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# Strengthening the Occupational Health Expertise and Scientific Performance of Public Health Institution of Turkey



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# Bird Watching and the Art of Occupational Health Surveillance

PPT B 1.3 presentation on day 1 of training B





# Learning Objectives

have basic knowledge of Occupational Health Surveillance

know the difference between Workers Health Surveillance and Workplace Health Surveillance

be able to discuss and compare the characteristics of several surveillance methods.



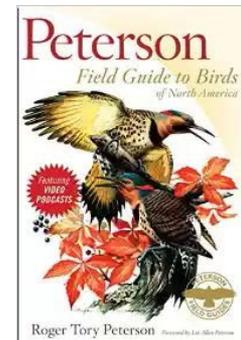
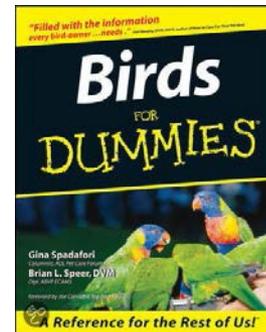
# Bird Watching, what is needed?



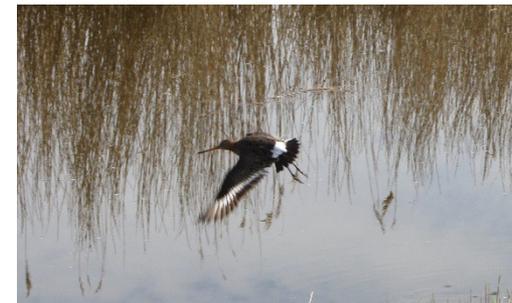
# Bird Watching, what is needed?

- A List of Birds
  - Short list, long list? Level of detail?
  - international accepted classification?

- A Guide/ Criteria/ Book
  - Apps for Finding Birds



- Basic Knowledge: how to observe/ assess?
  - Size, shape, colour, fly pattern, habitat, sound
  - Observation in a systematic way
  - Apps for Recording Observations





# Bird Watching, what is needed?



# Bird Watching, what is needed?

- Instruments:

- Binocular,
- Scope
- Chips (gps)



- Infrastructure: e-network, consultation of specialist

- A Plan:

- Why, Who, When (which season, annual counting's to look at trends)
- Where (in our Polder? in NL? in Europe? Global?)
- What to do with the data? (analyses, alerts, reports, action)



# Bird Watching, what is needed?



# Bird Watching, what is needed?

- Dedicated Observers



- Reporting, Communication, Mobilisation



# Bird Watching and Workers Health Surveillance?

- Birds and OD's?
- Birds: signal of vitality of nature
- Occupational Diseases: signal of failure of prevention
- Surveillance is more than just watching
- Surveillance methods of birds and of OD/WRD's have similarities....





# What is Surveillance?

- Surveillance is the careful watching of a person or place, especially by police or army because of a crime that has happened or is expected (Cambridge Dictionary)
- Occupational Health Surveillance is the ongoing and systematic collection, analysis and interpretation of data and the appropriate dissemination of such data. [ILO 1998]
- 





# What is Surveillance?

- An alert system for public health emergencies, to drive preventive measures, and to develop policies and practices to reduce morbidity and mortality.
- Focus is on monitoring the health of working populations and the exposure to hazards in the workplace, two sides of a coin





# SURVEILLANCE IS NOT RESEARCH

- Public health **surveillance** is essentially descriptive in nature.
- It describes the occurrence of injury or disease and its determinants in the population.
- It also leads to public health action.
- **Research**, in contrast, is experimental in design, aimed at testing a hypothesis by comparing and contrasting groups.





# SURVEILLANCE IS NOT RESEARCH

- Surveillance data are usually limited in detail and price
- Surveillance data may be used to develop research hypotheses.
- Research data are often quite complex and detailed and are usually expensive to produce.





# KEY ELEMENTS OF SURVEILLANCE SYSTEMS

All surveillance systems involve six key elements:

- 1. Detection and notification of health event
- 2. Investigation and confirmation (epidemiological, clinical, laboratory)
- 3. Collection of data
- 4. Analysis and interpretation of data
- 5. Feedback and dissemination of results
- 6. Response—a link to public health programs, specifically actions for prevention and control.



# Occupational Health Surveillance



- Workers' Health Surveillance
- Workplace Health Surveillance





# Workers' Health Surveillance

- The results of surveillance should be used to protect and promote the health of the individual, collective health at the workplace, and the health of the exposed working population.
- Health assessment procedures include medical examinations, biological monitoring, radiological examinations, questionnaires or a review of health records.
- The main aim is the prevention of occupational and work-related diseases and injuries. [ILO 1998 adapted]



# Workers' Health Surveillance

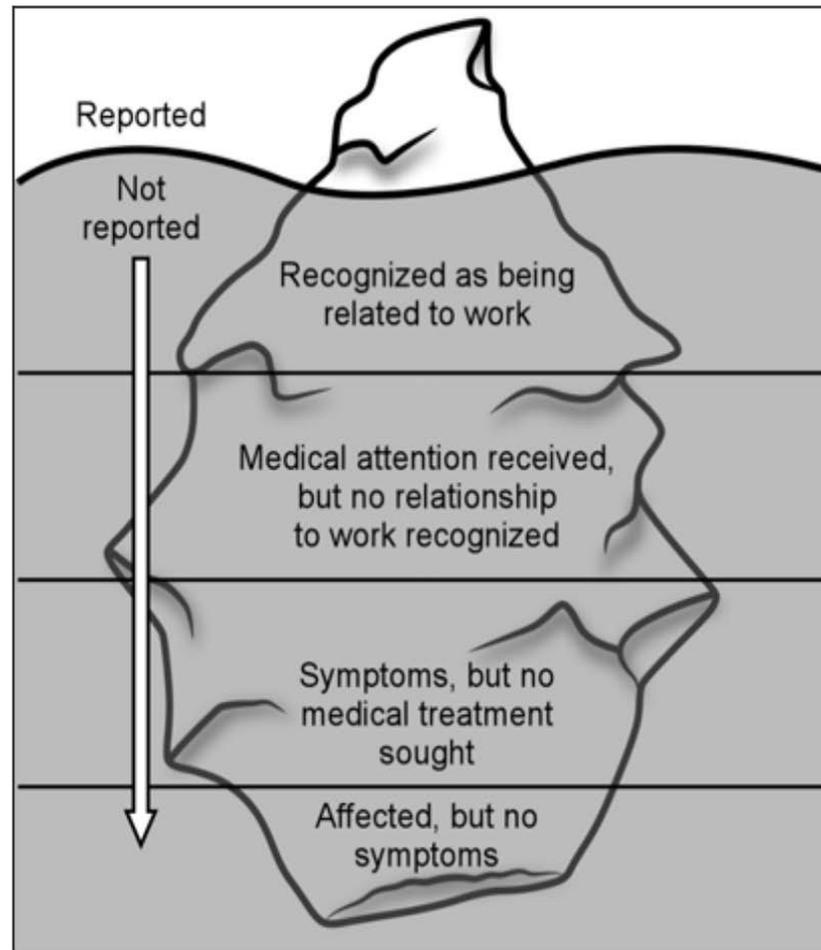


Figure 1. □ Disease and illness in the mining industry (after Metz 2002).

# Horizontal and Vertical Surveillance

- **Horizontal Surveillance:**
  - Measuring a wide range of diseases in a specific company, occupation or a region
  - Instruments: questionnaires, interviews, exploration of existing health data, use of lists of OD's, use of GP's as surveillance officers
  
- **Vertical Surveillance:**
  - Measuring one specific occupational or work-related disease in a region or specific occupation
  - Instruments: questionnaires, interviews, objective tests, exploring registers, in depth assessments, use of medical specialists as surveillance officers

# Workers Health Surveillance; how to proceed ?

- Lists of Occ/WR-Diseases
- Guidelines, Criteria, Books
- Systematic Assessment of cases
- Instruments, tools
- Infrastructure
- Dedicated Observers (recruitment/training)
- A Plan of action for OD-surveillance
- Analysis, Reporting, Communication, Mobilisation
- PHIT as Occupational Disease Intelligence Centre?