

Brucellosis outbreak in Greece

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Brucellosis

- Zoonosis
- *Brucella melitensis*
- Unpasteurised milk or milk products
- Incubation period 5-60 days
- Symptoms in human
 - arthralgia
 - sweating
 - fever
 - headache

Brucellosis in Greece

- 149-337 human cases per year
 - mostly in high risk professions
- Never more than 6 cases per year in the Kavála prefecture
- Most islands enjoy a brucellosis eradication status

The event

- 16 May 2008: 7 cases of brucellosis are notified to HCDCP
 - Local public health (PH) authorities were aware and would investigate
- 20 May 2008: fresh cheese consumption had been reported by many cases
- 22 May 2008: visits from the local PH authorities to investigate circulation of cheese

A religious interlude

- Orthodox Easter: 27 April 2008 (end of w17)
- Fast throughout Lent, stricter in Easter week
- Local production of fresh cheese to be consumed as of Easter Sunday in Thásos

Central actions

- Communication to the international community (EuroSurveillance)
- Description of the cases in time, place and person (active surveillance)
- Design of an analytical epidemiological study (case-control study) in order to
 - Find the vehicle of the outbreak
 - Prevent future outbreaks
 - Save the world from brucellosis!

The continuation - Challenges

- Multidisciplinary approach
 - Case finding – ongoing outbreak?
 - Controls for the case-control study
 - “convenience sample” was used
 - Environmental investigation

Challenges (I)

- Case finding – ongoing outbreak?
 - Long incubation period
 - Hospitals, health centres, GPs
 - Tourists having traveled in the area

Challenges (II)

- Environmental investigation
 - Isolation of *B. melitensis* in
 - Cheese
 - Ruminants
 - Withdrawal of any cheese residuals
 - Teach the producers

All in all...

- Prefecture of Kavála
 - PH authority
 - Vet authority
- Clinicians
 - GPs
 - Health centres
 - Hospitals (wards, outpatient clinics)
- Labs
- HCDCP

Looking back in 2008

- First response and communication was timely
- Faster international communication
- Better choice of controls
- Set a head of the outbreak investigation
 - Though always a sensitive issue
- Faster analysis of study data

Always a learning procedure

- Natural experiment
 - Meant to expose all difficulties
- Challenges are “built-in”
- See it as a challenge to win

Thank you 😊