Drunkning, vi kan göra mer!

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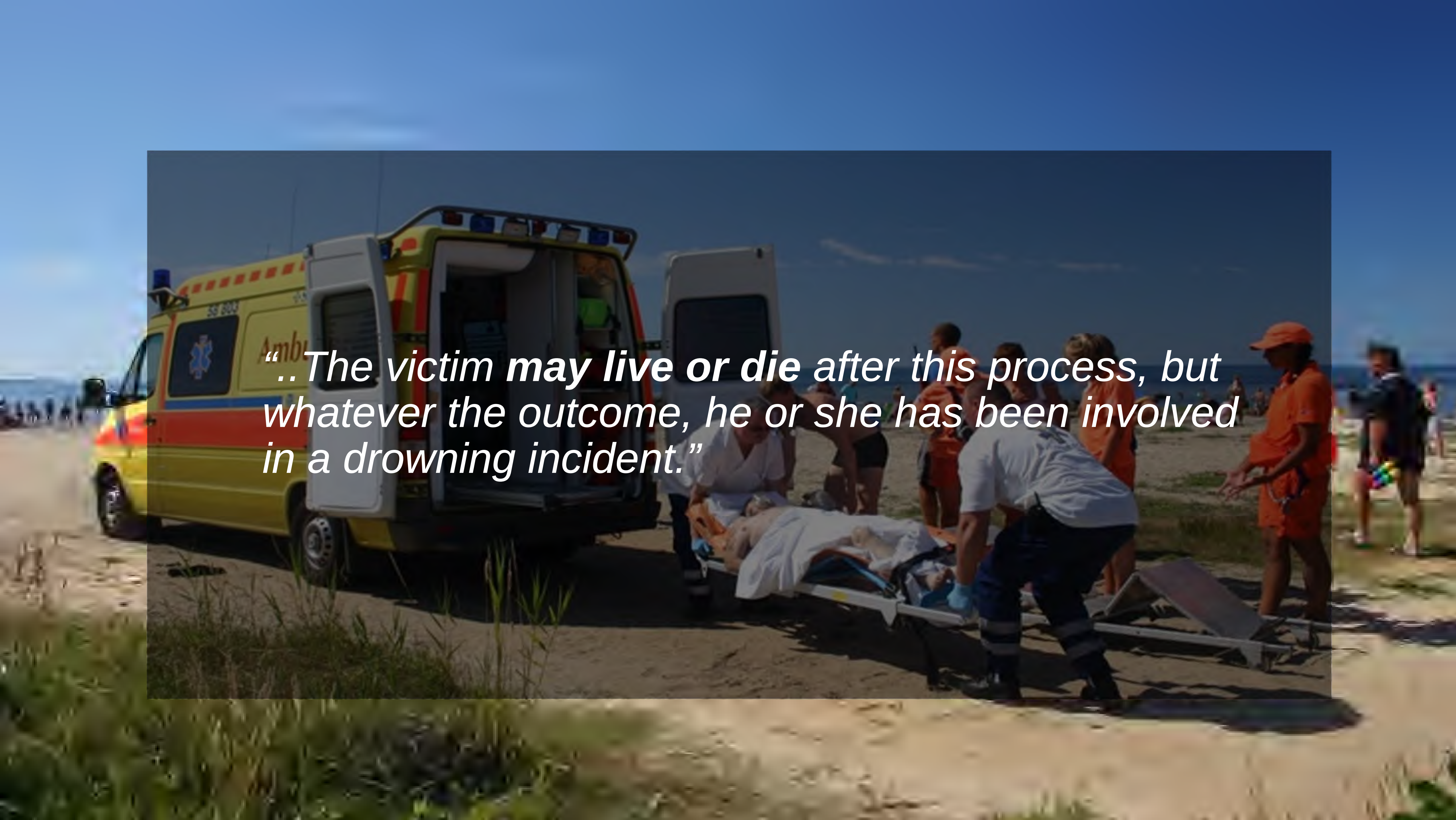
Drunkningsdefinition 2005

"Drowning is a process resulting in primary respiratory impairment from submersion/immersion in a liquid medium..

..The victim may live or die after this process, but whatever the outcome, he or she has been involved in a drowning incident."

van Beeck EF, Branche CM, Szpilman D, Modell JH, Bierens JJLM.
A new definition of drowning: towards documentation and prevention of a global public health problem. *Bull World Health Organ 2005;83:853-6.*



“..The victim ***may live or die*** *after this process, but whatever the outcome, he or she has been involved in a drowning incident.”*

Ca 400,000 personer rapporteras döda i drunkningsolyckor globalt varje år.

WHO, Global report on drowning. Preventing a leading killer. Report 17th November 2014.

25 July

is World Drowning Prevention Day

World Health Organization

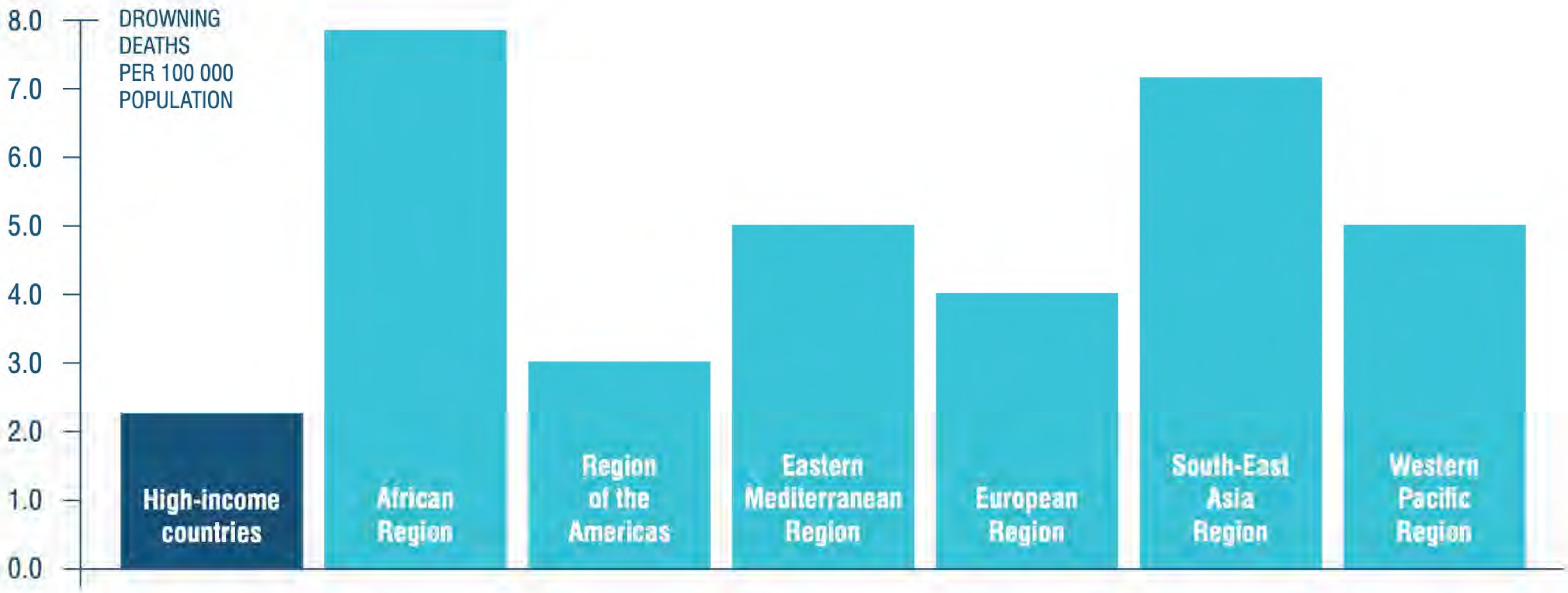
Anyone can drown, but

more than 90% of drowning deaths occur in low- and middle-income countries

World Health Organization

FIGURE 4

AGE-STANDARDIZED DROWNING DEATHS PER 100 000 POPULATION, BY REGION AND INCOME LEVEL



Note: Data for all high-income countries appears as 'High-income countries'. All WHO regions provided show ranking for only the low- and middle-income countries within those regions.

Available online at www.sciencedirect.com

Resuscitation

journal homepage: www.elsevier.com/locate/resuscitation

Clinical paper

Incidence and characteristics of drowning in Sweden during a 15-year period

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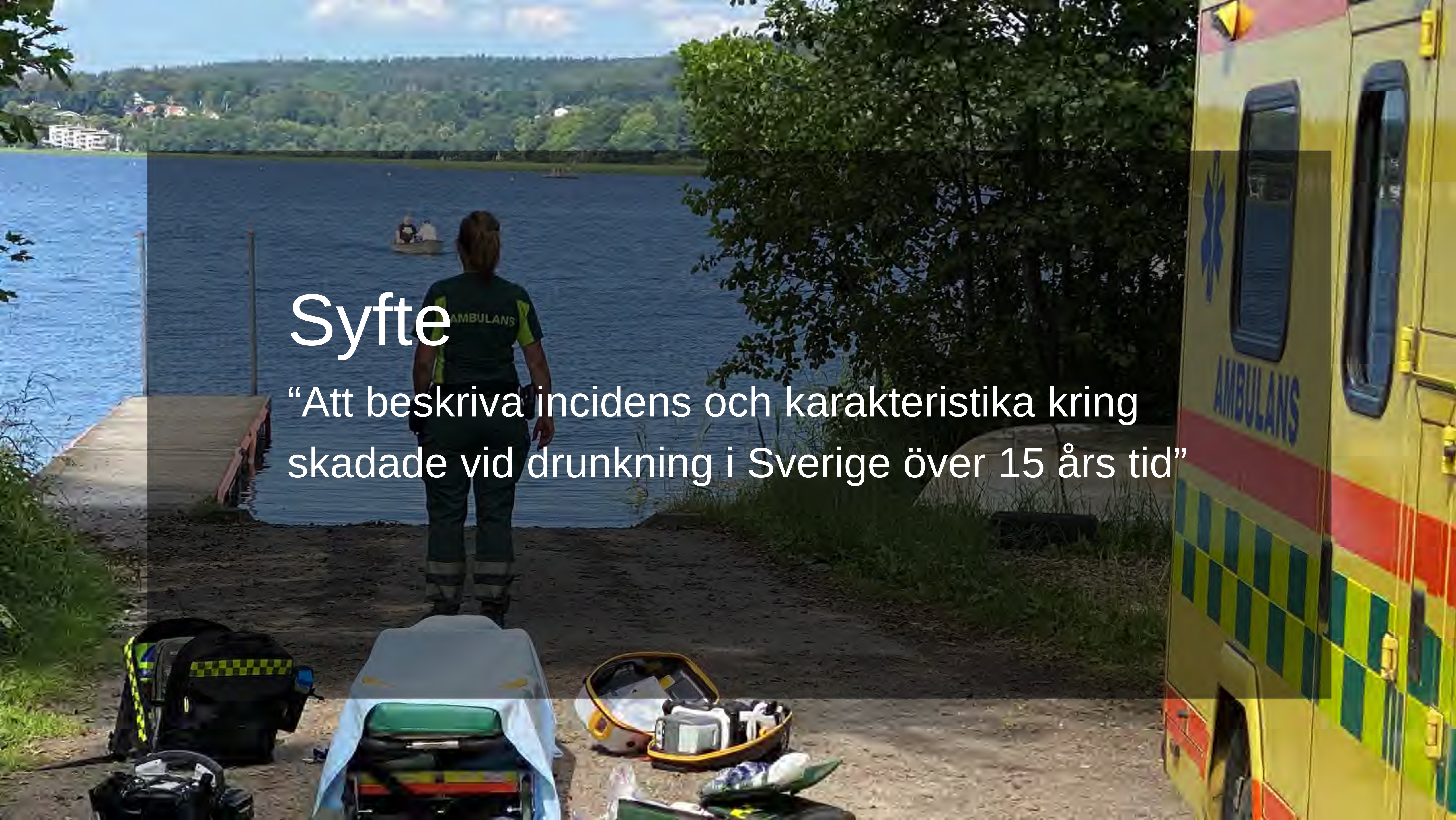
[a] Department of Medicine, Centre for Resuscitation Science, Karolinska Institutet, Solna, Sweden
[b] Department of Cardiology, Västerås Hospital, Västerås, Sweden
[c] Swedish Lifesaving Society, Bromma, Sweden
[d] Department of Health, Medicine and Caring Sciences, Linköping University, Linköping, Sweden



Syfte

"Att beskriva incidens och karakteristika kring skadade vid drunkning i Sverige över 15 års tid"

Metod

Retrospektiv observationsstudie baserad på tre av Socialstyrelsens register:

1. Dödsorsaksregistret
2. Patientregistret – öppenvård (Akutmottagning, vårdcentral)
3. Patientregistret – slutenvård (Inlagda på sjukhus)

Inklusion:

Samtliga av läkare till Socialstyrelsen rapporterade fall av drunkning i Sverige mellan 2003-2017 utifrån ICD10 systemet.

- Studien genomförs i samverkan med SLS och med stöd av MSB
- Studien godkänd av etikprövningsmyndigheten den 31 Oktober 2018: (#2018/1954-1)

ICD10

International classification of diseases version 10:

T 75.1 Drowning

V90 Transportation on water where watercraft is directly causing drowning

V92 Transportation on water where watercraft is not causing drowning

W65 Drowning in Bathtub

W66 Drowning after fall in bathtub

W67 Drowning in pool

W68 Drowning after fall in pool

W69 Drowning in sea, lake

W69 Drowning in sea, lake

W70 Drowning after fall in sea, lake

W73 Drowning other

W74 Unspecified unintentional drowning

X37-39 Natural disaster

X71 Intentional drowning

X92 Homocide

Y21 Unspecified drowning

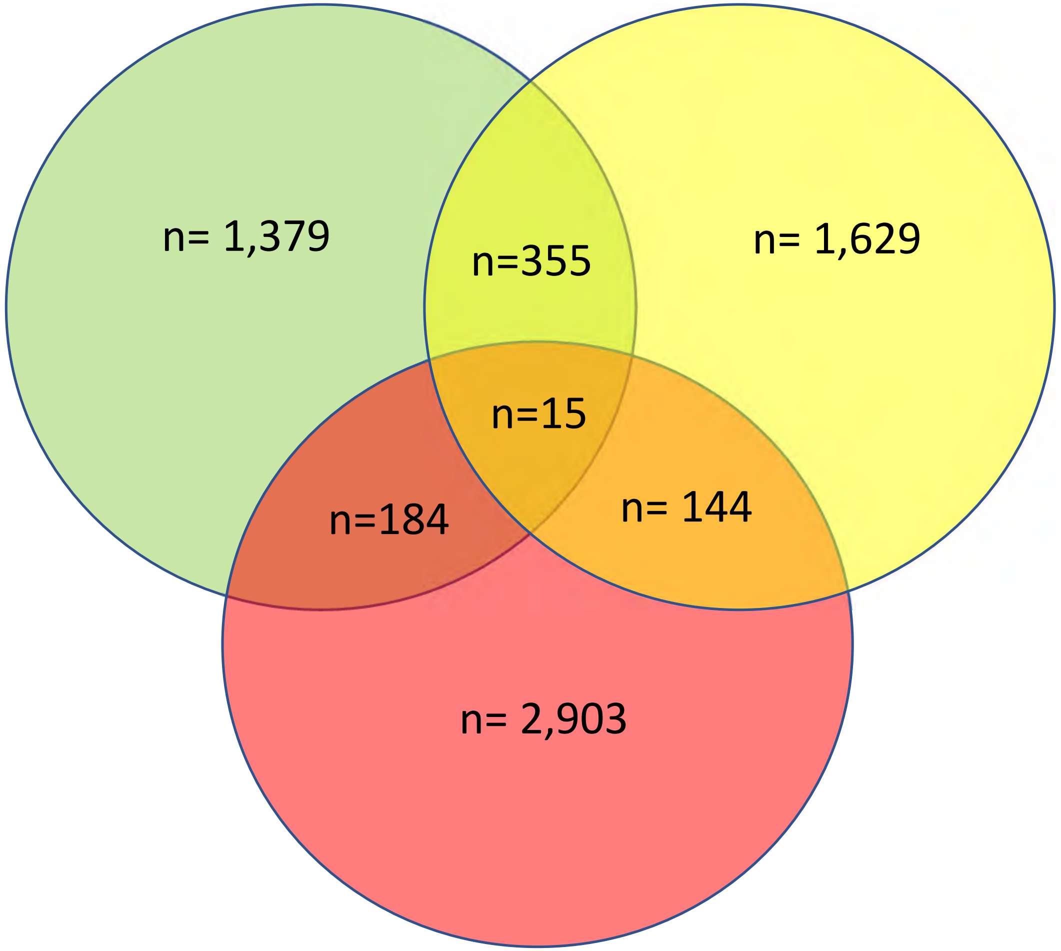
Exklusion

1. T75.1 kod men avsaknad av underliggande ICD10 kod
2. Dubbla orsakskoder
3. Upprepade öppenvårdsbesök
4. Död av annan orsak efter 30 dagar
5. X37-X39 – naturkatastrof
6. År 2004-2005 års tsunamirelaterade fall (Thailand 25 December 2004).

Studiepopulation

- Drunkning Sverige 2003-2017, Socialstyrelsen

Skadade
- Öppenvård
n=1,934

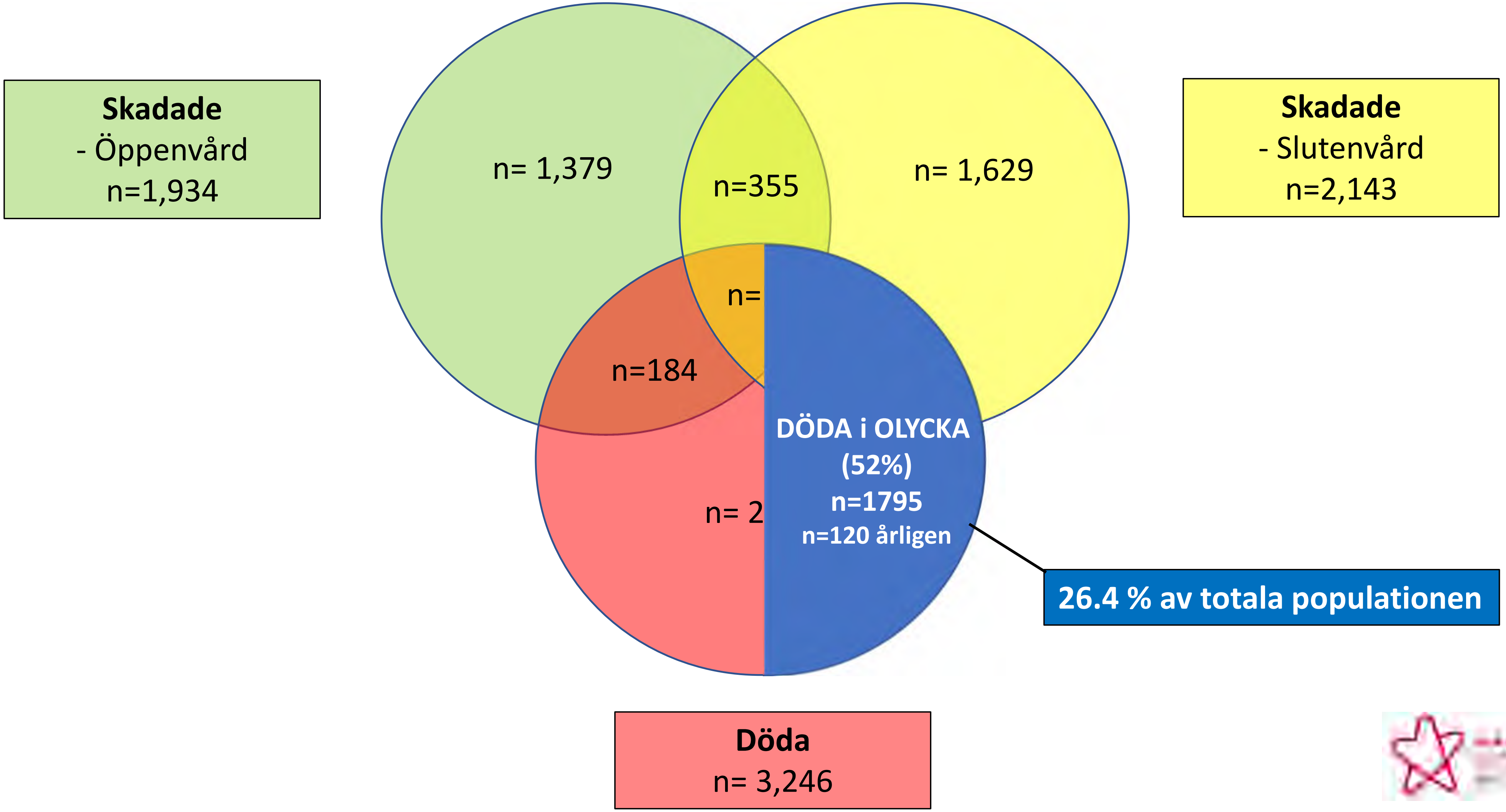


Skadade
- Slutenvård
n=2,143

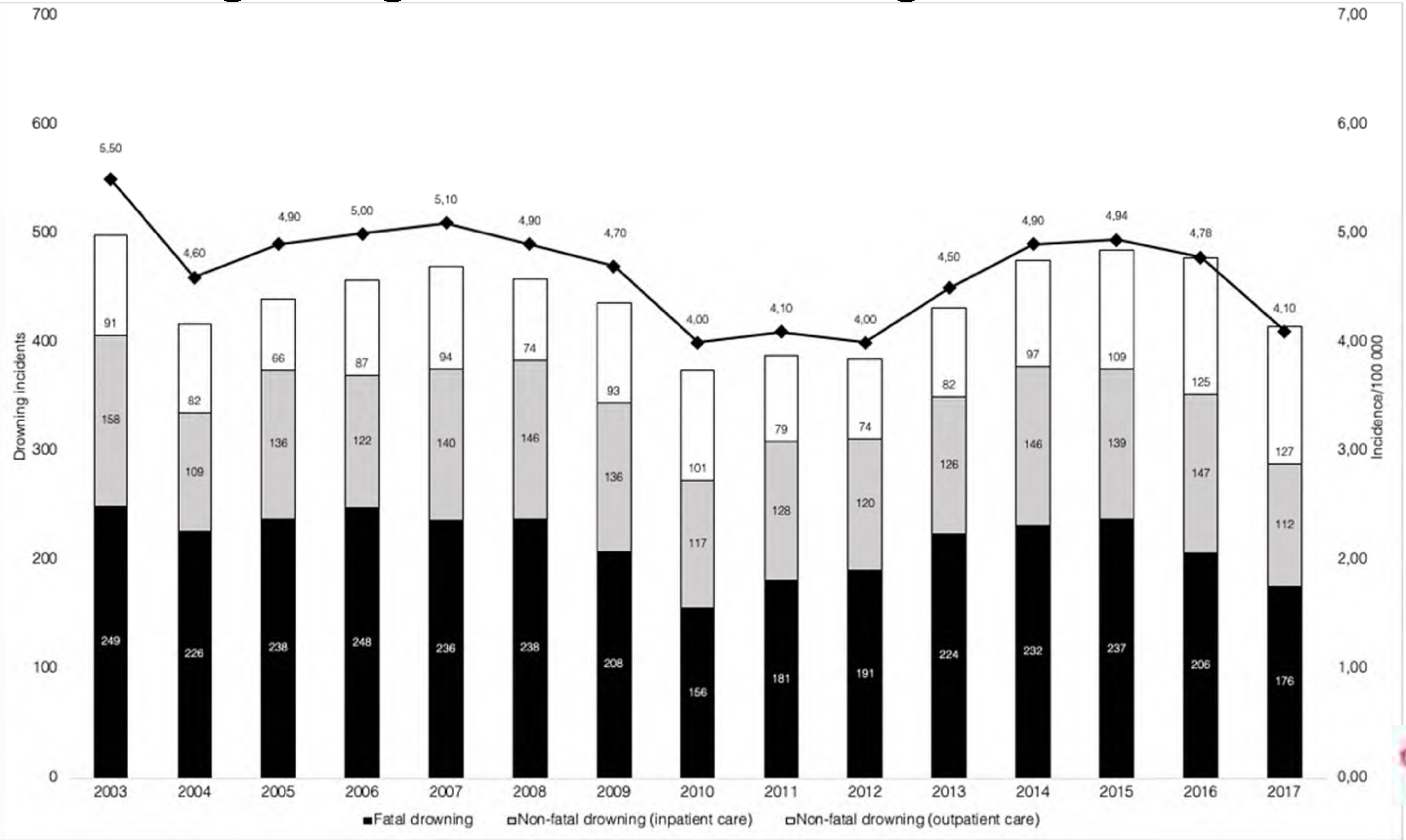
Döda
n= 3,246

Studiepopulation

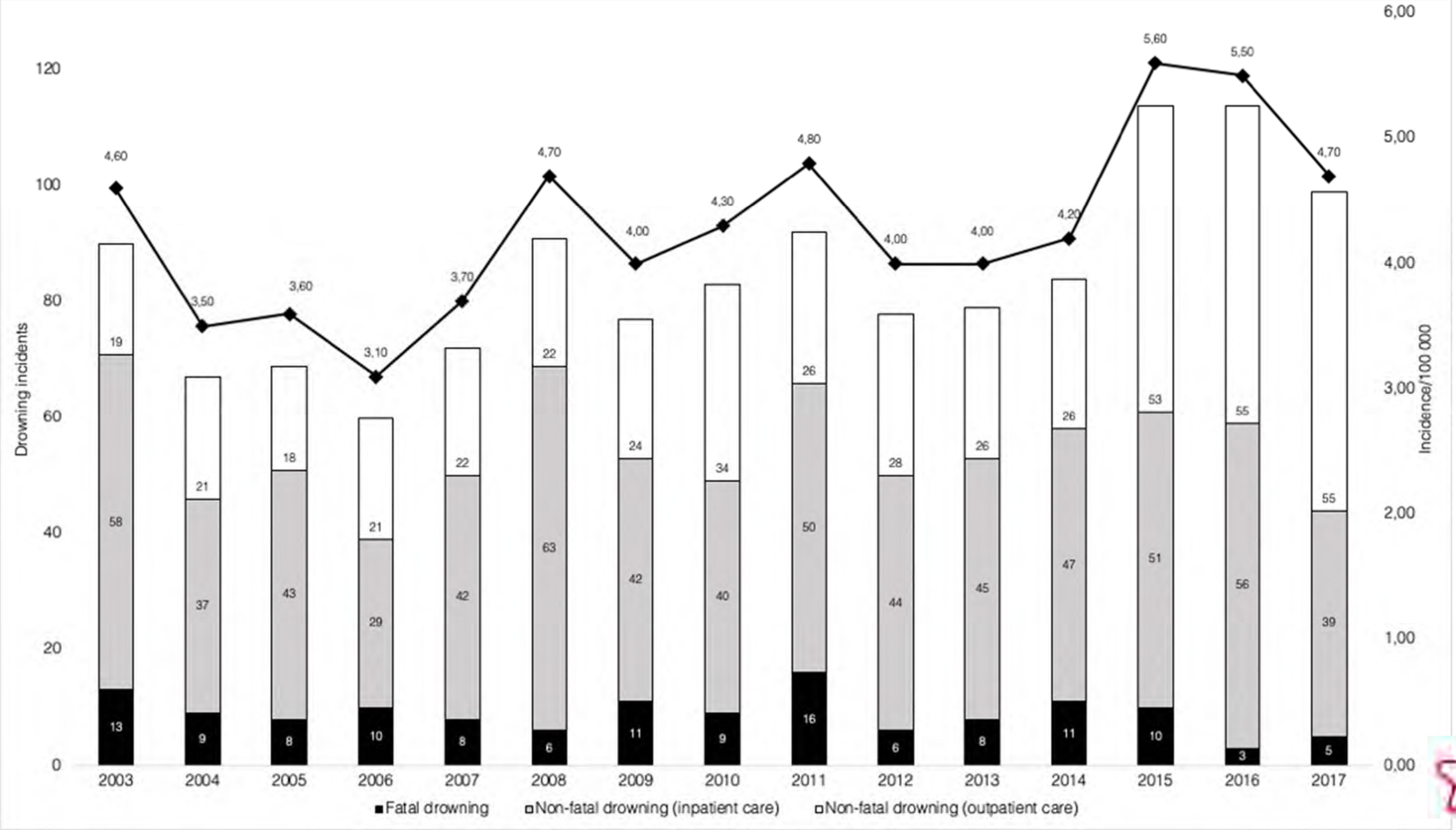
- Drunkning Sverige 2003-2017, Socialstyrelsen



Drunkning Sverige 2003-2017, samtliga



Drunkning Sverige 2003-2017, Barn 0-17 år



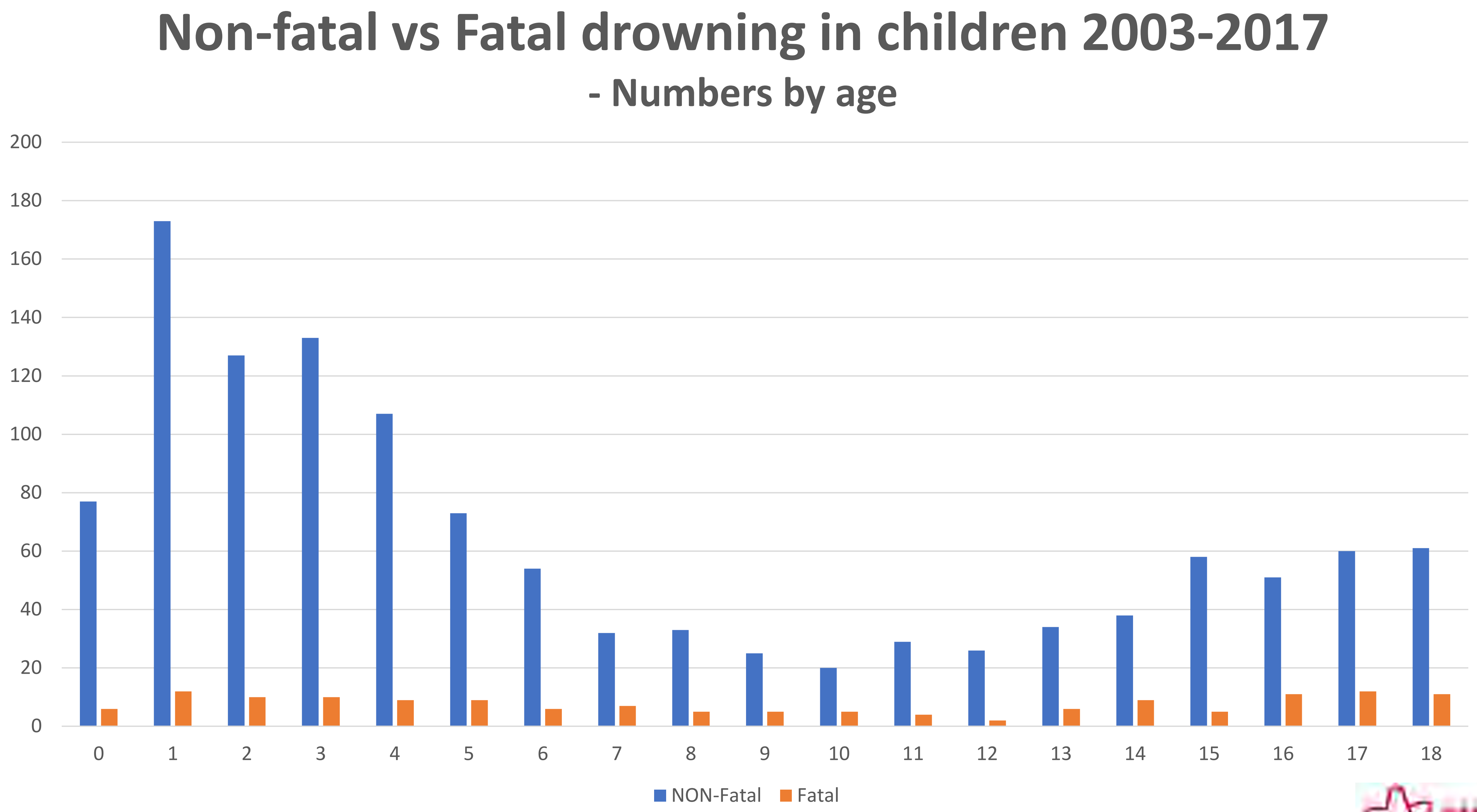

Non-fatal vs Fatal drowning in children 2003-2017
- Numbers by age
200
180
160
140
120
100
80
60
40
20
0
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
NON-Fatal
Fatal

Table 1. Drowning Sweden 2003-2017, fatal vs non-fatal cases

	All cases	Fatal	Non-fatal	p*	Ratio**
	6609	3246	3366		1.0
Characteristics					
Gender, female (%)	2193 (33)	982 (30)	1211 (36)	<0.001	1.2
Gender, male (%)	4416 (67)	2264 (70)	2155 (64)	<0.001	1.0
Age median [IQR]	49 [23, 67]	60 [45, 72]	30 [10, 56]	<0.001	NA
Age categories				<0.001	NA
- 0-17 (%)	1269 (19)	133 (4)	1136 (34)		8.5
- 18-35 (%)	1115 (17)	397 (13)	718 (21)		1.8
- 36-65 (%)	2320 (35)	1373 (42)	947 (28)		0.7
- 66- (%)	1905 (29)	1343 (41)	562 (17)		0.4
Cause					
Unintentional drowning V90-92, W65-74 (%)	4517 (68)	1795 (55)	2722 (81)	<0.001	1.5
-Transport related V90-92 (%)	705 (11)	277 (9)	428 (13)	<0.001	1.5
- Accidental drowning W65-74 (%)	3812 (58)	1518 (47)	2294 (68)	<0.001	1.5
- Accidental - bathtub W65-66 (%)	415 (6)	177 (5)	238 (7)	0.008	1.3
- Accidental - pool W67-68 (%)	603 (9)	41 (1)	562 (17)	<0.001	13.7
- Accidental - natural water W69-74 (%)	2794 (42)	1300 (40)	1494 (44)	<0.001	1.1
Intentional_drowning X71, X92 (%)	1557 (24)	970 (30)	587 (17)	<0.001	0.6
Unclear intent Y21 (%)	504 (8)	469 (14)	35 (1)	<0.001	0.1
Missing (%)	31 (0.5)	12 (0.3)	22 (0.7)		

** A p-value of <0.05 was considered significant. ** Ratio of non-fatal vs fatal cases*

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Gender, female (%)	485 (38)	31 ()	454 ()	<0.001	14.6
Gender, male (%)	784 (62)	102 (77)	682 (60)	<0.001	6.7
Age median [IQR]	4 [2, 11]	7 [3, 14]	4 [2, 11]	<0.001	NA
Age categories				<0.001	NA
0-4 (%)	655 (52)	47 (35)	608 (54)		12.9
5-11 (%)	306 (24)	41 (31)	265 (23)		6.5
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Cause					
Unintentional drowning V90-92, W65-74 (%)	1181 (93)	118 (89)	1063 (94)	0.057	9.0
-Transport related V90-92 (%)	73 (6)	6 (5)	67 (6)	0.651	11.2
- Accidental drowning W65-74 (%)	1108 (87)	112 (84)	996 (88)	0.318	8.9
- Accidental - bathtub W65-66 (%)	150 (12)	16 (12)	134 (12)	1.000	8.4
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Resultat

I medel drabbades 441 personer av drunkning/år 2003-2017:

- 216 dödsfall årligen vs 224 skadade årligen

En liten minskning av dödsfall observerades över tid:

Incidens 5.5– 4.1/100,000 invånare, snitt 4.79/100,000

Ingen minskning sågs generellt bland skadade:

Incidens 2.8– 2.4/100,000 invånare

Män hade nästan dubbelt så hög incidens som kvinnor:

Incidens 6.0 vs 3.2/100,000 invånare

Flickor överlevde drunkning i dubbelt så stor utsträckning som pojkar
Ratio: 14.6 vs 6.7

För barn 0-17 och drunkning i pool rapporterades en stor mängd skadade:

Ratio 1:22

FN resolution A/RES/75/273 antagen 210428:

1. **Tillsätta ett nationellt centrum för drunkningsprevention (NCDP).**
2. **Ta fram en nationell handlingsplan för drunkningsprevention med mätbara mål.**
3. Som del i WHO:s rekommendationer för drunkningsprevention, arbeta med:
    a. Barriärer till vattenmiljöer
    b. Övervakning, tillsyn
    c. Simkunnighet
    d. Vattenlivräddning och HLR
    e. Regler kring båtliv
    f. Hantera beredskap och risk för översvämning
4. Säkerställa effektiv tillämpning av vattensäkerhetslagar
5. Sammanställa data om drunkning på nationell nivå.
6. Främja kampanjer om attityder och beteenden kring drunkning riktade gentemot allmänheten
7. Integrera drunkningsprevention inom ramen för samhällsskydd och beredskap.
8. Uppmuntra till internationell samverkan och utbyte för att dela erfarenheter
9. Uppmuntra till forskning samt utveckling av nya innovationer och hjälpmedel för
10. Implementera utbildning kring vattensäkerhet, simkunnighet, HLR och första hjälpen inom ramen för skolans verksamhet för barn och ungdomar

national
water safety
forum

A future without drowning:

The UK Drowning Prevention Strategy 2016-2026

" Collaboration is essential if we are to succeed in reducing fatalities around the waters of the UK"

PURPOSE:

Prevent accidental drowning fatalities in the UK by working in partnership to ensure consistent guidance for the safe enjoyment and management of activities in, on and around water.

AIM:

Reduce accidental drowning fatalities in the UK by 50% by 2026 and reduce risk amongst the highest risk populations, groups and communities.

What we intend to do	• Every child should have the opportunity to learn to swim and receive water safety education at primary school and where required at Key Stage 3 • Every community with water risks should have a community-level water safety risk assessment and water safety plan • To better understand water-related self-harm • Increase awareness of everyday risks in, on and around water • All recreational activity organisations should have a clear strategic risk assessment and plans that address key risks
How will we achieve our aim?	• Improve evidence and data • Support partners and networks • Provide leadership and advocacy • Mobilise resources and sustained investment in drowning prevention • Measure success

Mål: 50% reduktion till år.. 2031?

Variabel	Samtliga Medel/år 2003-2017	Samtliga Mål: 50% reduktion	Olyckor Medel/år 2003-2017	Olyckor Mål: 50% reduktion
Skadade:	224	112	181	90
Döda:	217	108	120	60
Totalt:	**441**	**220.5**	**301**	**150**

Potentiellt 150 personer årligen i Sverige
som kan undvika död eller livslång hjärnskada

Baserat på data från:
Claesson A, et al. Incidence and characteristics of drowning in Sweden during a 15-year period. Resuscitation. 2021 May;162:11-19

Konklusion

- Drunkning omfattar sedan 2003 alla som per definition inandats vätska, samtliga fall måste räknas, både överlevare och dödsfall, oavsett orsak.

- Totalt 441 personer/år var i medeltal med om allvarlig eller dödlig drunkning,

- Mer forskning krävs för att förstå exponerade grupper, utsatta platser, orsaker, samt livskvalitet efter drunkning

Vi kan gemensamt göra mer, det finns potential att reducera drunkning i Sverige genom att följa FN:s resolution med början i att:

1. Tillsätta ett nationellt centrum för drunkningsprevention (NCDP).
2. Ta fram en nationell handlingsplan för drunkningsprevention med mätbara mål.


WORLD CONFERENCE ON DROWNING PREVENTION 2023
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