a health emergency

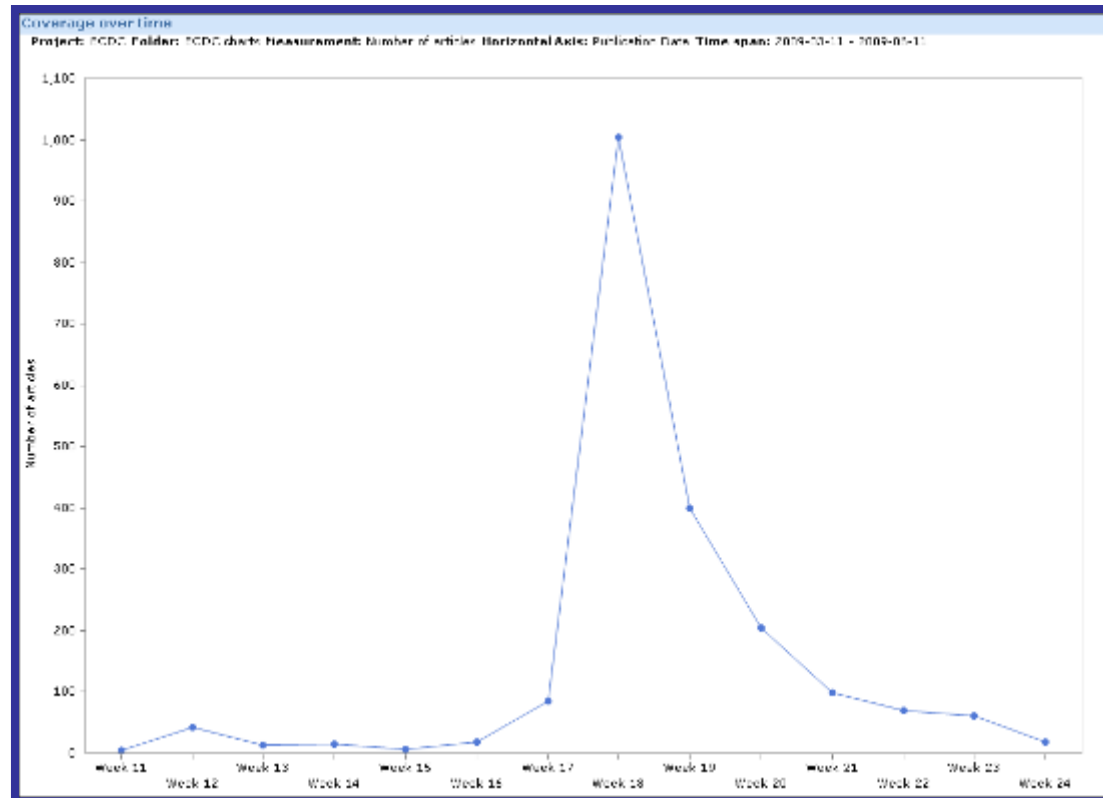


Risk assessment

Risk management

Case study – emergence of new H1N1 influenza virus

- Daily epidemiological reports
- Media given daily access to senior experts
- Factual info, admitting to uncertainties
- Senior health experts regarded as credible by media



Case study – transatlantic traveller with suspect XDR-TB, May 2007

- US citizen diagnosed with TB but travels to Europe against advice of health official
- Lab results showing XDR-TB
- Refuses to go into care of Italian health authorities – goes on the run
- Travels back to US via Canada. Put into Federal Quarantine as soon as gets back to US
- EU epi experts assess risk as very low but...
- Director of US CDC to give press conference
- CDC plans to screen all passengers on flights
 - Patient was "*virtually asymptomatic*"

Case study XDR-TB: the result

- Risk assessed as low but precautionary measures agreed by EU countries
- Screen “grey zone” passengers
- Information and suggested media line circulated to all EU countries
 - advance copy of US press statement
 - risk assessment + suggested media messages
 - statement put on ECDC website



Some rules for successful communication during an emergency



- Understand your audience
- Treat them with respect
 - Acknowledge legitimacy of their concerns
 - Be open about uncertainty and gaps in your knowledge
- Announce early
 - If authorities do not talk to media they report rumours and self appointed “experts”
- Communication should build trust
 - Do not exaggerate risk
 - Do not give false reassurance
- Involve communications experts throughout emergency
- **Coordination and coherence between different partners**

Communication mandate

“The Centre shall communicate on its own initiative on the fields within its mission, after having given prior information to the Commission and Member States. It shall ensure that the public and any interested parties are rapidly given objective, reliable and easily accessible information with regards to the results of its work.”

(ECDC Founding Regulation (851/2004), Article 12 (1))

- Obligation to communicate about results of scientific work
- Obligation to communicate to public and media, as well as experts
- Prior information to MSs and Commission



Communication: Work areas

- Communication to the media and the European public
- Communication to professional audiences
- Supporting the Member States with their communication activities



Communication strategies

- Target-group specific approach to all scientific communication
 - Fully integrate a communication element in all disease-specific activities
 - Effectively disseminate ECDC's scientific output

ECDC's disease- specific programmes

- Influenza
- Tuberculosis
- Food- and waterborne diseases and zoonoses
- Emerging and vectorborne diseases
- Vaccine-preventable diseases and invasive bacterial infections
- HIV, STI and blood-borne viruses
- Antimicrobial resistance and healthcare-associated infections

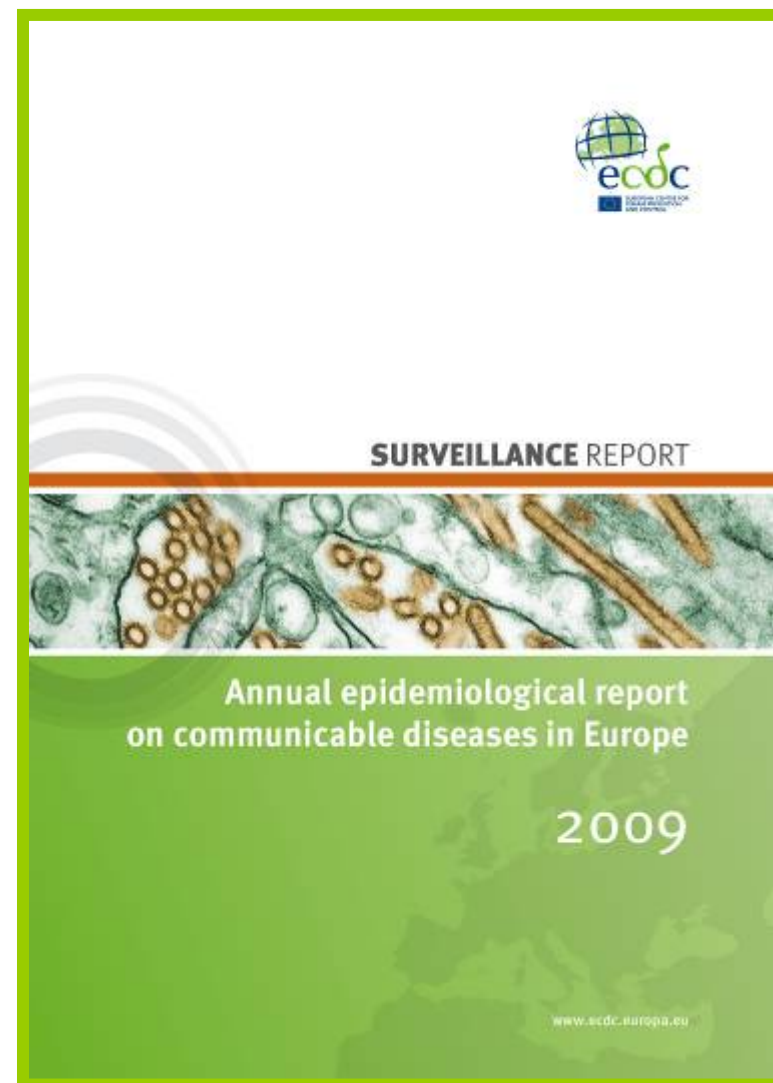
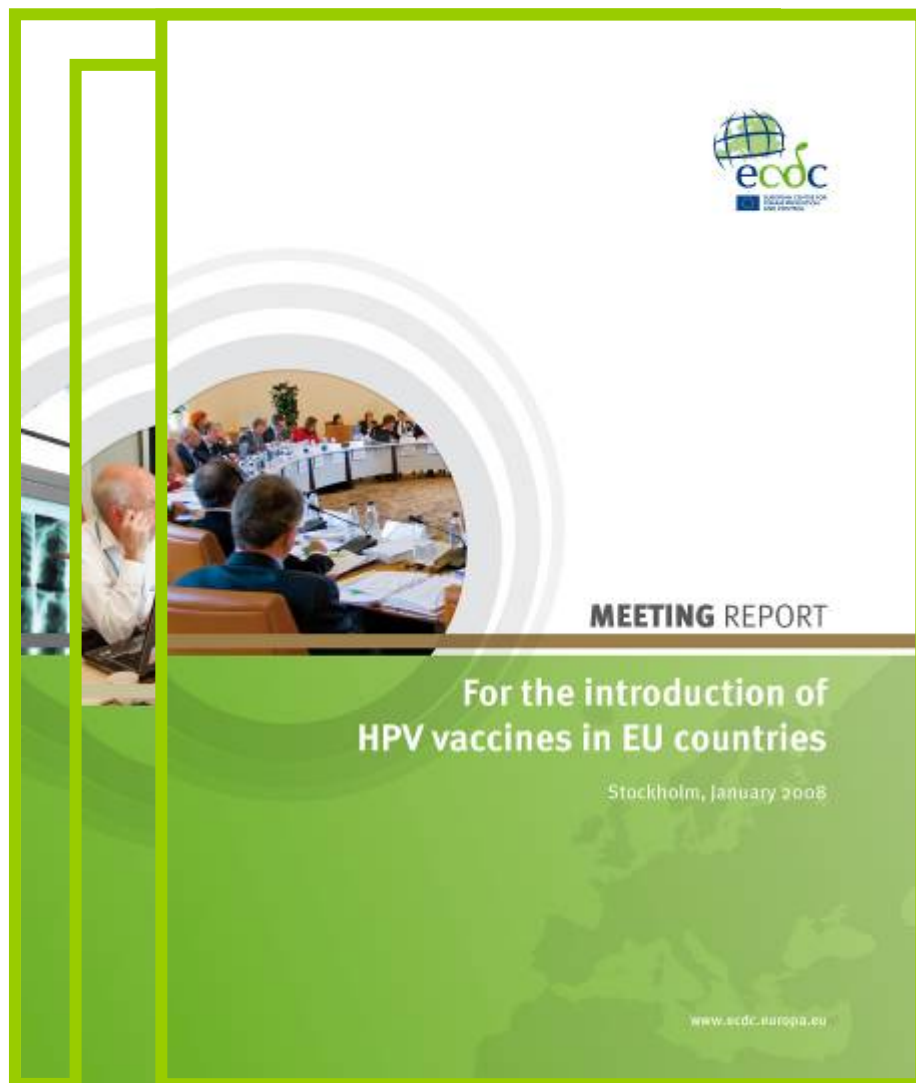


Member
States

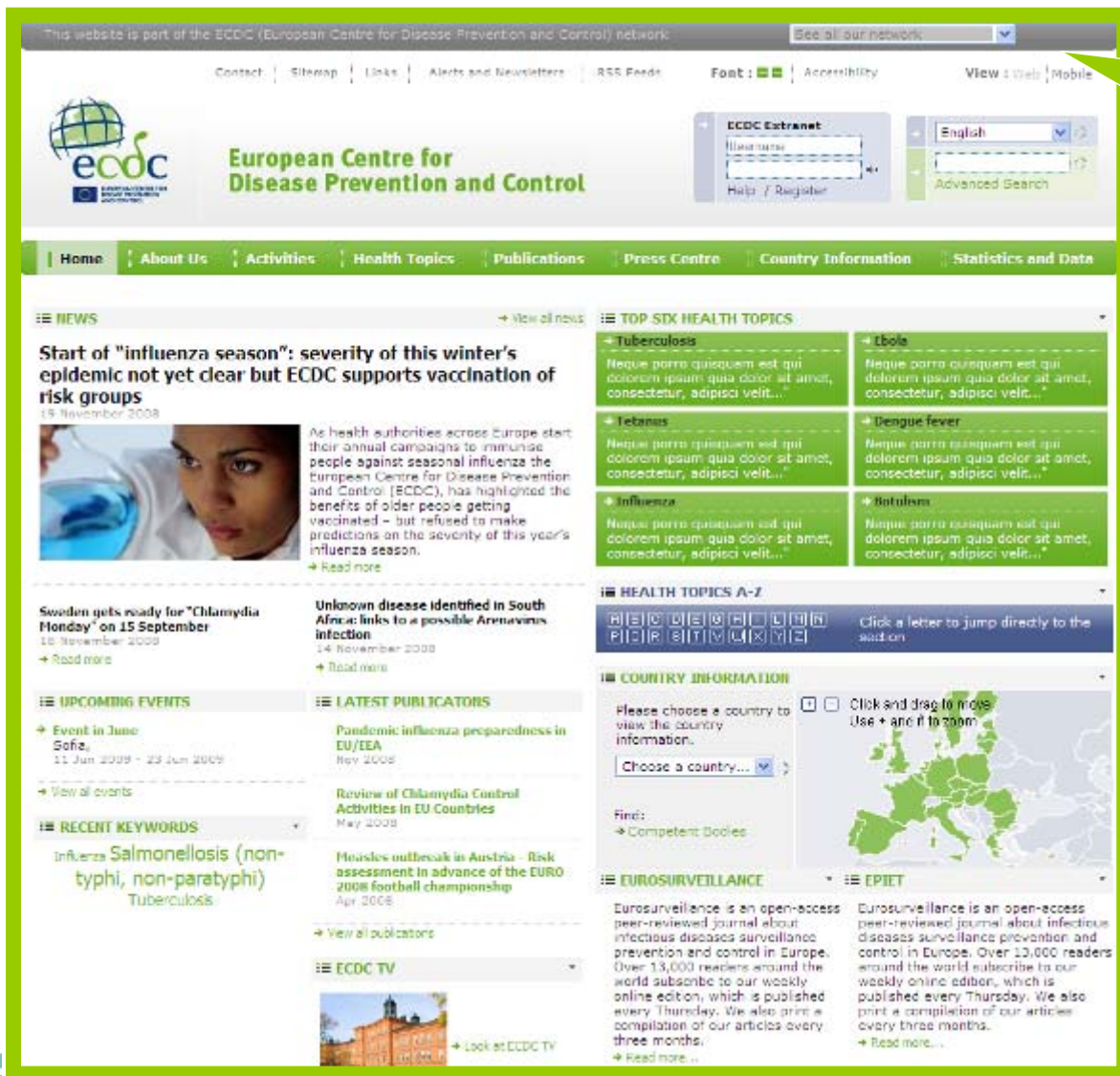
- **Open-access, editorially independent, peer-reviewed**
 - Free of charges to readers and authors
 - Listed in MEDLINE/Scopus
 - Published by ECDC since March 2007
- **Epidemiology, prevention and control of communicable diseases** from a European perspective
- **Weekly electronic release** (> 14,000 subscribers)
 - Rapid updates: peer reviewed and published in less than two days
 - Longer research articles, guidelines and reviews
 - E-alerts
- **Quarterly print compilation** (6,000 copies)
- application for **impact factor in 2008**
- **Editorial board** (Member States, EC, WHO)
- **Associate editors**



Technical and scientific publications



Web portal



The screenshot shows the ECDC web portal interface. At the top, there is a navigation bar with links for Contact, Sitemap, Links, Alerts and Newsletters, RSS Feeds, Font, Accessibility, and View (Web/Mobile). Below this is the ECDC logo and the text "European Centre for Disease Prevention and Control". A search bar and language selector are also present. The main content area is divided into several sections: News (with a featured article on influenza), Top Six Health Topics (Tuberculosis, Tetanus, Influenza, Ebola, Dengue fever, Botulism), Health Topics A-Z, Country Information (with a map of Europe), Eurosurveillance, and EPIET. There are also sections for Upcoming Events, Latest Publications, and ECDC TV.

Network links on grey bar:
unique point of access to all ECDC-managed websites

- Gateways to various ECDC databases and services
- Integrates information offerings from the present DSN websites

- New sections:
country information and **statistics and data**
- Contextual **navigation** on all internal pages
- Subscription to latest **updates/newsletters**
- Social **bookmarking**

Supporting health campaigns with our partners



COUGH? SNEEZE? GET WELL WITHOUT ANTIBIOTICS

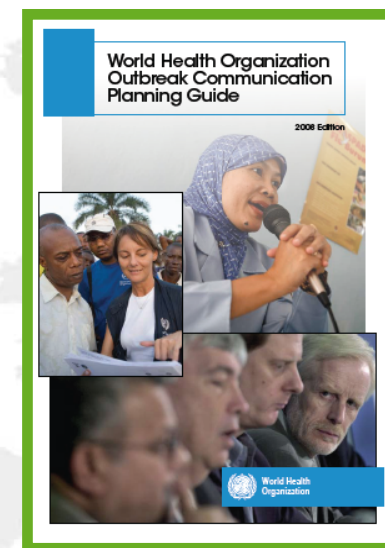


An initiative of the European Union



Supporting preparedness and networking

- 2006-2007: ECDC and SANCO organise meetings to share Member States' experience of developing national pandemic communication plans
 - Preparedness checklist and indicators
- 2007-2008: communication toolkit on chikungunya fever
- 2008: ECDC and EU experts contribute to WHO Outbreak Communication Planning Guide
- March 2009, Athens: first meeting of Health Security Committee Communicators' Network





Communicating science and uncertainty

How we might like the system to work

Risk
assessment



How we might like the system to work

**Risk
assessment**

**Risk
management**



How we might like the system to work



**Risk
assessment**



**Risk
management**



**Risk
communication**



How we might like it to work

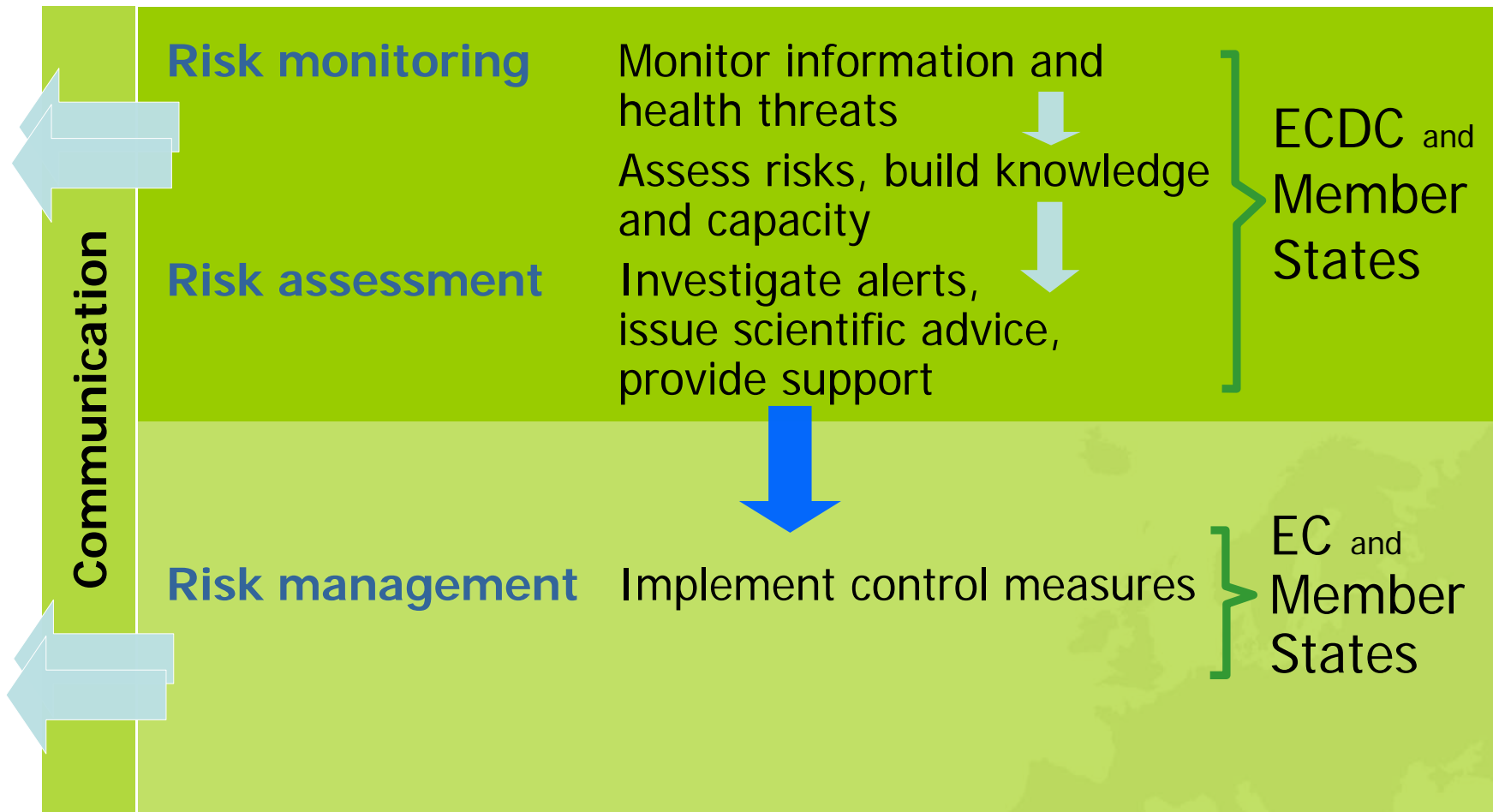
Risk
assessment

Risk
management

Risk
communication

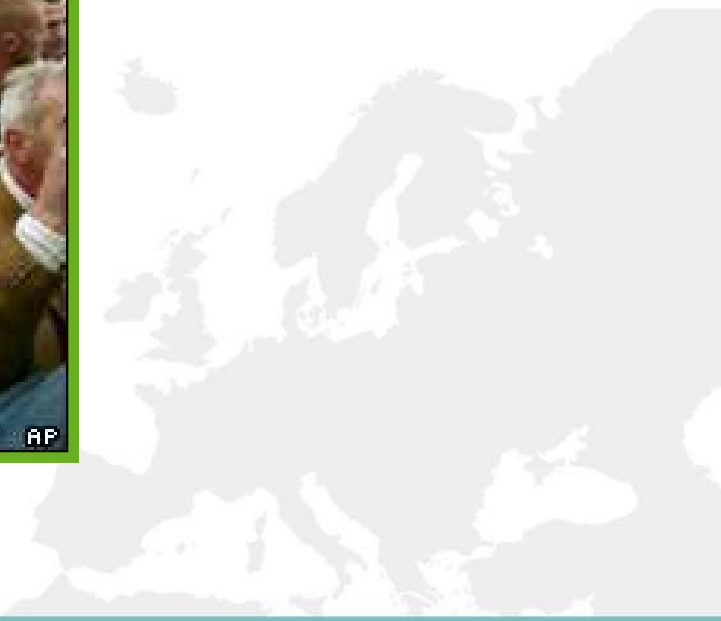


The EU health security system: conceptual overview



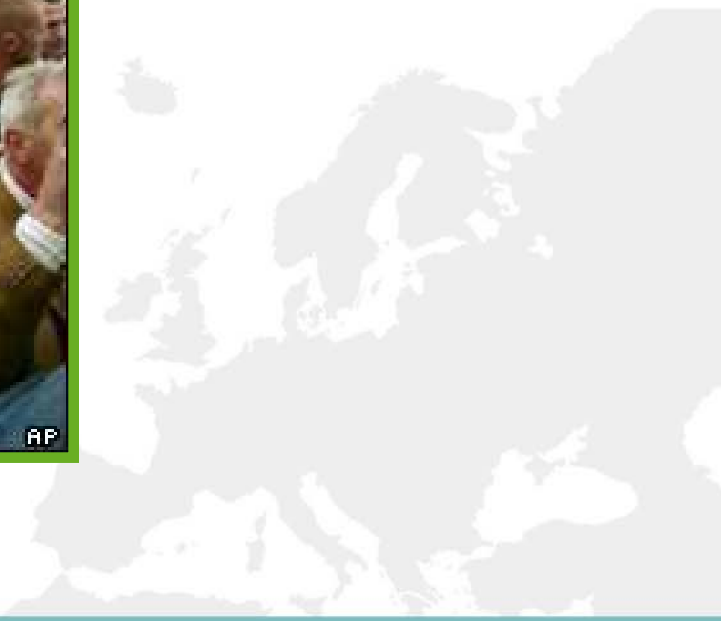
The audience may not be so passive !

Risk
communication



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Risk
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