

Drowning surveillance in Denmark: combining different data sources on drowning mortality

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Purpose

The aim is to provide national statistics to be used for prevention of drowning in Denmark

Statistics on:

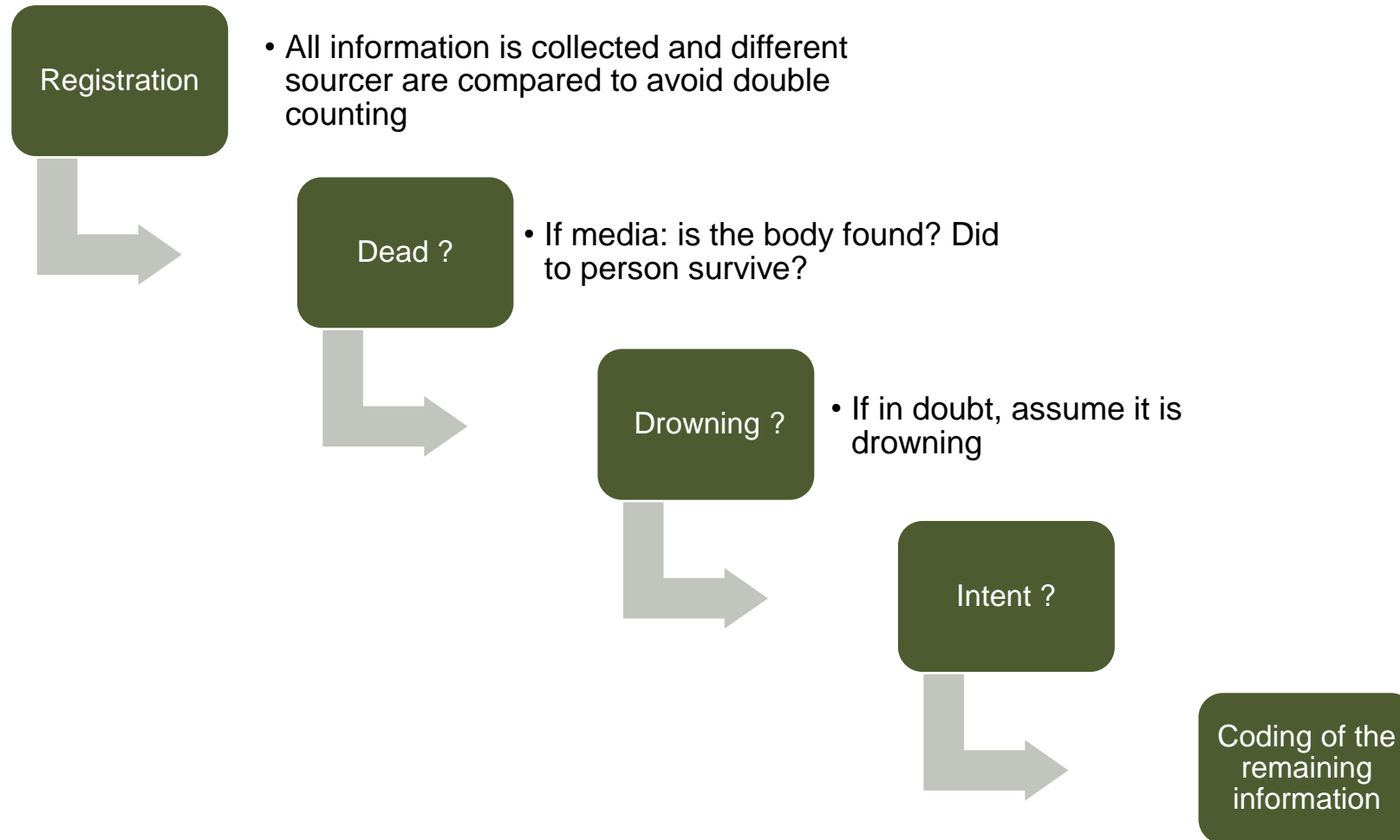
- Intent (accident, suicide, homicide, unknown)
- Age and sex
- Place of drowning event, e.g. lake
- Activity before drowning, e.g. fishing
- Other information, e.g. alcohol and drugs, first aid, alone, life jacket

Used for prevention of drowning in cooperation with TrygFonden

Data sources

- Media (TrygFonden, Danish Council for Greater Water Safety)
- Death certificates, selected ICD-10 codes (drowning, hypothermia)+external cause of injury
- Registration by the Danish Maritime Safety Council
- Other, e.g. web searches

Selection process



Combining data sources 2014-17

During 2014-17, a total of 341 people drowned in Denmark

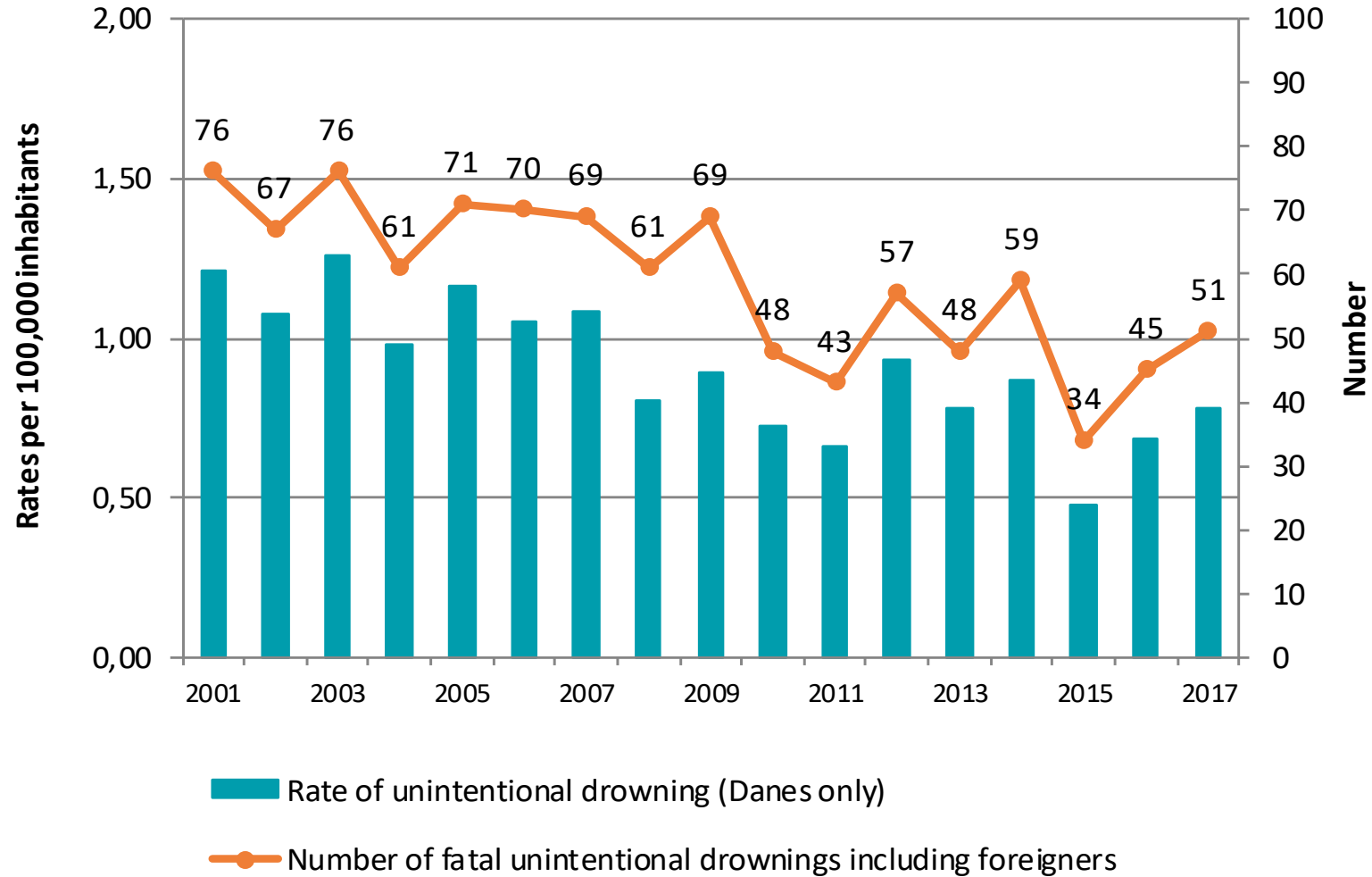
- 189 by accident (55 %)
- 120 by suicide (35 %)
- 30 with unknown intent (9 %)
- 2 by homicide (<1 %)

Sources of information to the 341 drowning deaths:

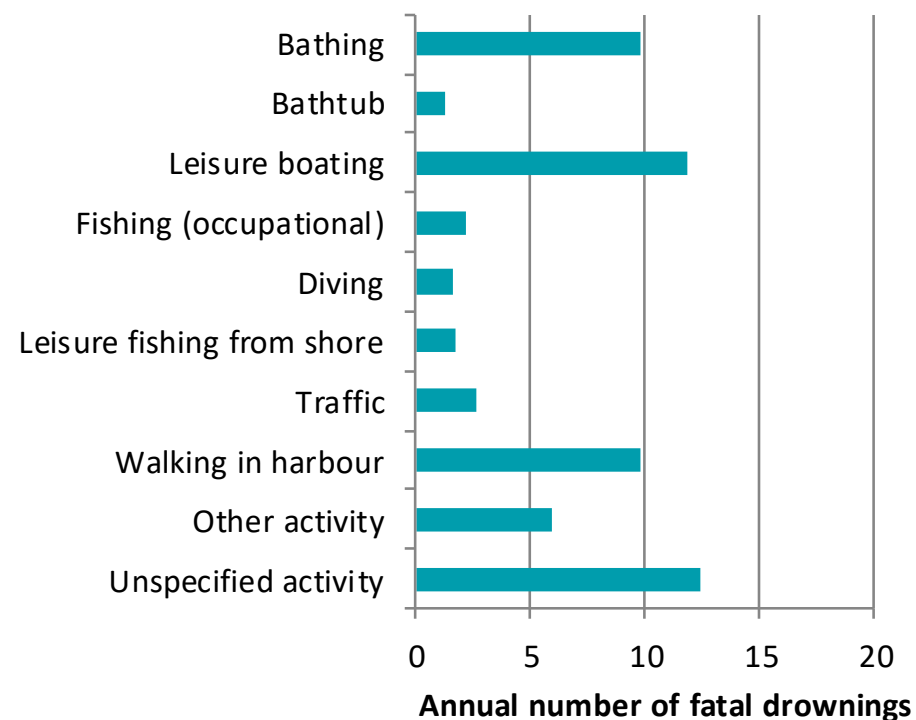
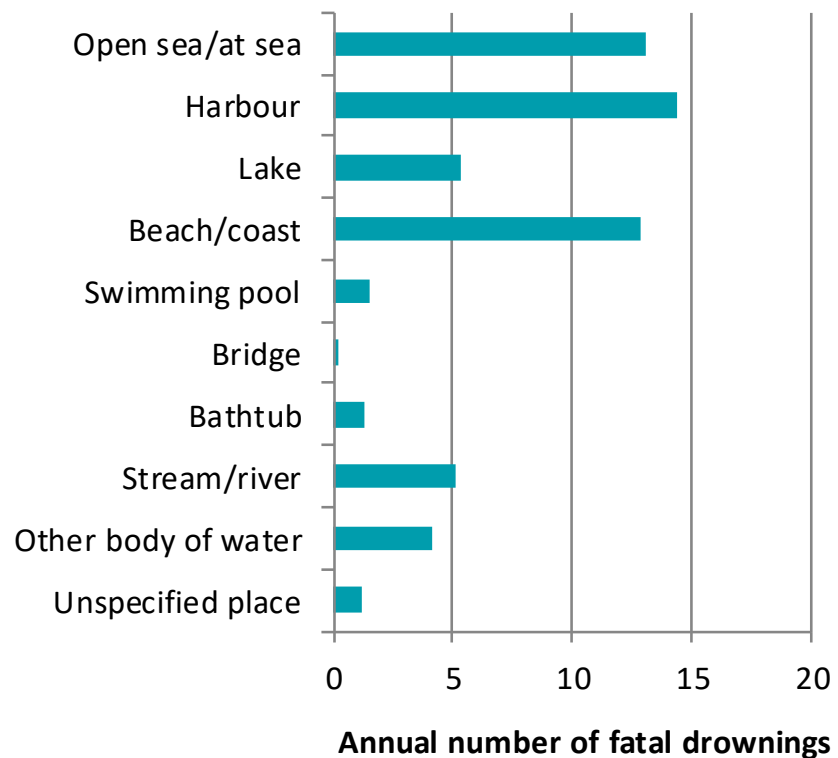
- Death certificates: 267 (78%)
- Media: 225 (66%)
- Resque services: 43 (13%)

Unintentional drowning deaths in Denmark 2001-2017

Total number and incidence per 100,000



Unintentional drowning – place and activity mean annual number 2001-2017



Conclusion

- Death certificates and media information are both incomplete, but both may be needed to obtain the full picture
- Combining data sources is not straightforward as information is uncertain