



VBORNET WP4

Questionnaire

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19 April 2011



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- Vector-borne diseases
- EU member states
- Human surveillance
- Animal surveillance
- Vector surveillance
- Linkage databases



Questionnaire

- Aims to assess:
 - surveillance activities vector-borne diseases
 - other efforts to estimate occurrence vector-borne diseases
 - extent of information exchange
 - availability of surveillance or contingency plans
 - availability of public health campaigns
 - interest in contribution to VBORNET
- Queries on:
 - human, animal and vector surveillance
 - 11 mosquito-, tick-, sandfly-borne diseases



Vector-borne diseases

- **Mosquito-borne diseases:**

- Chikungunya
- Dengue
- West Nile Fever
- Rift Valley Fever

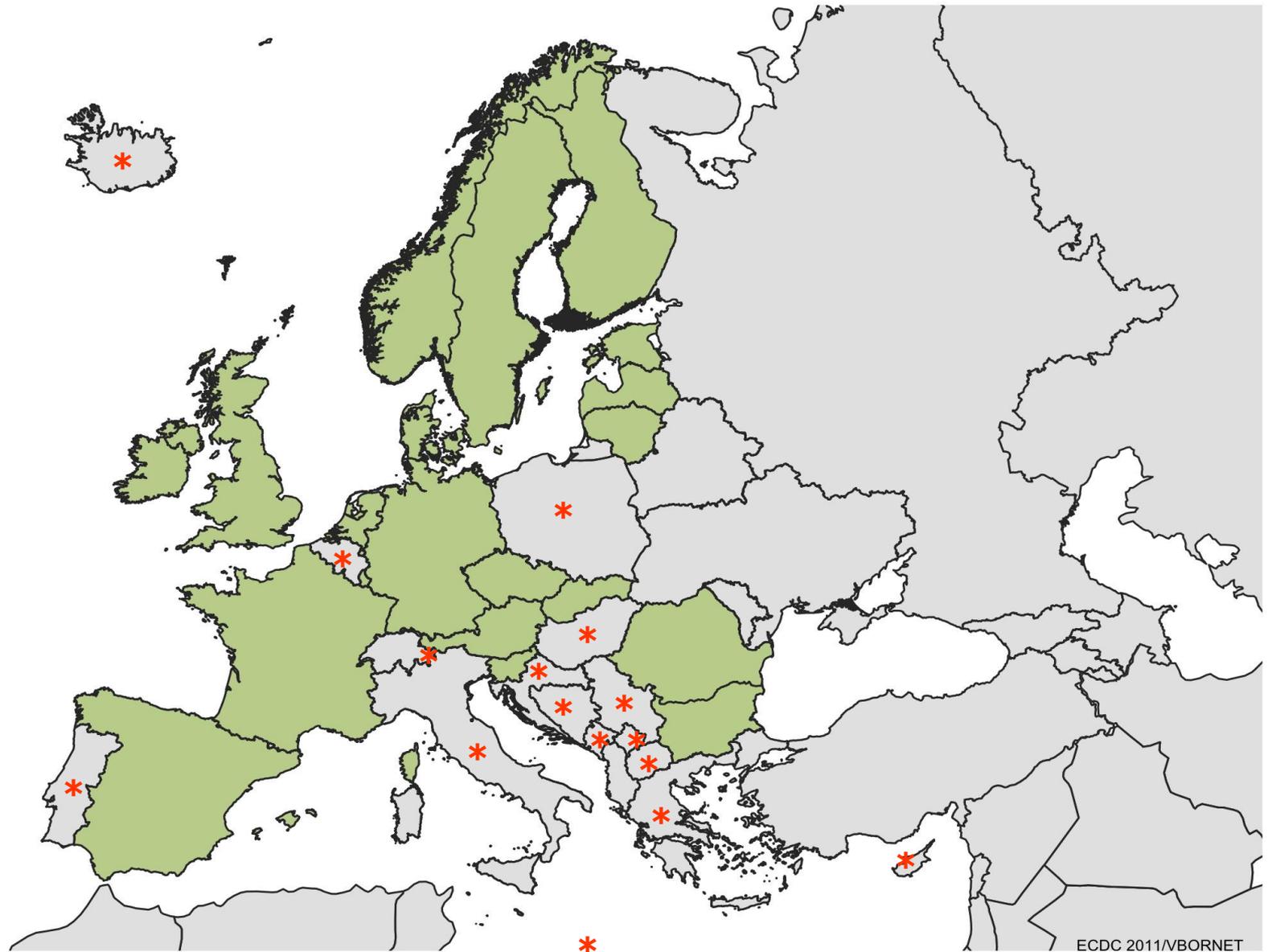
- **Sandfly-borne diseases:**

- Leishmaniasis
- Sandfly fevers

- **Tick-borne diseases:**

- Tick-borne encephalitis
- Crimean-Congo haemorrhagic fever
- Lyme borreliosis
- Tularaemia
- Rickettsiosis

EU member states



43 invited incl. Switzerland & 21 responded



Human surveillance

- Human surveillance activities
- Priority human surveillance
- Current public health campaigns about personal prevention against vector-borne diseases

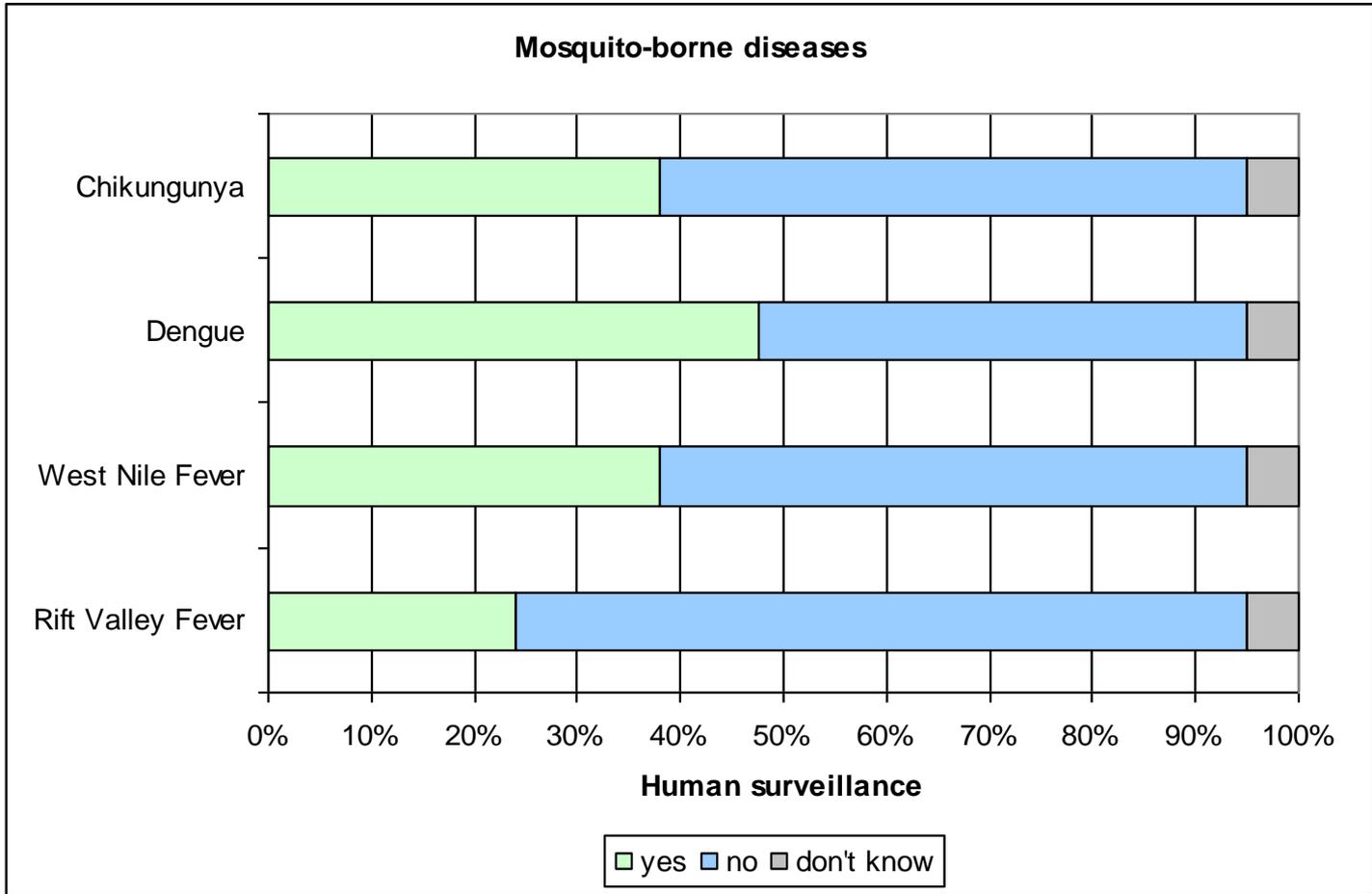


Human surveillance

- Mosquito-borne diseases:
 - Dengue: 48% human surveillance activities
 - West Nile Fever: highest priority human surveillance

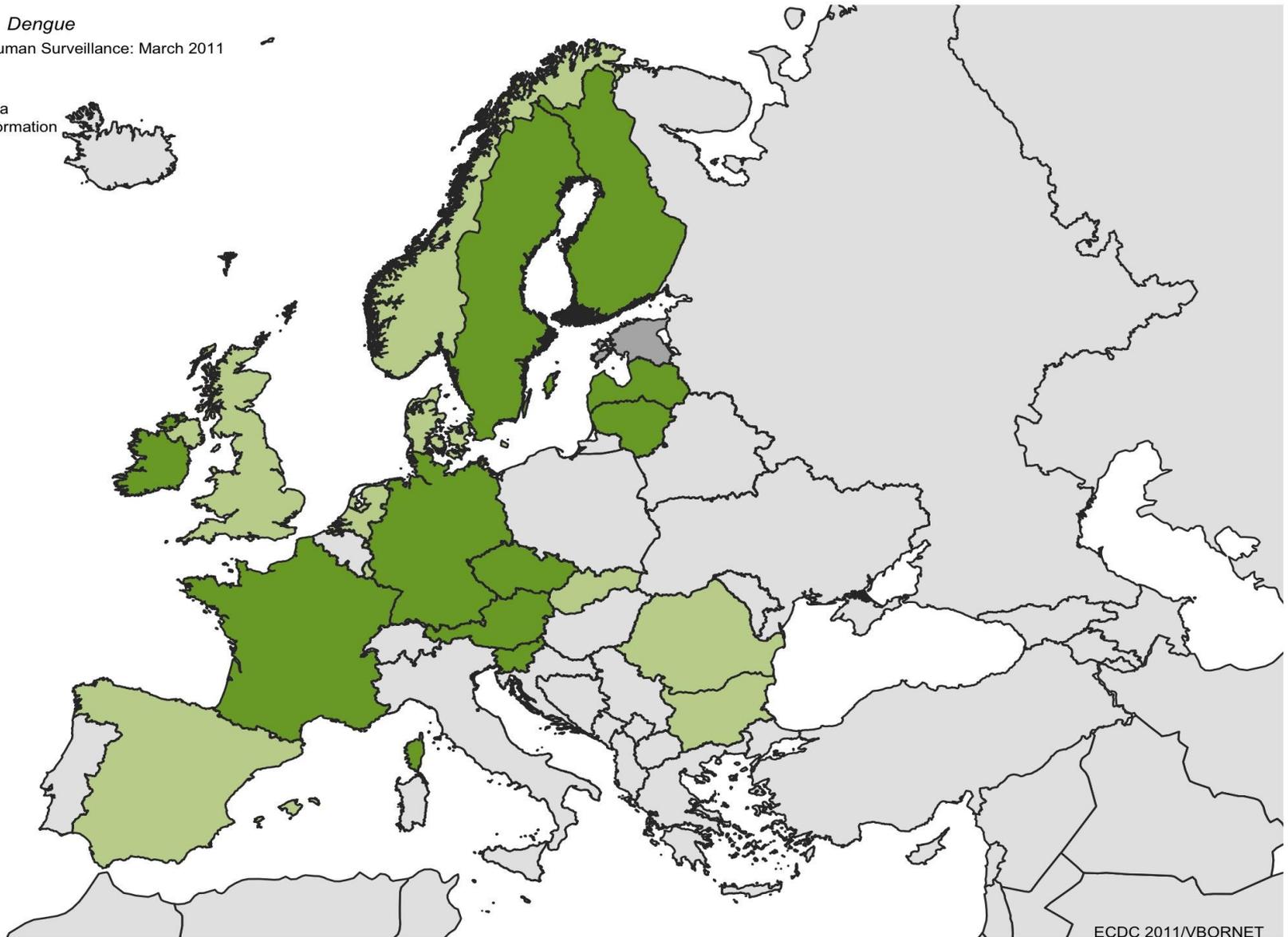


Human surveillance



Dengue
-human Surveillance: March 2011

- Yes
- No
- No data
- No information

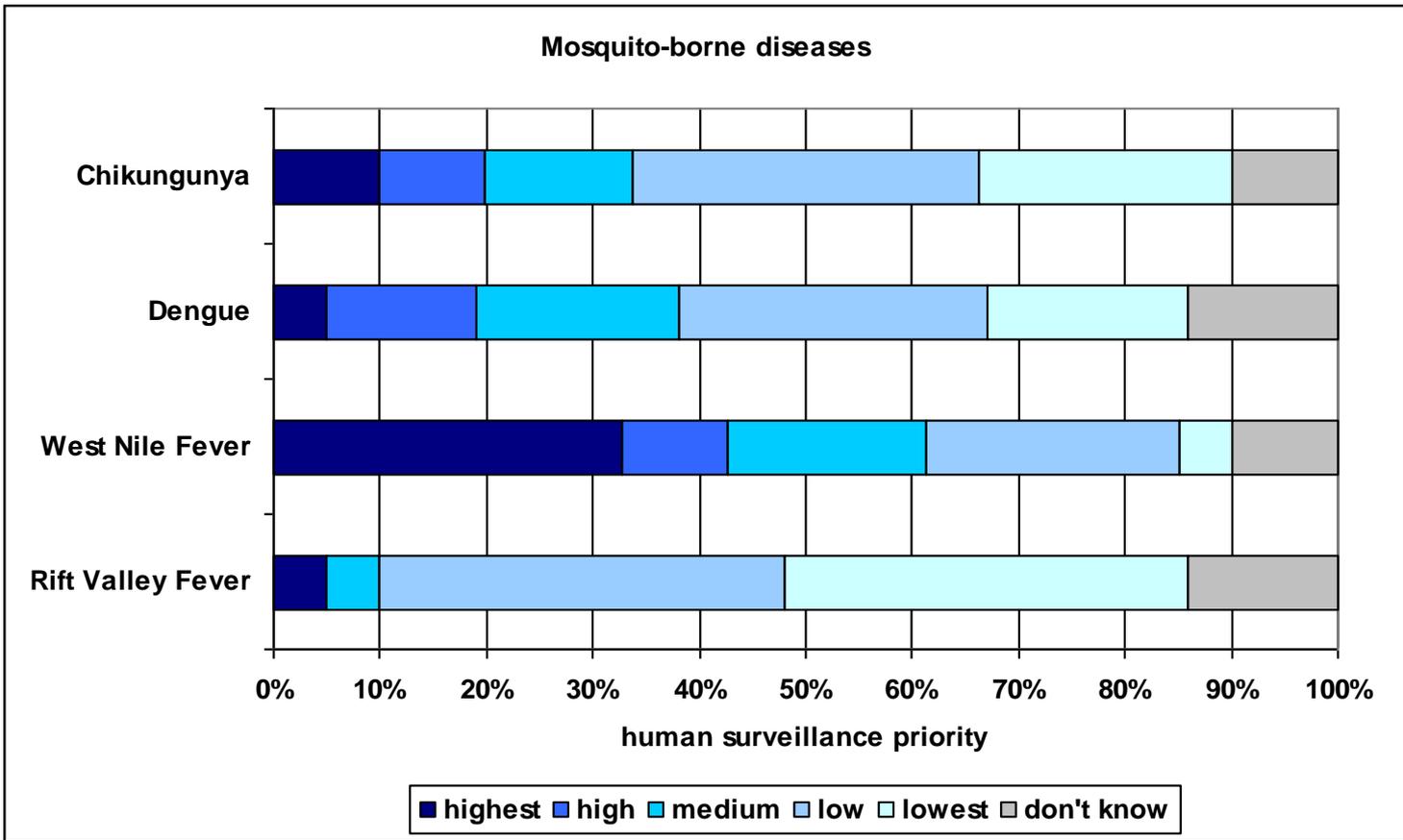


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Dengue 48% human surveillance activities

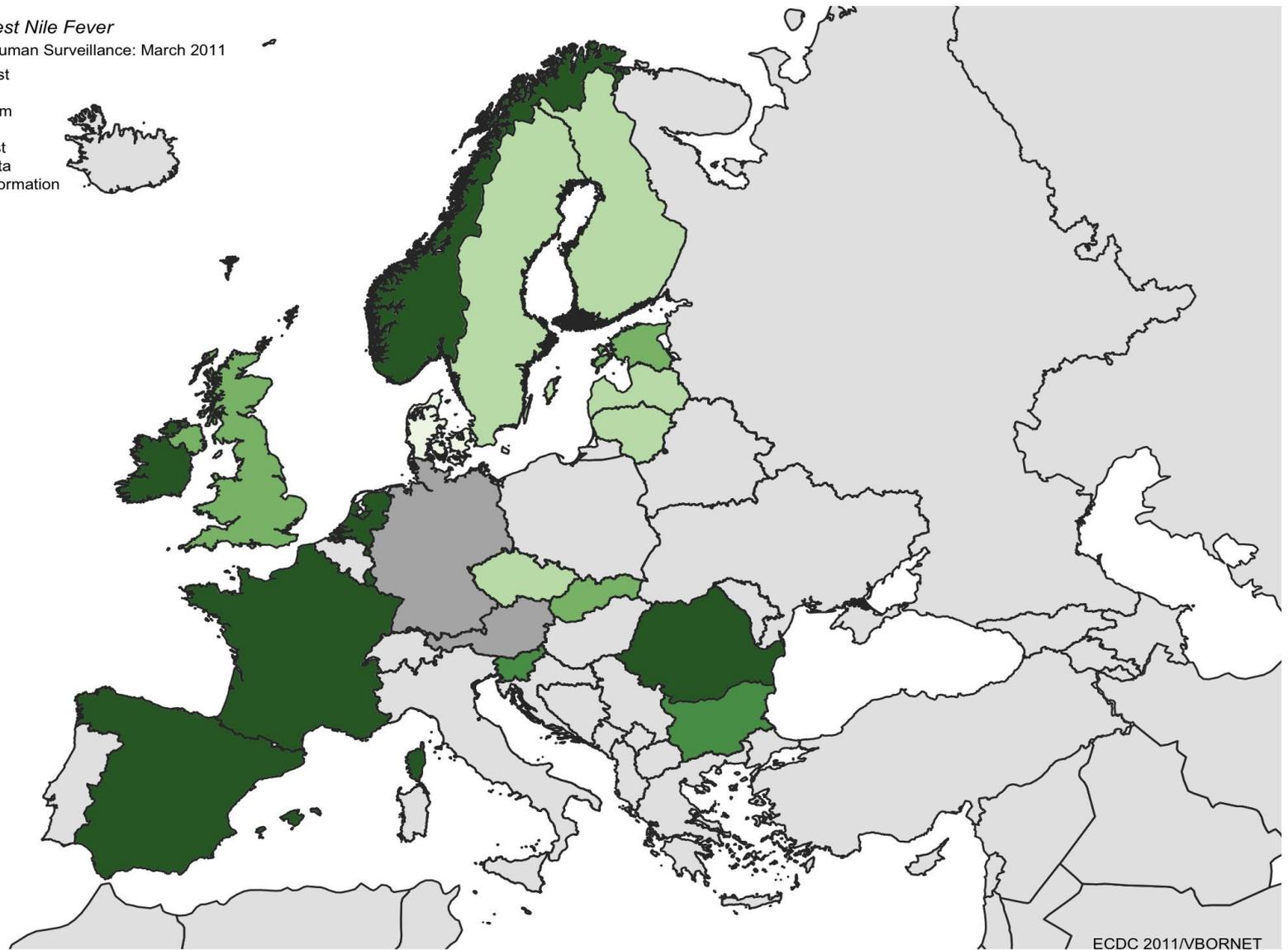


Human surveillance priority



West Nile Fever
Priority Human Surveillance: March 2011

- Highest
- High
- Medium
- Low
- Lowest
- No data
- No information



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West Nile Fever priority human surveillance

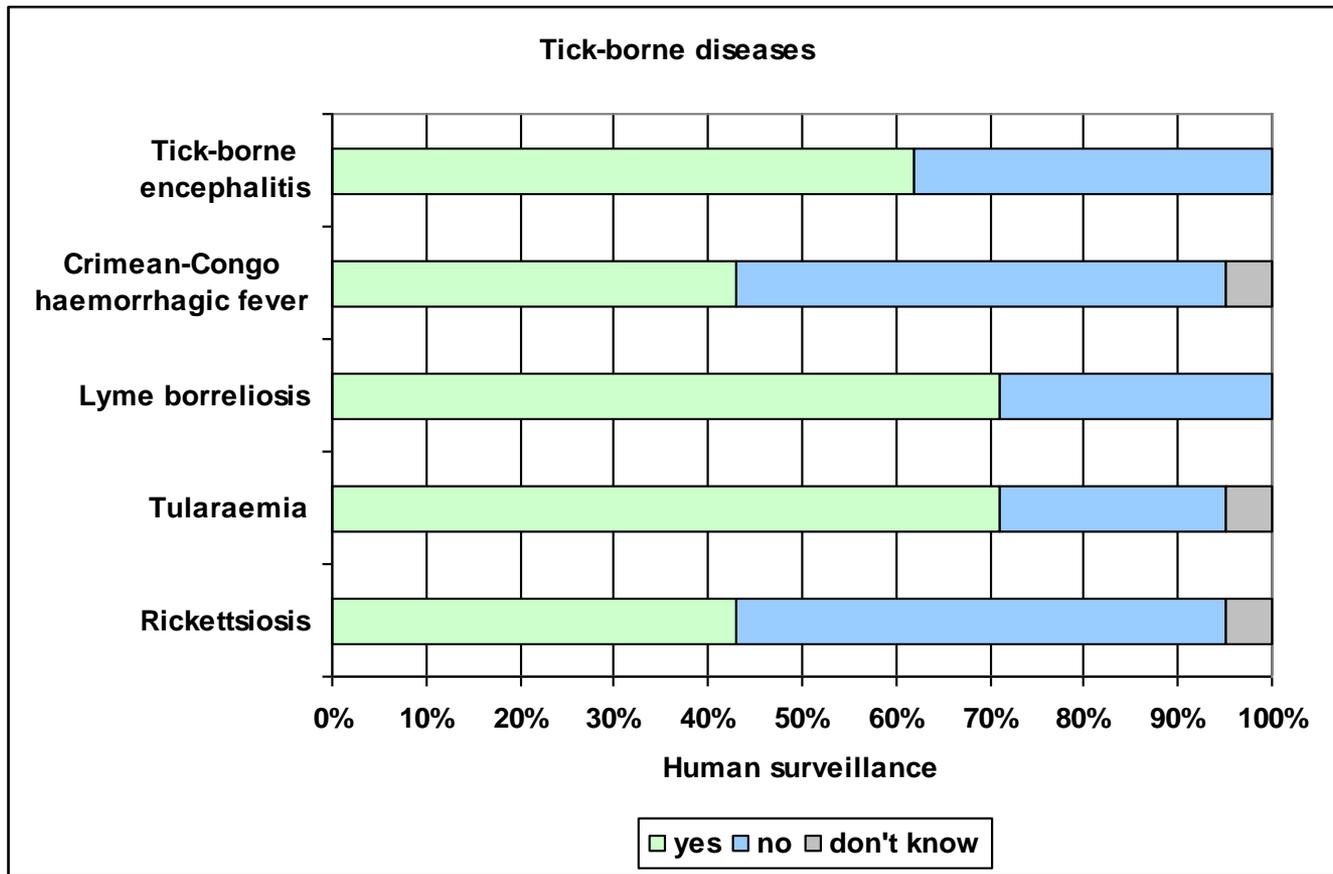


Human surveillance

- Tick-borne diseases:
 - Lyme borreliosis: 71% human surveillance activities
 - > priority high
 - Tularaemia: 71% human surveillance activities
 - > priority medium



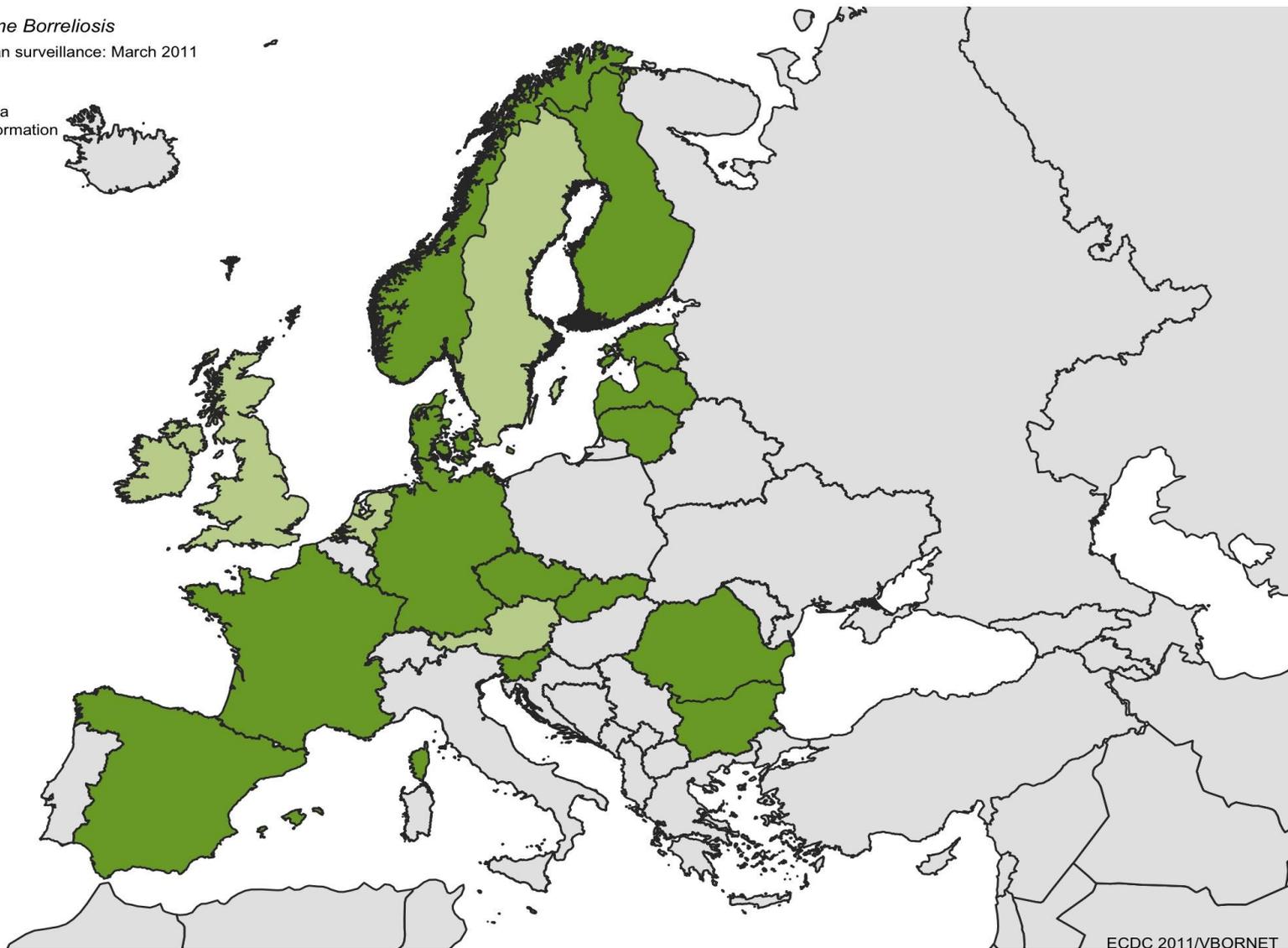
Human surveillance



Lyme Borreliosis

Human surveillance: March 2011

- Yes
- No
- No data
- No information

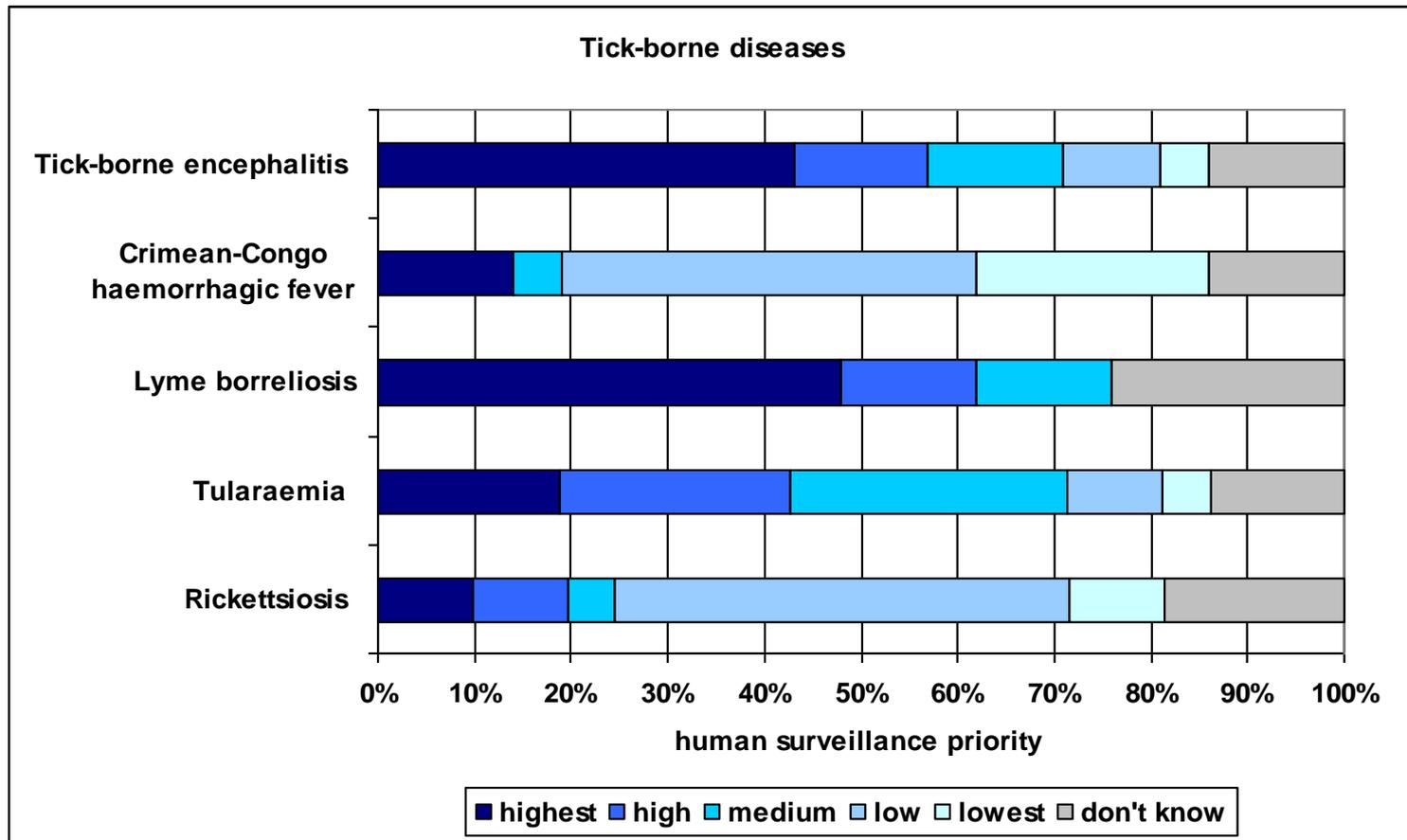


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Lyme borreliosis 71% human surveillance



Human surveillance priority



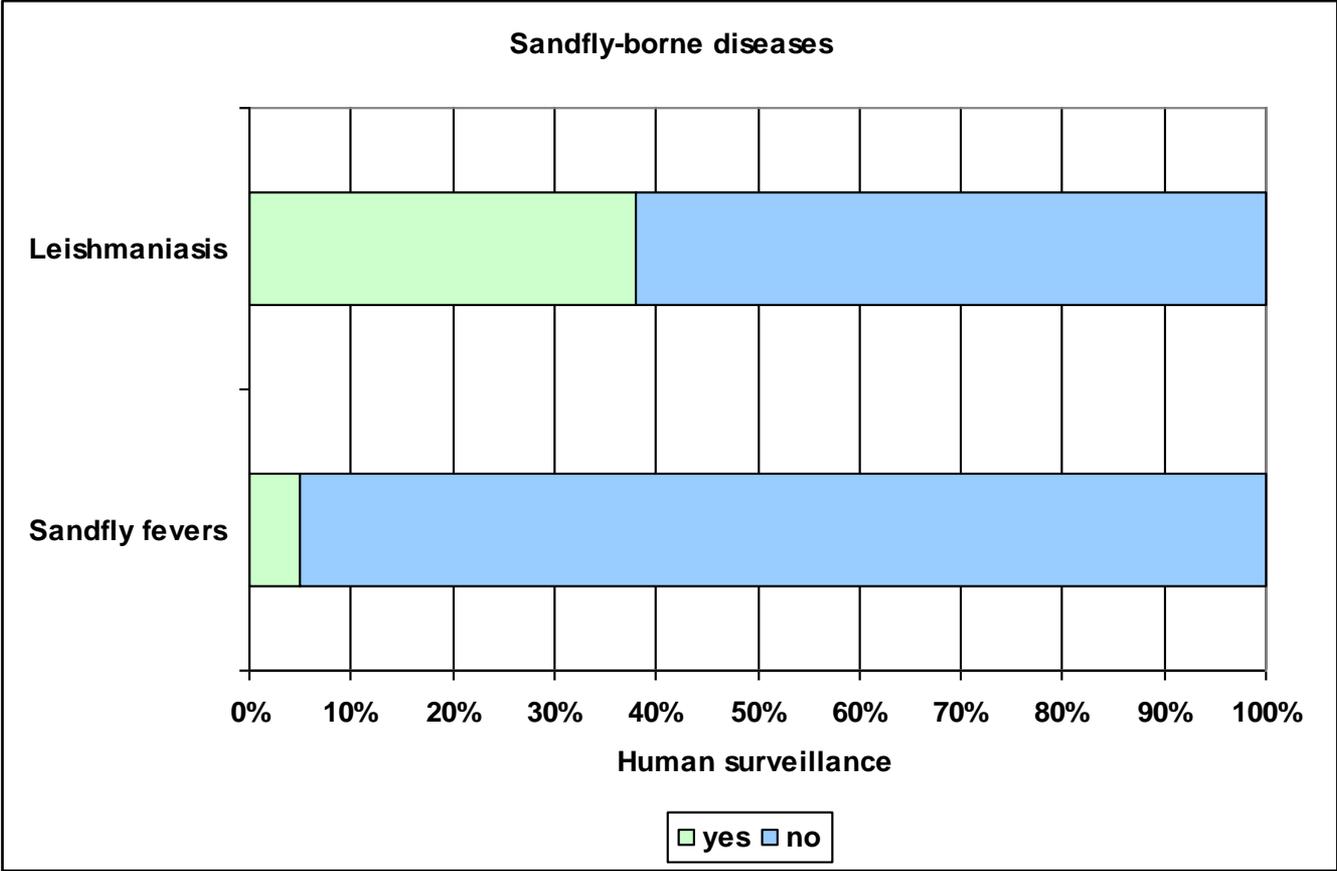


Human surveillance

- Sandfly-borne diseases:
 - only France performs human surveillance activities for Sandfly fevers
 - lowest priority for human surveillance in Europe

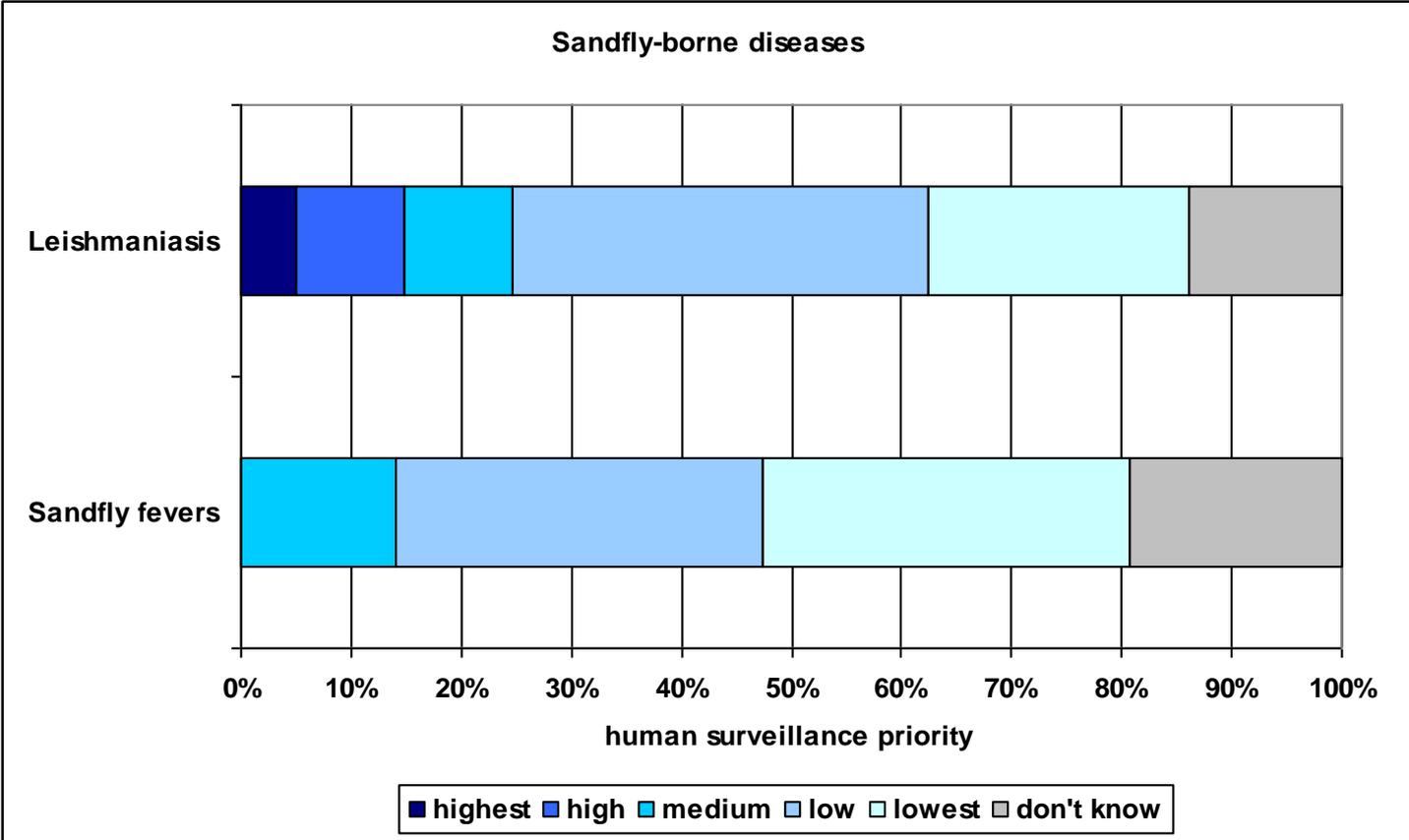


Human surveillance





Human surveillance priority



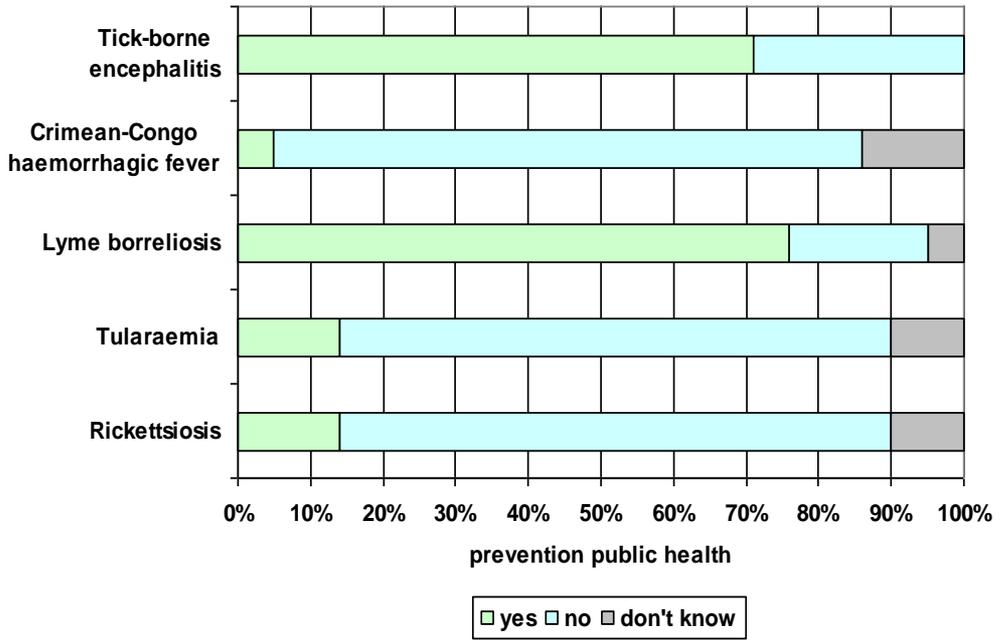


Human surveillance

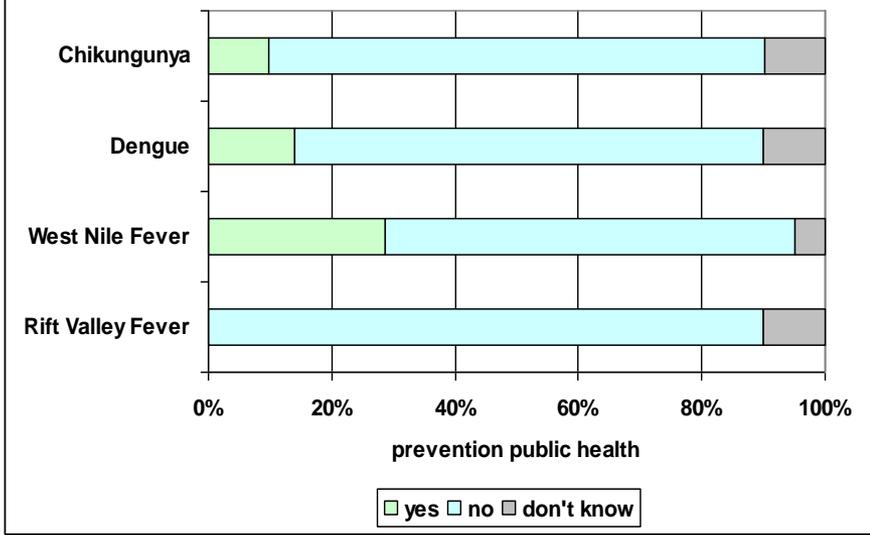
- Human surveillance vector-borne diseases is mostly passive
- Public health interventions mostly for tick-borne diseases
- Mosquito- and tick-borne diseases are in many countries notifiable by law



Tick-borne diseases



Mosquito-borne diseases





Animal surveillance

- Almost no animal surveillance for vector-borne diseases
- Except for West Nile Fever: 52% of countries perform activities



Vector surveillance

- Moderate performance vector surveillance activities for mosquito-borne and tick-borne diseases:
 - Dengue 29%
 - Lyme borreliosis 38%
- No vector surveillance for sandfly-borne diseases



Vector surveillance priority

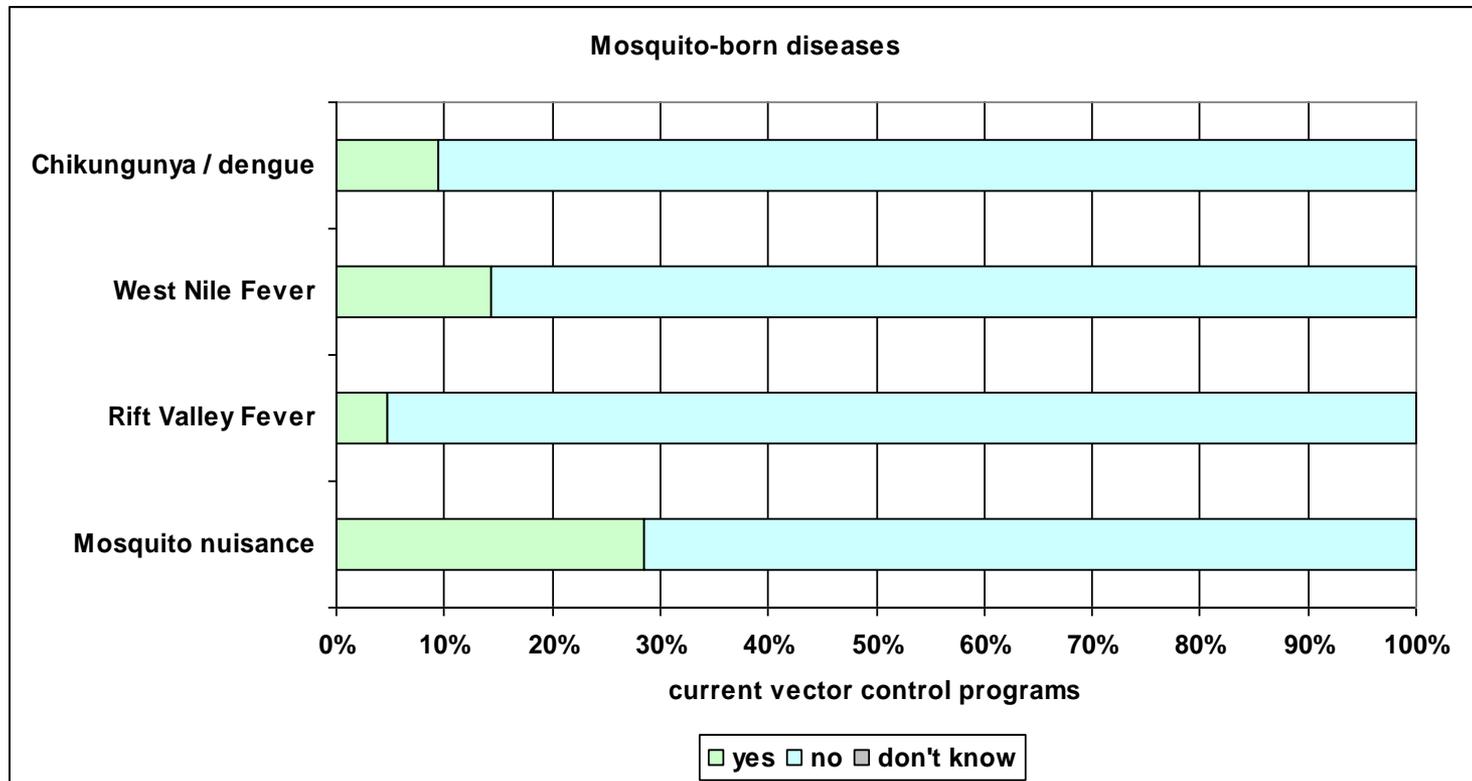
- Priority highest:
 - > Lyme borreliosis
 - > Tick-borne encephalitis

- No priority:
 - > Crimean-Congo haemorrhagic fever



Vector control programs

- Only for mosquito nuisance in general vector control plan: 29%





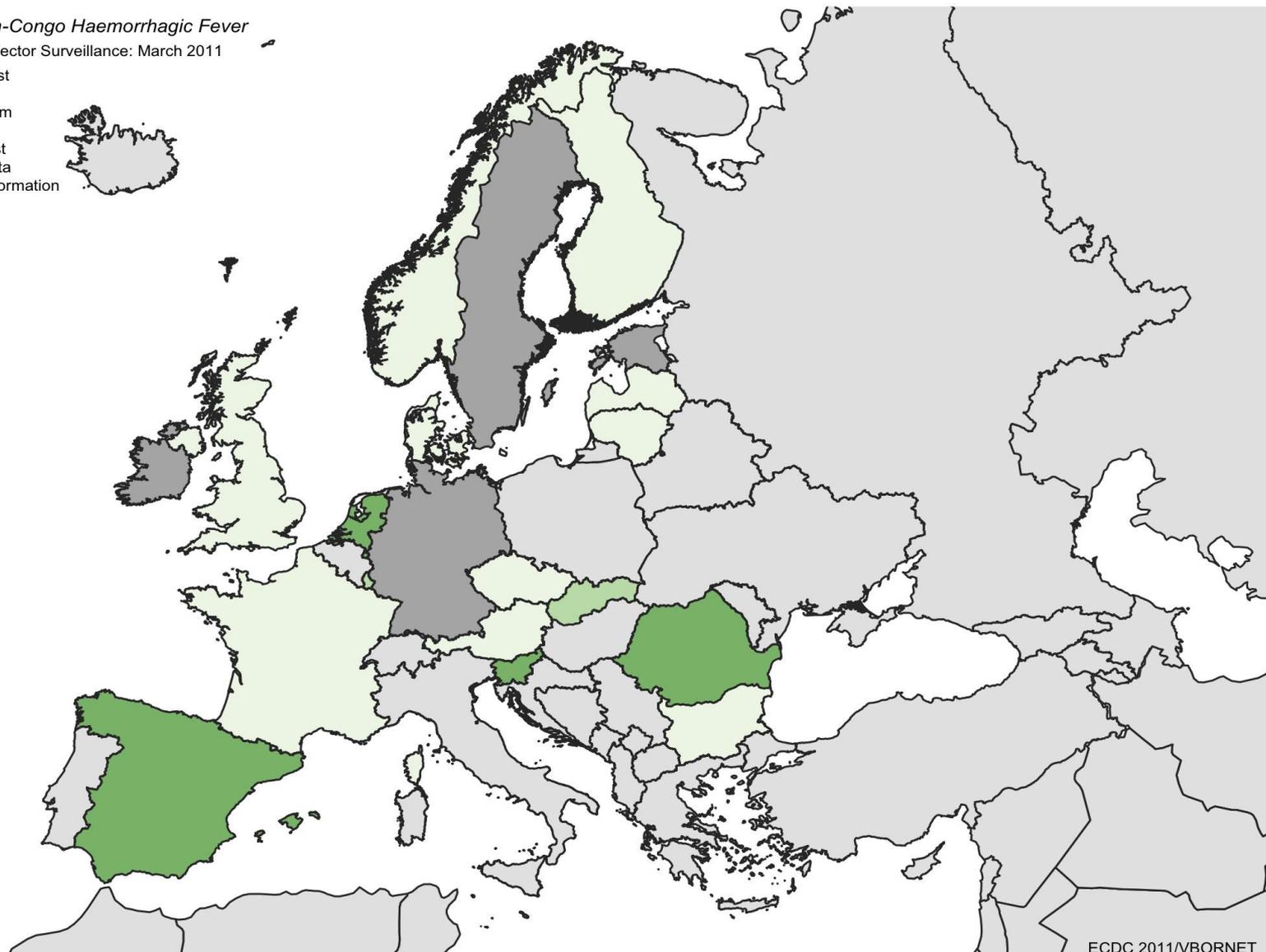
Vector contingency plans

- Contingency plans:
 - > Crimean-Congo haemorrhagic fever
 - > Tularaemia
- priority vector surveillance is low

Crimean-Congo Haemorrhagic Fever

Priority Vector Surveillance: March 2011

- Highest
- High
- Medium
- Low
- Lowest
- No data
- No information



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priority is low for Crimean-Congo haemorrhagic fever vector surveillance



Linkage or exchange information

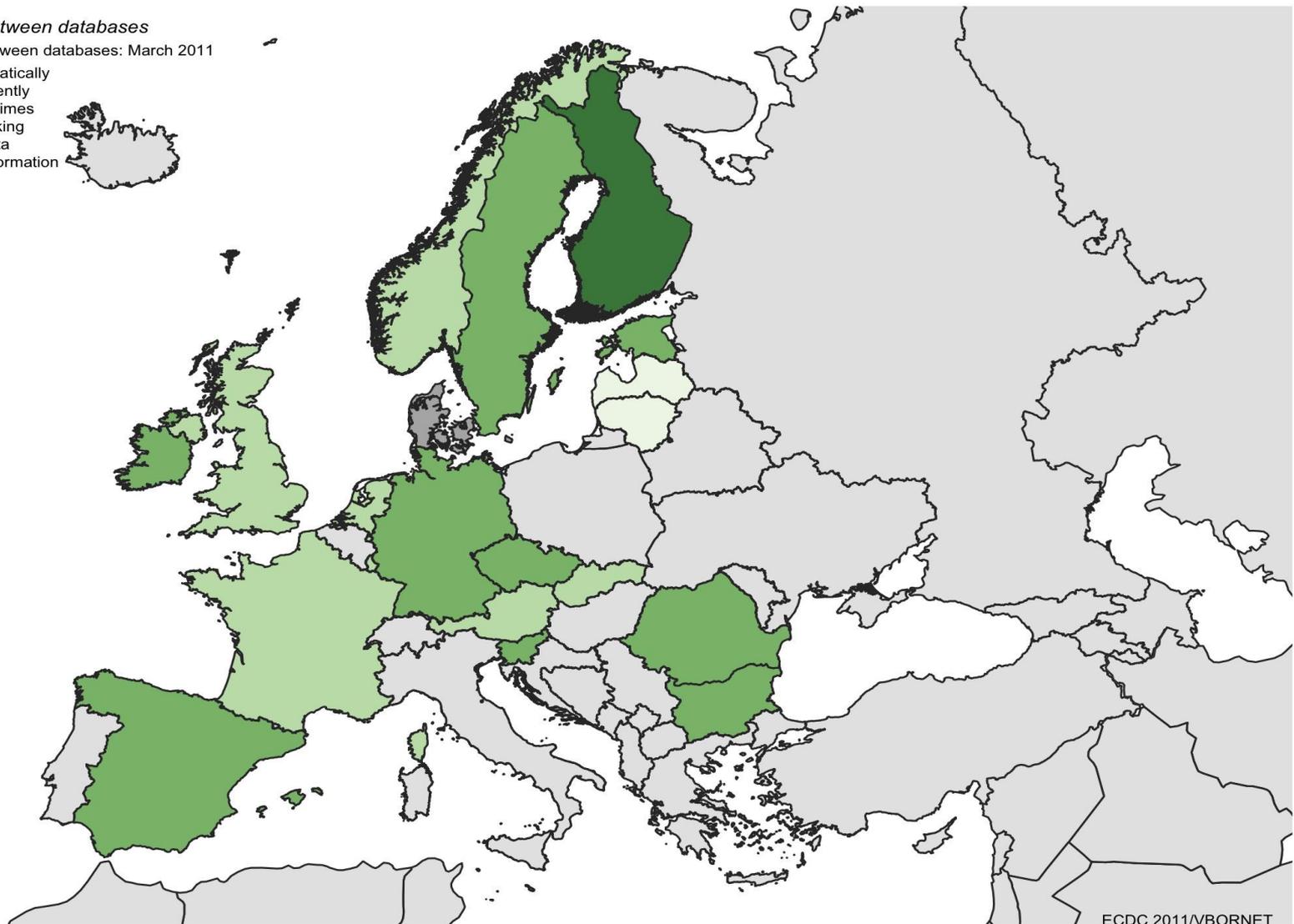
- Between public health surveillance systems and vector or animal surveillance systems:
 - 5 countries responded YES:
 - > Finland
 - > France
 - > Latvia
 - > Netherlands
 - > Spain

Linking or exchange information surveillance

Link between databases

Link between databases: March 2011

- Automatically
- Frequently
- Sometimes
- No linking
- No data
- No information





Summary

Questionnaire

- 49% response

Surveillance:

- Human: Lyme borreliosis: 71% → high priority
- Animal: West Nile Fever: 52%
- Vector: Lyme borreliosis: 38% → high priority

Contingency plans:

- Crimean-Congo haemorrhagic fever → low surveillance & priority
- Tularaemia → low surveillance & priority



Discussion

- Distinction between surveillance activities performed and priority of surveillance in humans, animals and vectors in Europe
- Why do some countries perform surveillance activities, whereas priority is low
- Results based on information from 49% of EU member states