



A local outbreak of infections with EHEC-O157:H7 associated with the consumption of raw meat products, June 2012, Limburg, Belgium.

November 2012, EU-RL workshop VTEC

Sarah Denayer

E. coli O157 H7 outbreak, June 2012

4th June : first case reported

5th June: five new cases

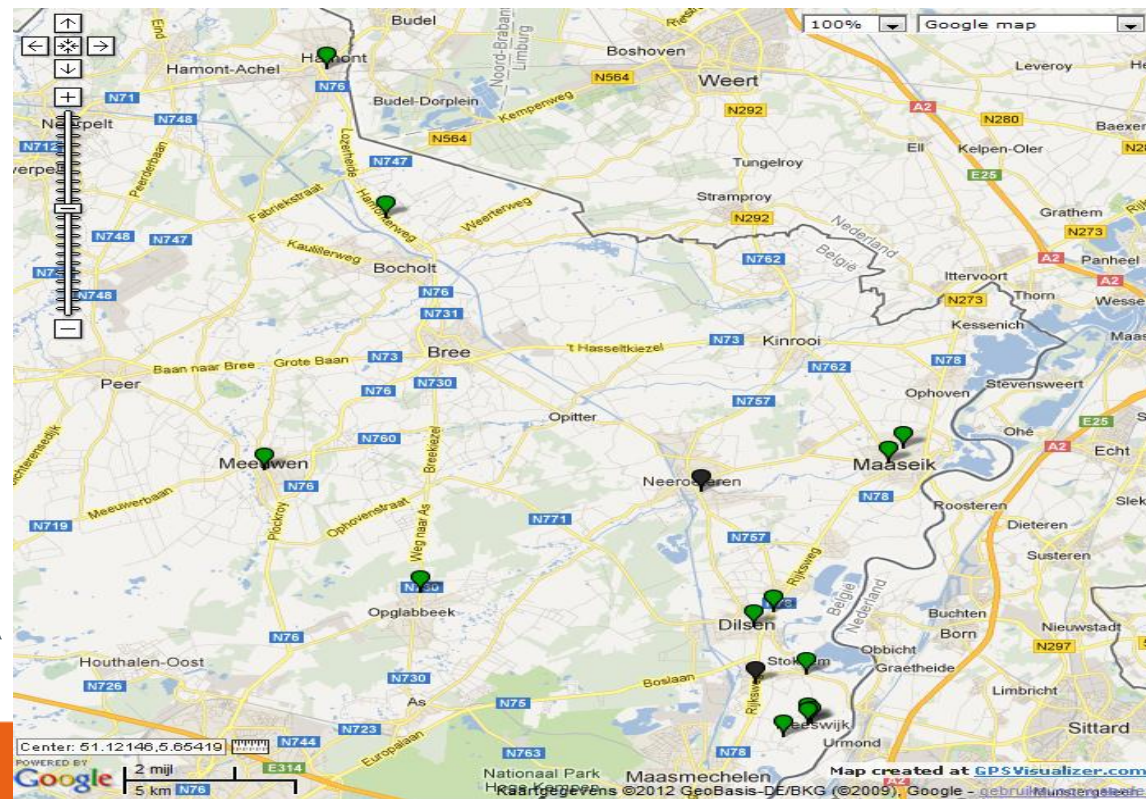
6th June: 1st HUS case reported

Symptoms

- mainly diarrhoea
- started 30th of May



Exploring descriptive data





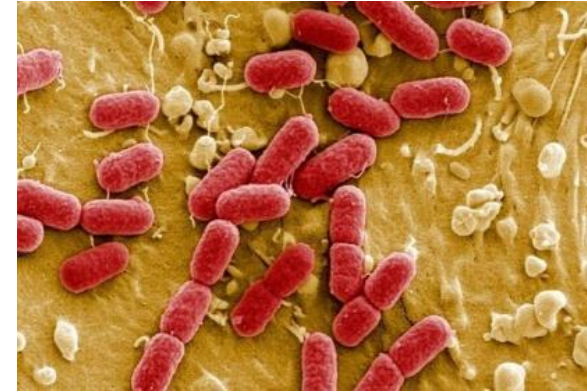
Case-control study

14th June:

- Case-control study
- Questions based on exploratory analysis
- Electronic survey – Invitation letter to 400 persons
- Low response rate (<20%) but significant (11 cases-65 controls)

Significant Surveyed Items	Odds Ratios (95% CI)
Steak Tartare	48.12 (5.62-416.01)
Suspicious stores	11.67 (1.41-96.49)

Number of cases



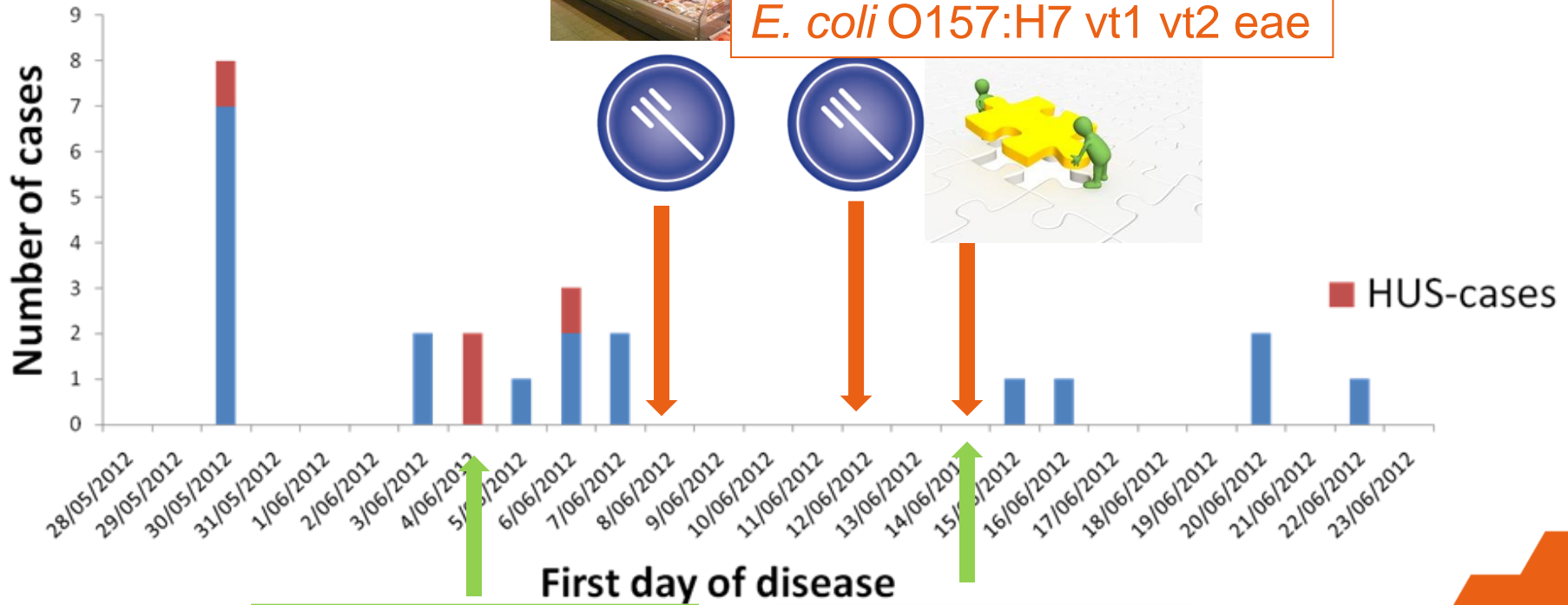
- ❑ 17 laboratory confirmed cases (NRC, Dr D Pierard)
- ❑ 7 epidemiologically linked cases
 - 6 family contacts (same household)
 - 1 stool sample after antibiotic treatment

E. coli O157:H7 vt1 vt2 eae

Epidemiologic curve



E. coli O157:H7 vt1 vt2 eae



First reported cases

Case-control study



In total 78 samples analysed using 3 different methods

	ISO 16654:2001	Alternative method 1	Alternative method 2
Detection	4/78	10/78	18/78 ⁽¹⁾
Isolation and confirmation	4/4	0/10	n/a

(1) Including 6 non-outbreak related types

Other types: O157 vt2 eae (3), vt1 eae (1),
vt1 vt2 eae (1), vt2 eae (1)

Counter analysis on positive sample resulted negative

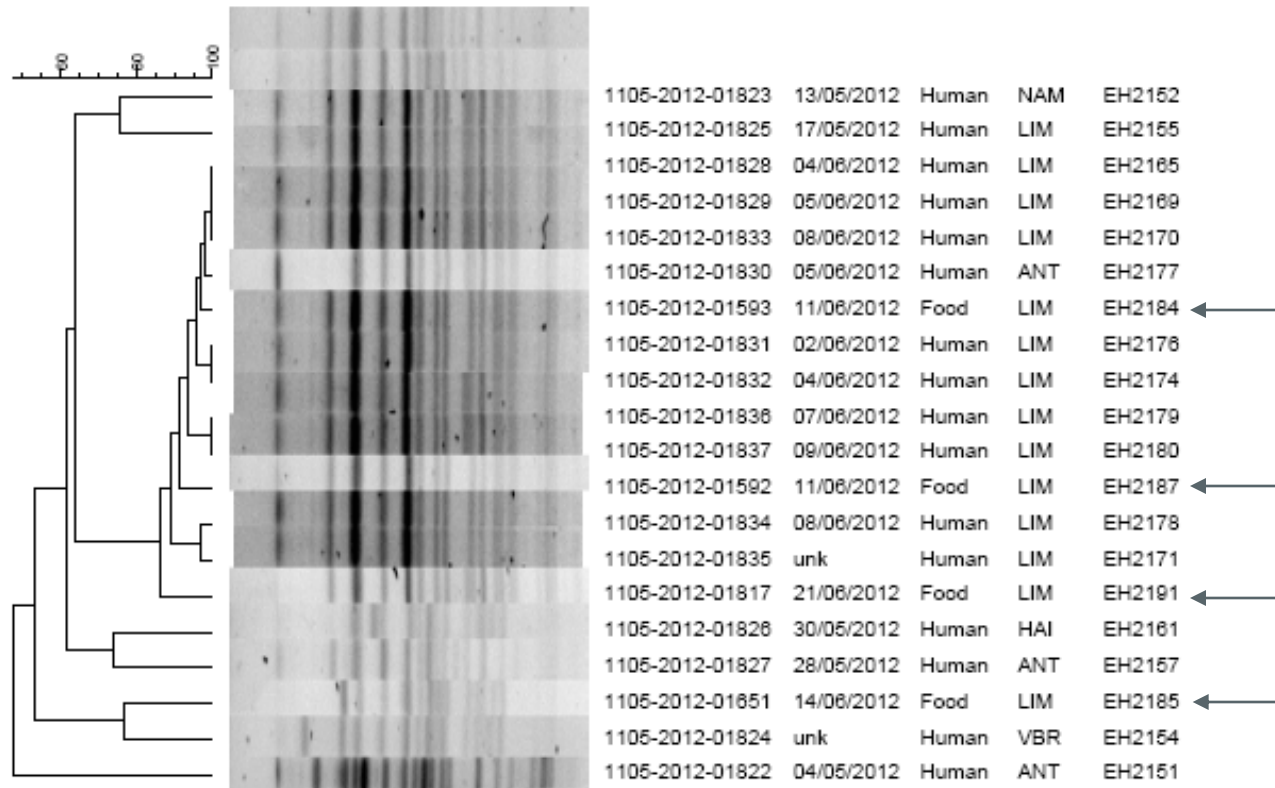
Laboratory used alternative method 1!!



Confirmation Food-human

PFGE-XbaI

PFGE-XbaI



Acknowledgements

FASFC

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NRC pathogenic *E. coli*

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Health Inspection

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