



DROWNING DEATHS – THE ESTIMATED RATIOS BETWEEN MORTALITY, MORBIDITY AND NO MORBIDITY

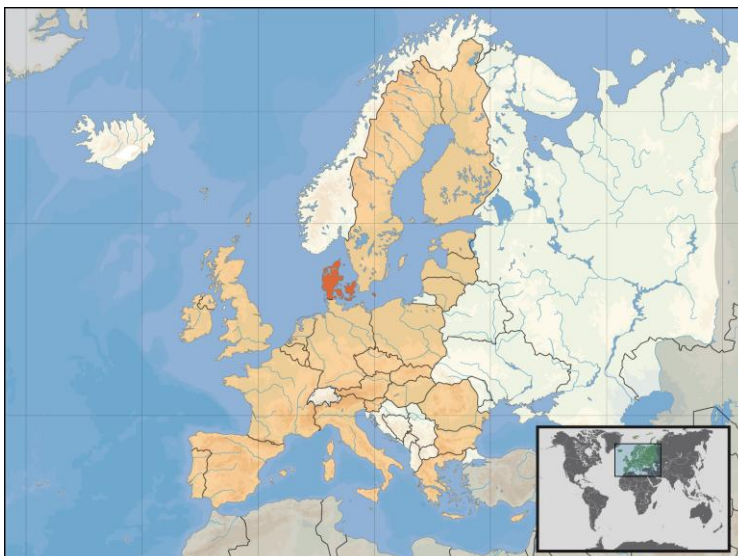
Da Nang, Vietnam 11th of May 2011

Erik Bech, General Manager, Surf Life Saving Denmark

Introduction



Denmark, a small coastal and maritime nation



7.500 km coast

Max dist. < 67 km

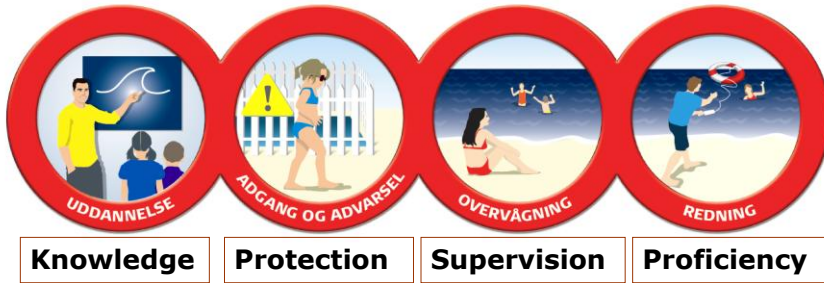
25% can't swim

Breaking the drowning chain



Lack of knowledge
No protection
Lack of supervision
Inability to cope

Most drowning accidents are preventable!



3

Fatal drownings by bathing in Denmark



~ 125 fatal drowning per annum
IR 2.1 per 100.000

Kortet viser dødsfald og badeulykker blandt personer med fast bopæl i Danmark samt udlændinge druknet i Danmark. Tre badeulykker kunne ikke stedfæstes og fremgår derfor ikke på kortet.

4

ICD-10 codes in drowning stats



ICD-10: *The International Statistical Classification of Diseases and Related Health Problems, 10th Revision, WHO*

W65: Unintentional: drowning/suffocation
 W67: Accidental drowning and submersion while in swimming-pool
 W69: Accidental drowning and submersion while in natural water
 W73: Other specified cause of accidental non-transport drowning and submersion
 W74: Unspecified cause of accidental drowning and submersion
 X31: Exposure to excessive natural cold
 X38: Flood
 X39: Exposure to other forces of nature
 X71: Intentional self-harm by drowning and submersion
 X92: Assault by drowning and submersion
 Y21: Drowning and submersion, undetermined intent
 T68: Hypothermia
T75.1: Drowning and nonfatal submersion
 V90: Drowning and submersion due to accident to watercraft
 V92: Drowning and submersion due to accident on board watercraft, without accident to watercraft

For most people, drowning is synonymous with mortality

5

Reported incidents in Denmark



Reporting of ICD-10 codes to the Danish Cause of Death Register:

The average yearly distribution

- Mortality: 125+ including suicides ~ IR 2.1/100.000
- Morbidity: 48+
- No morbidity (near-misses): ?

Only very few near-miss incidents are reported

6

Population surveys



~ 50% of all adults americans have had an experience where they nearly drowned in their lifetime

~ 24% of all Danes have had an experience where they nearly drowned in their lifetime

Additionally 2% have nearly drowned several times

Counting Near-misses is *not* an exact science

7

Population surveys



Correlated values normalized to mortality

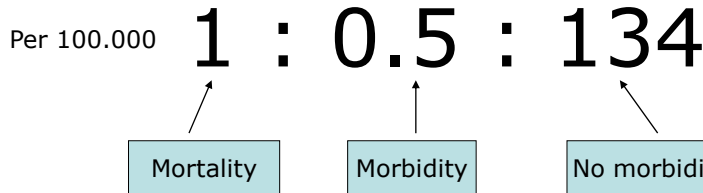
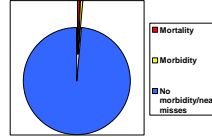
Survey	Mortality	Morbidity	No morbidity
American Red Cross, 2009	1	-	576
Danish TrygFoundation, 2010	1	0.5	134

8

Conclusion

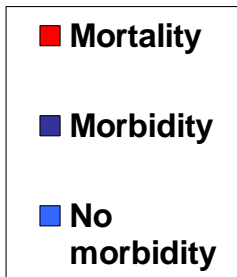
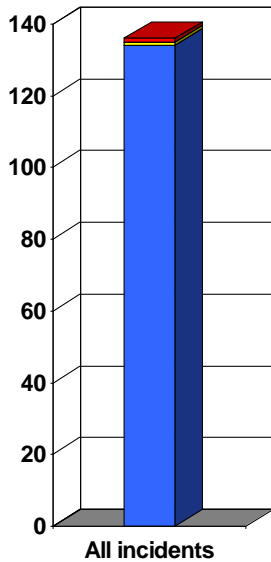


The *estimated* ratios:



9

The tip of an iceberg



No morbidity is correlated to near misses

10

Awareness/training the public

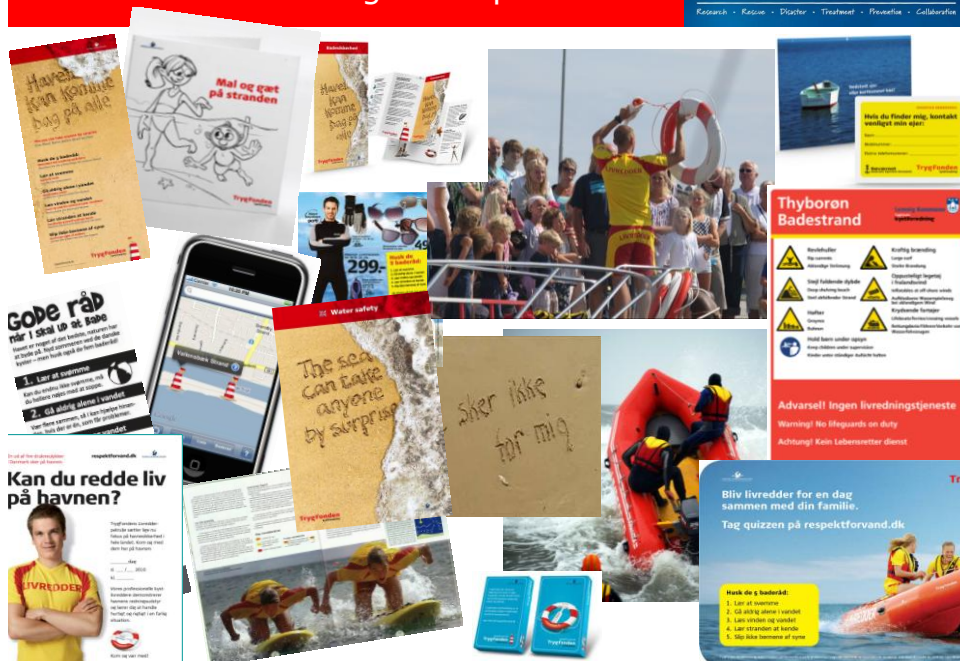


Giving the public information and training will reduce drowning risks and suffering

P.S. It will also save money...

11

Outreach to the general public



Thank you for your time

 **WORLD CONFERENCE ON DROWNING PREVENTION 2011** VIETNAM
10-13 MAY
Research • Rescue • Disaster • Treatment • Prevention • Collaboration

