



Evidence-based guidance for immunisation.

A European perspective of the ECDC

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Berlin, 22 November 2010

**European Centre for Disease Prevention and Control**

# Presentation Outline

- Overview of ECDC scientific advice process
- Early vaccination guidance
- Current vaccination guidance
- Plans for periodical vaccination guidance (flu)



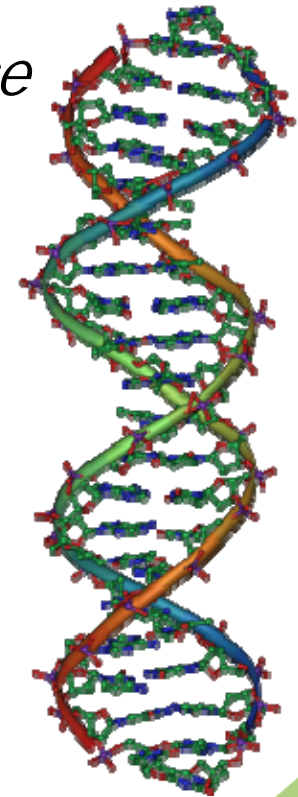
# Overview of ECDC scientific advice process



# How do we define scientific advice?

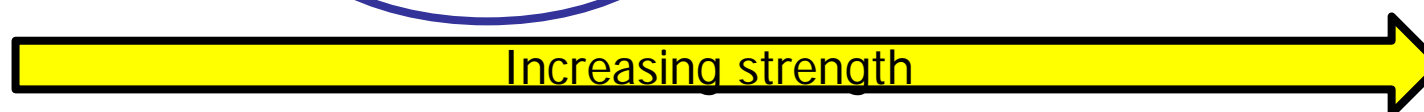
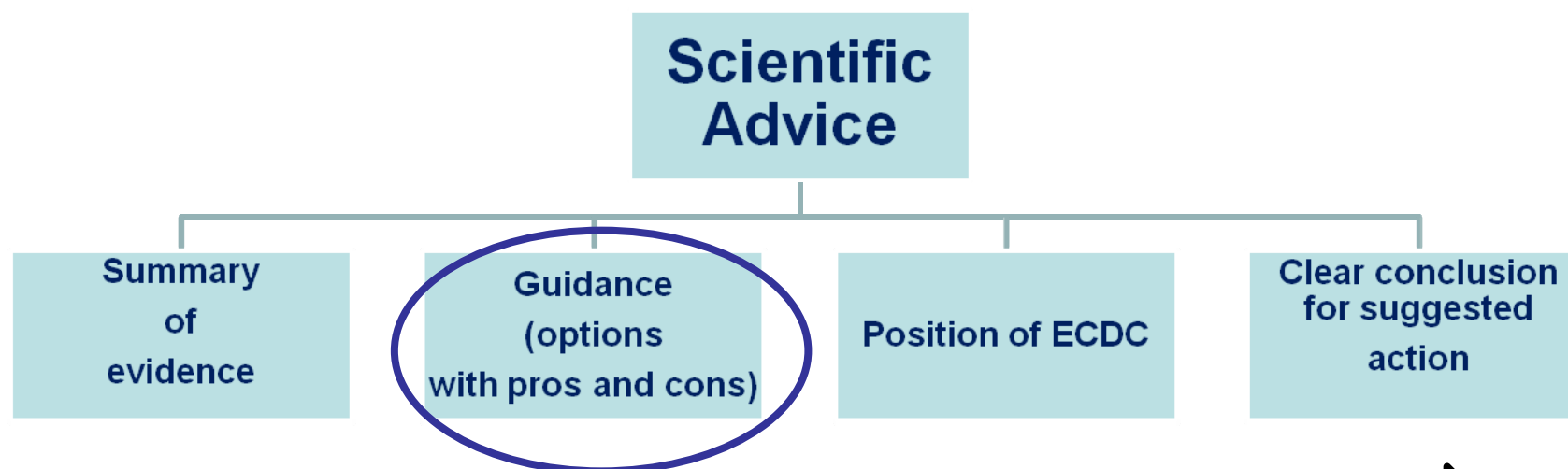


- *"A conclusion of an expert evaluation and/or judgment, taking into account scientific evidence and acknowledging uncertainties"\*.*



\*adapted from: Provision of Scientific Advice to Codex and Member Countries.  
Report of a Joint WHO/FAO Workshop, Geneva, Jan 2004

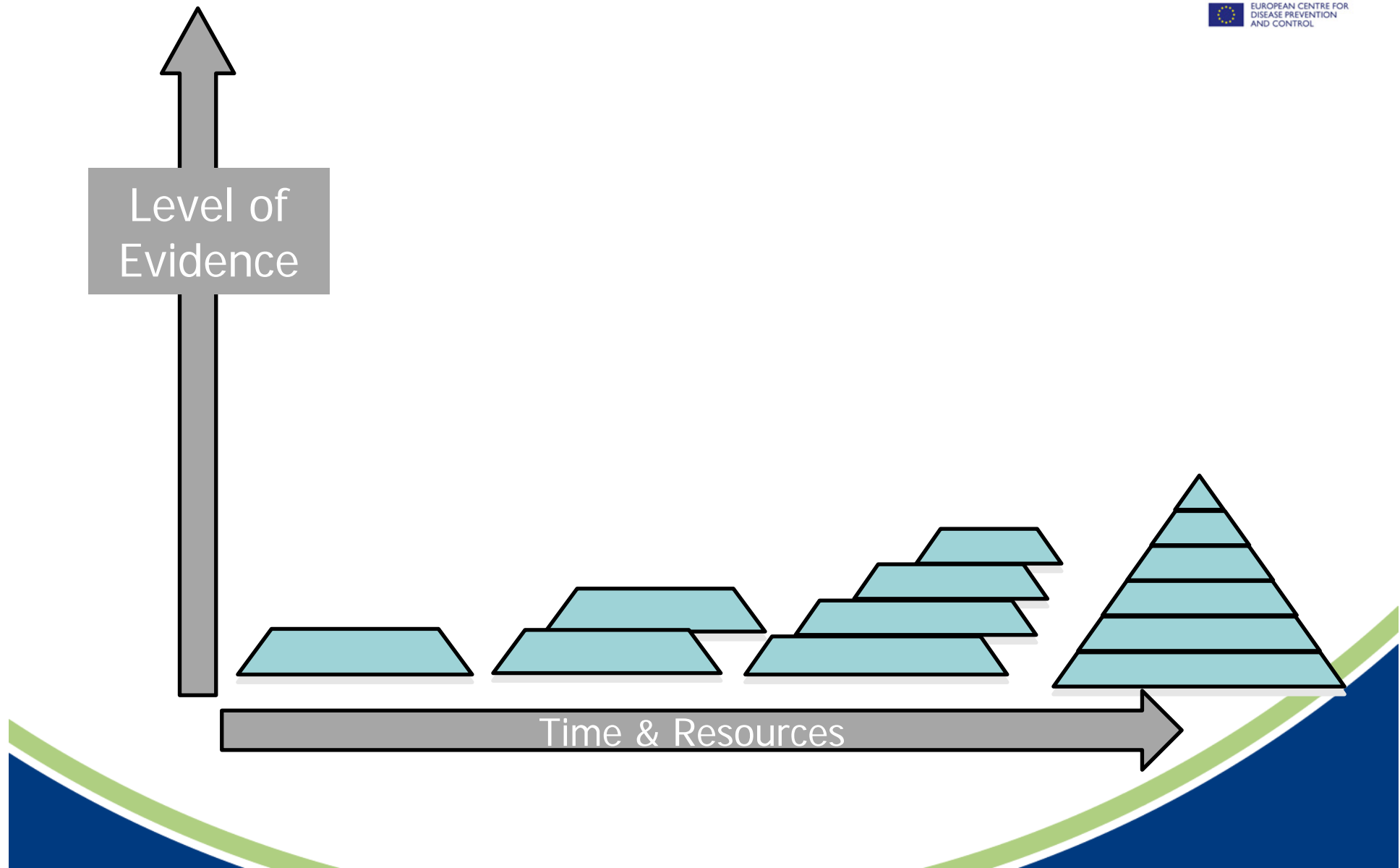
# Scope and timeframe of scientific advice of ECDC



- Broadly two types:
  - Urgent (up to 48 hours to deliver)
  - Non-urgent (weeks – months to deliver)

Most vaccination guidance

# Level of Evidence vs. Time



# Elements of the process of scientific advice at ECDC



- Priority setting for topics in scientific advice
- Development of scientific advice:
  - Selection of experts: internal or external – candidate expert database (ECED)
  - Separate procedure on handling declarations of interest
  - Standard procedure of responding to requests
  - Evidence – Based Methodology
  - Involvement of stakeholders
  - Keeping track: SARMS database
  - Publishing and dissemination
- Measuring the impact of scientific advice

# How do we select our topics?

Feb:  
back to  
AF with  
% topics  
included  
in WP

*Jan-  
March*

- Initial priority list prepared by SAU (input: ECDC DSPs, CBs, AF, EVAG)

*April:*

- Scoring process applied (AF)

*May:*

- Scored list presented at Advisory Forum meeting. Also the “discarded” topics. Discussion at the Advisory Forum meeting used as input

*Sep:*

- Consolidated list used to inform ECDC Work Plan for the following year



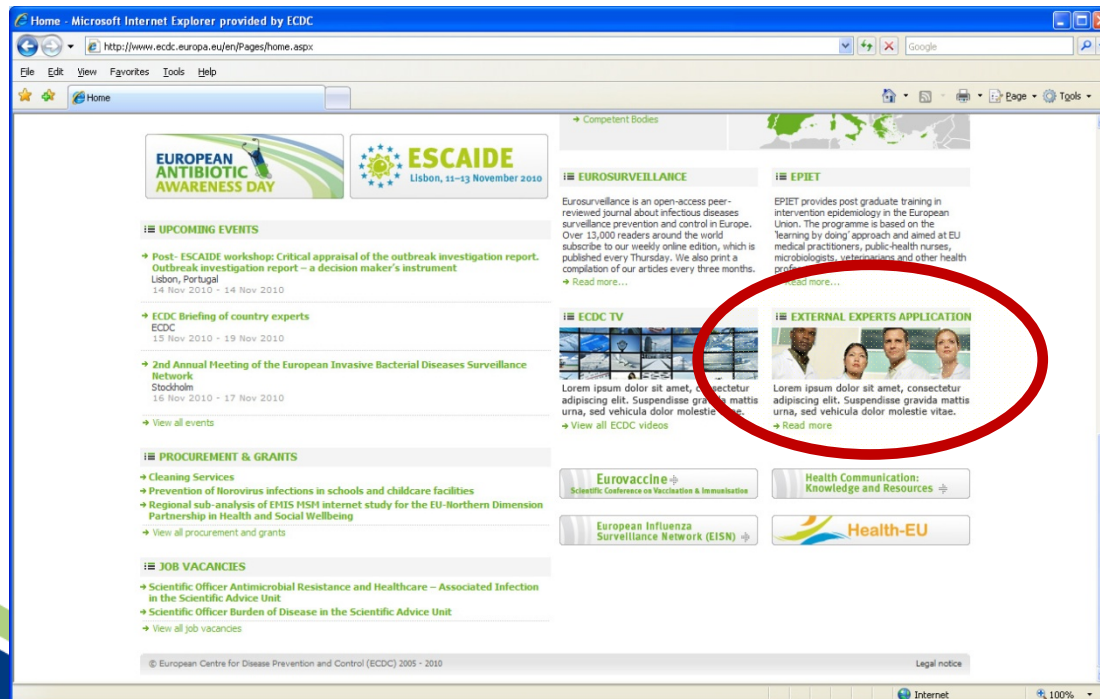
# Using expert advice

- ECDC shall provide independent scientific opinions and scientific and technical assistance
- Scientific panels to assist the Centre in this role
- Set up on an ad hoc basis by the Centre
- Remit, duration stated in advance
- Composition of panels
  - Currently: content experts
  - Increasingly: methods experts
  - Future: consumer experts?

# How do we select experts: ECED



- ECDC candidate expert database (ECED) launched
- Candidate experts can create their profile
- Candidate experts submit contact info, can be later contacted in case of need



# Publishing and Dissemination of Scientific Advice



- Directly to those who requested
- ECDC Web Portal:  
<http://ecdc.europa.eu/en/publications/Pages/Guidance.aspx>
- Publication in Eurosurveillance:  
<http://www.eurosurveillance.org/>

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is it necessarily Eurosurveillance or maybe depends on the target audience for the advice?

Bruno Ciancio; 25.10.2010

# Involvement of Stakeholders



- To date:
  - ECDC Advisory Forum consultation
- Future:
  - Open consultation?



# Vaccination Guidance: beginnings



# Scientific Panel on DTP vaccination: *3 Questions*



- What is the best age to start the basic immunisation scheme for DTP vaccine?
- What is the minimum number of doses and what are the best immunisation intervals in infants < 2 years of age?
- What is the minimum number of booster doses that should be administered between 2 and 18 years of age, and what are the best intervals?



# Scientific Panel on DTP vaccination: *some thoughts*



- Current vaccination schedules are the result of historical tradition, compliance with provision of health services and national vaccine registration
- Many studies on DT were conducted in 1950s and 1960s according to the methods available at that time
- Very hard to provide EBM guidance
- The scientific panel managed to develop expert opinion on the basis of current available knowledge building on lessons learnt in some EU countries (epidemiological observations)

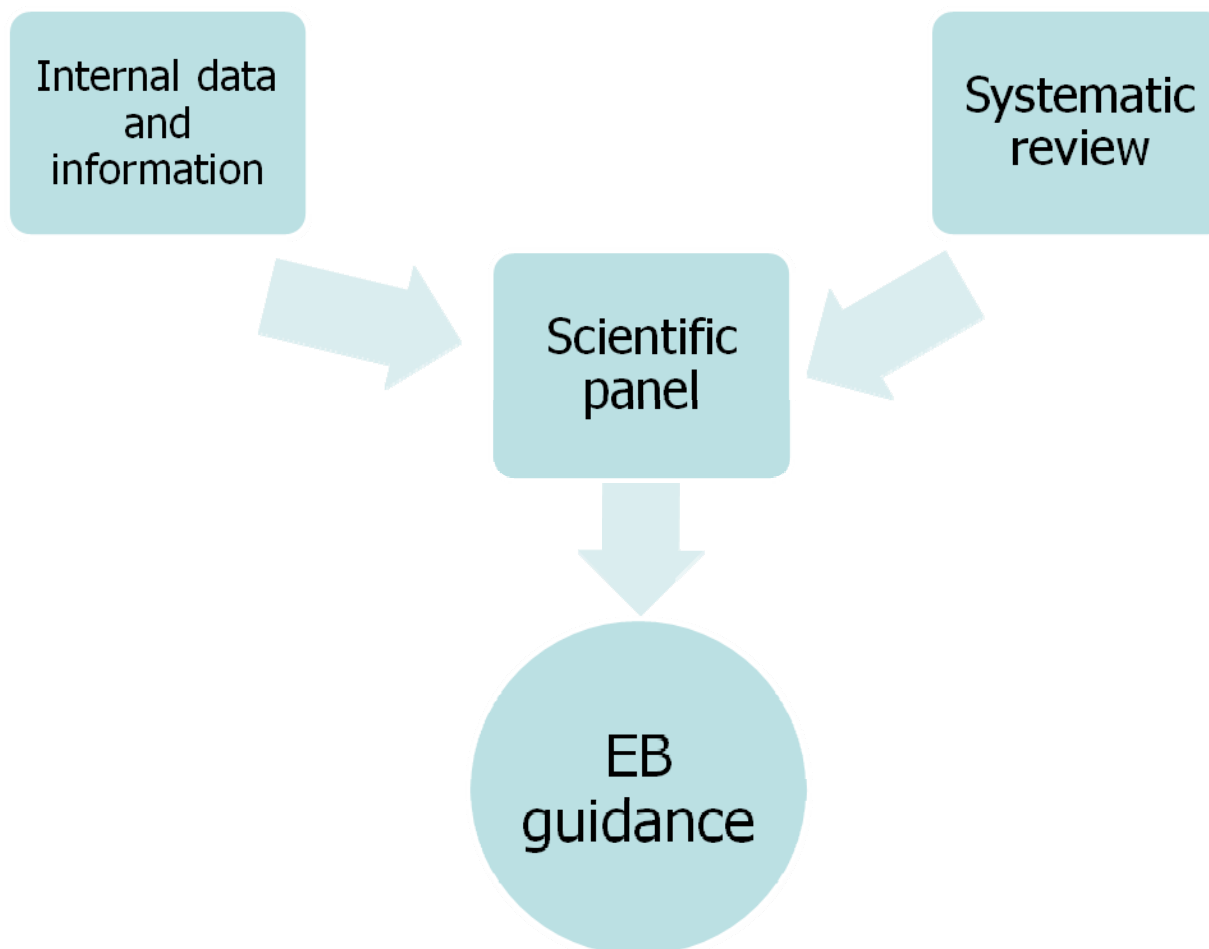




## Vaccination Guidance: Current approach



# Evidence-based guidance development



# Public health management of sporadic cases of invasive meningococcal disease and their contacts: *8 questions*



- Mostly about laboratory diagnosis and chemoprophylaxis
- One question about vaccines:
  - Should contacts of a case of IMD, who have received chemoprophylaxis, also be offered a meningococcal vaccine, if appropriate?



# Public health management of sporadic cases of invasive meningococcal disease and their contacts: *chapters' structure*

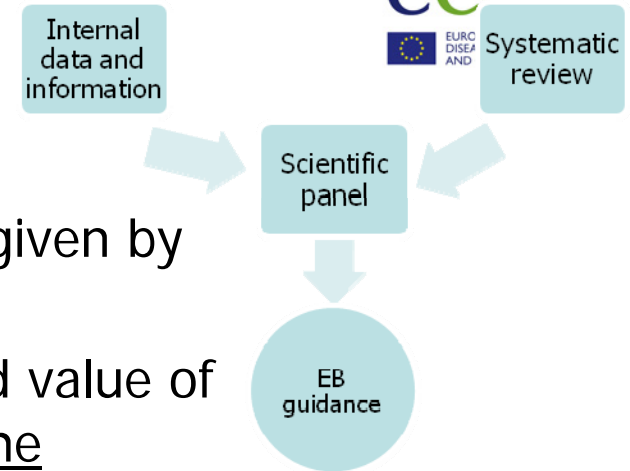


1. Research question
2. Specific background
3. Specific methods
4. Evidence review
  - a. Direct evidence
  - b. Indirect evidence
  - c. Quality of evidence
5. Assessment of potential benefits, harms and costs
6. Recommendations
7. Implications for practice
8. Further research needs



# Evidence-based guidance development

## *early lessons: strengths and limitations*



1. Members of the Panel appreciate the support given by the systematic review
2. Experts sometimes do not recognise the added value of the systematic review, as they already know the preeminent publications
3. Systematic reviews are often considered too long to be digested by experts
4. Expert would like to have ECDC support to get unpublished data



# Scientific Reports and Guidance by the ECDC: recent and coming



- Public health management of meningococcal meningitis case
- Pneumococcal conjugate vaccination
- Rotavirus vaccination
- Varicella vaccination



## Plans for periodical vaccination guidance (flu)



# Literature review on influenza in pregnant women and healthy children: *methods*



1. Identification of key words and search strategies
2. Data sources:
  - PubMed and Embase
  - Names of key authors
  - Manual search (i.e., checking the references of the selected articles)
  - Other data sources (i.e. relevant websites)
3. Critical appraisal and selection of articles
  - Full articles based on CoCanCPG checklists
  - Two researchers independently
4. Grading of evidence
5. Time: publications in the past ten years
6. Languages: English, French, German, Italian, Spanish, Dutch



Maybe you can skip this one as it repeats what already described somewhere else

Bruno Ciancio; 25.10.2010

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# Literature review on influenza in pregnant women and healthy children: *articles by topic (preliminary results)*



Topic	Number of retrieved articles PubMed, Embase and key-authors	Number selected in first selection step	Number selected in second selection step
Burden children	2154	362	91
Burden contacts children	182	21	<u>2</u>
Burden pregnancy	260	44	17
Vaccine children	497	74	<u>10</u>
Vaccine contacts children	90	7	<u>1</u>
Vaccine pregnancy	49	9	<u>0</u>

I added that these are also preliminary results. In fact there are some mistakes made by Pallas which they are now correcting.

Bruno Ciancio; 25.10.2010

# Literature review on influenza in pregnant women and healthy children: *possible role of HSC flu section*



- Move from evidence to recommendation
  - Consider national and local context
  - Feasibility of sustained implementation
- Disseminate results at local level
- Evaluate impact of recommendations
- Suggest priority topics for future ECDC reviews



# Conclusions



- ECDC striving to outline transparent and explicit process of guidance production
- ECDC working on adopting / adapting Evidence Based Medicine tools to the area of public health
- More to come soon...

**Thank you!**  
**Danke!**

