EpiSouth

Network for the Control of Public Health Threats
in the Mediterranean Region and South East Europe

Introduction to the case-study and the database for «outbreak investigation»

EpiSouth Outbreak investigation course
Belgrade, 8-10 April 2013

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Outbreak investigation 3 days

- Daily start at 9 AM and finish at 5 PM
  - 5 lectures
  - 2 presentations on computer tools
  - One case study
- Wednesday: Final evaluation of the course
- Pen drive at the end (of the week)

Objectives of the three days

to conduct an outbreak investigation

from

data entry mask design

to

interpretation &

communication of the results

… some theory…

… and loads of practice

More specifically

- Perform the successive steps related to outbreak management
- Perform descriptive analysis and generate hypotheses
- Select the best study design to confirm the hypothesis
- Interpret results
- Overview the role of the laboratory in outbreak investigation
- Identify the key communication messages for different target audiences

How are we going to work…

- Some lectures
- One case study
  - Outbreak of gastroenteritis in the district of Camarma, Spain 2002
- Exercises
  - Plenary session to discuss the operational aspects of outbreak investigation
  - Individual or in pairs work for the exercise on computer
  - Four working groups for the communication exercise
    - Communication to the politics
    - Communication to the population
    - Communication to a scientific meeting
    - Abstract for a scientific publication
- Data management and analysis
  - Excel
  - EpiInfo 7

Databases

- Three Excel files:
  - 01_Cases
  - 02_Family

    → two same databases (few more variables in the 2nd one) with socio-demographic data and information on symptoms, exposure, date of onset…
  - 03_Case-control

    → for further analytical study

Computer tools

- Excel
  - Epicurve as part of descriptive analysis
- EpiInfo
  - data entry mask design
  - Descriptive analysis
  - Univariate and stratified analysis

Codification Database

0=======No

1=======YES

Gender:

1=======MALE

2=======FEMALE

Case:

0=======CONTROL

1=======CASE

Enjoy !

Epi info

- A suite of free data management, analysis and visualization tools designed specifically for public health community
- Features include:
  - Rapid electronic form creation and data entry
  - Statistical analysis
  - Mapping and visualization
  - Report design and generation

Epi info core principles

- Free
- Easy to use
- Flexible
  - Lightweight & agile-when responding to mergency
  - Robust- when performing large-scale, multiuser data collection
- Standards based

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