

Programma workshop uitbraakonderzoek AMPHI Nijmegen

Voorafgaand aan de AMPHI ARENA - Dinsdag 3 april 2018, Radboudumc, Nijmegen

Academische werkplaats AMPHI organiseert een workshop uitbraakonderzoek voorafgaand aan de AMPHI ARENA op dinsdag 3 april 2018. Tijdens deze workshop worden de stappen in een uitbraakonderzoek besproken en kunnen deelnemers in groepjes aan een EPIET Case Study (groepsopdracht) werken waarin deze stappen en epidemiologische aspecten van uitbraakonderzoek uitgebreid aan bod komen.

Doelgroep: artsen, verpleegkundigen en andere geïnteresseerden van de IZB teams van de GGD'en uit de AMPHI regio.

Bij aanmelding kunnen deelnemers aangeven welke case studies ze graag zouden willen doen (top 3), en afhankelijk van het aantal aanmeldingen en voorkeuren wordt een selectie gemaakt van 1-2 case studies. Afhankelijk van het aantal deelnemers en de voorkeur van de deelnemers verdelen we de deelnemers over de geselecteerde case studies.

Programma:

- 10:00 Opening, voorstelronde en ervaring uitbraakonderzoek
- 10:15 Presentatie ter voorbereiding Case study uitbraakonderzoek
- 10:45 Start Case study uitbraakonderzoek
- 12:45 Nabespreking
- 13:00 Einde & korte pauze
- 13:30 Start ARENA

Opties case studies epidemiologie en uitbraakonderzoek:

Optie 1 - An epidemic of Trichinosis in France

Main topics: study design in outbreak investigation and selection of control group

Objectives

At the end of this exercise, participants will be able to:

1. Describe the steps in an epidemic investigation
2. Develop a case definition in the context of an outbreak investigation
3. Construct and interpret an epidemic curve
4. Choose an appropriate control group for a case control study
5. Calculate and interpret an odds ratio.

Optie 2 - Cholera in Parbatia

Main topic: confounding and matching

Learning objectives

At the end of the case study, the participants will be able to:

1. Review the 10 steps of an outbreak investigation;
2. Define a confounding factor;
3. Explain possible ways to deal with a confounding factor;
4. Define matching in a case control study;
5. Explain the pro and cons of matching;
6. Conduct a matched analysis for a matched case control study.

Optie 3 - Gastroenteritis outbreak in Sweden

Main topic: foodborne outbreak

After completing the case study, participants should be able to:

1. Interpret an epidemic curve
2. Calculate attack rates
3. Calculate and interpret relative risks
4. Perform stratified analysis
5. Identify effect modification among risk factors
6. Identify confounding among risk factors
7. List the necessary environmental and laboratory investigations

Optie 4 – Giardiasis in Bergen, Norway.

Main topic: waterborne outbreak

At the end of this exercise, the participants should be able to:

1. Define an outbreak
2. Describe the steps in an outbreak investigation
3. Understand the importance of a case definition in the context of an outbreak investigation
4. Construct and interpret an epidemic curve
5. Calculate attack rates
6. Characterise an outbreak by time, place and person
7. Compare frequency of exposures between cases and a sample of the population

Optie 5 - An outbreak of gastrointestinal illness following a christening party

Main topic: classical foodborne outbreak ('wedding outbreak')

At the end of the case study, the participant will be able to:

1. Define an outbreak
2. List the steps of an outbreak investigation and its challenges
3. Draw an epidemic curve.
4. Calculate and compare food-specific attack rates to identify possible vehicles.

Optie 6 - An outbreak of gastro-enteritis in Kalundborg, Denmark

Main topic: outbreak investigation, incl WGS typing of samples

Objectives. At the end of the case study, the participant will master the general concepts behind the following competencies:

1. Identify the steps of the investigation of an outbreak
2. Identify the pathogen involved in an outbreak through (a) short-listing infectious agents on the basis of clinical, epidemiological and environmental characteristics (b) identifying the type of specimens to collect and (c) selecting the diagnostic tests to use
3. Elaborate a case definition
4. Generate hypotheses using different pieces of evidence
5. Test hypotheses with different pieces of evidence
6. Interpret microbiological results
7. Use microbiological characterizations of pathogens to document a common source
8. Combine epidemiological, microbiological and environmental data to formulate conclusions
9. Communicate findings
10. Formulate recommendations

Optie 7 - Nationwide mumps outbreak in the Republic of Moldova, 2007

Main topic – uitbraak RVP ziekte, en berekenen vaccine-effectiveness

Learning objectives: At the end of the case study, the participant will be able to:

1. Describe how the steps of an outbreak investigation apply to a vaccine preventable disease
2. List possible reasons for vaccine failure
3. Define vaccine effectiveness (VE)
4. Describe the possible designs used to measure VE including their strengths and weaknesses
5. Estimate VE using the screening method with national surveillance data
6. Estimate VE using a cohort study
7. Describe the possible reasons for low vaccine effectiveness