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Epidemic
Disease
Detectives
Hamburg

An Epidemic of Haemolytic Uraemic Syndrome in Hamburg

Investigation Report / Serious Game

Please note:

To fill in this **Investigation Report**, you need the final results of your game-based scenario. The following items may refer to evidence from your investigation book, attachments you have screened, epidemiological statistics or your calculations.

Transfer the results carefully, they are the basis for the final evaluation.

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Based on a true event

Version: September 2023

1 Evolution of the outbreak in Hamburg

A Outbreak Statistics - enter your game scores:

Estimated population of Hamburg: _____

Total EHEC cases: _____ *(best: 363 / worst: 439)*

Total HUS cases: _____ *(best: 152 / worst: 180)*

Total deaths: _____ *(best: 4 / worst: 8)*

Total cured: _____ *(best: 93 / worst: 115)*

Community trust (mark the bar): *(best: max / worst: min)*

Economic satisfaction (mark the bar): *(best: max / worst: min)*

Public pressure (mark the bar): *(best: none / worst: max)*

B Temporal Development:

Probable start of the outbreak: _____

Explain your assumption briefly given that the first cases were reported on April 28th, 2011:

_____

_____

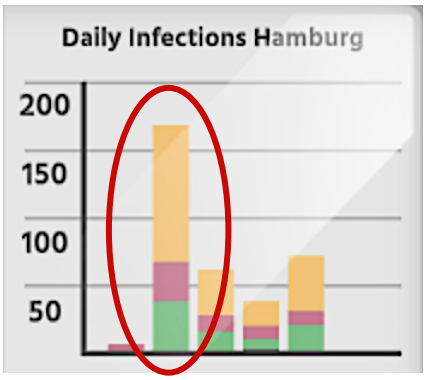
_____

At the beginning of the outbreak (Day 2, see figure) an exceptionally high number of cases was reported. What is the reason for this?

_____

_____

_____



The peak of the outbreak occurred between April 10th and May 4th, 2011, specifically on *date:* _____

with new cases of suspected EHEC of *approx.:* _____

with new cases of confirmed EHEC of *approx.:* _____

with new cases of confirmed HUS of *approx.:* _____

C Spatial Development:

Highlight and label the most affected regions in Hamburg (as of April 28th) on the map.
Add the incidence per 100,000 inhabitants known from the reports:

Regions 1: _____

Incidence/100.000: _____

Regions 2: _____

Incidence/100.000: _____

Regions 3: _____

Incidence/100.000: _____

Regions 4: _____

Incidence/100.000: _____

Highlight the most affected regions in Germany on the map.

What could be an explanation for this distribution pattern?

_____

_____

_____

_____

_____

D Disease profile over time:

Initially reported syndrome: _____

Identified infectious disease: _____

Causative agent: _____

Leading symptoms: _____

_____

_____

_____

_____

Why and how has the *Case Definition* been updated? Why was this important?

_____

_____

_____

Debunk the press!

What evidence (clinical + epidemiological) suggested that this was not an Ebola outbreak?

_____

_____

_____

Fill in the table to differentiate previous and the recent EHEC outbreak from each other:

Indicators	**Previous EHEC outbreak(s)**	**Recent EHEC outbreak**
Risk group of severe complications		
Notifiable event?		
Identified serotype		
Remarks on antibiotic treatment		
Remarks on diagnostics		

E Transmission of the disease:

Potential routes of transmission: (1) _____

(2) _____

(3) _____

(4) _____

(5) _____

Mark the confirmed route of transmission.

Identification of the food item causing the infection along the investigation process:

Step 1: Food items associated with infection risk identified through interviews with affected patients	
Step 2: Food items with the highest OR identified through the 1st case-control study at the Elbe Health Centre	Food items with highest OR: Item 1 OR = Item 2 OR =
Step 3: Food items with laboratory confirmation of EHEC-causing bacteria	
Step 4: Food item with the highest OR identified through the 2nd case-control study investigating canteen food	Food item with highest OR: OR =
Step 5: Food item with the highest RR identified through the restaurant-based cohort study	Food item with highest OR: RR =

Laboratory results indicated that three out of four cucumber varieties imported from Spain carried EHEC bacteria. Yet, why is it controversial to issue a warning against consumption to the population?

_____
_____
_____
_____
_____
_____