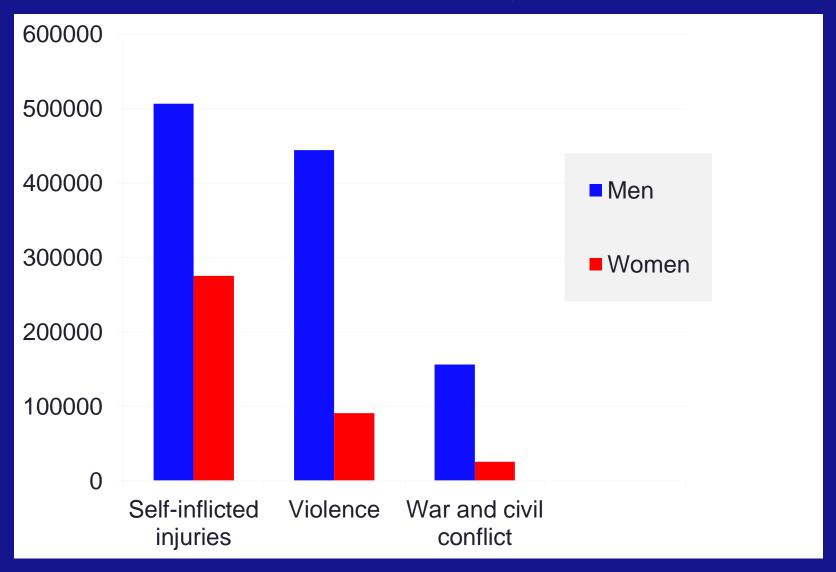
Gender and suicidal behaviour

Professor Merete Nordentoft
Psychiatric Center Copenhagen
University of Copenhagen
mn@dadlnet.dk

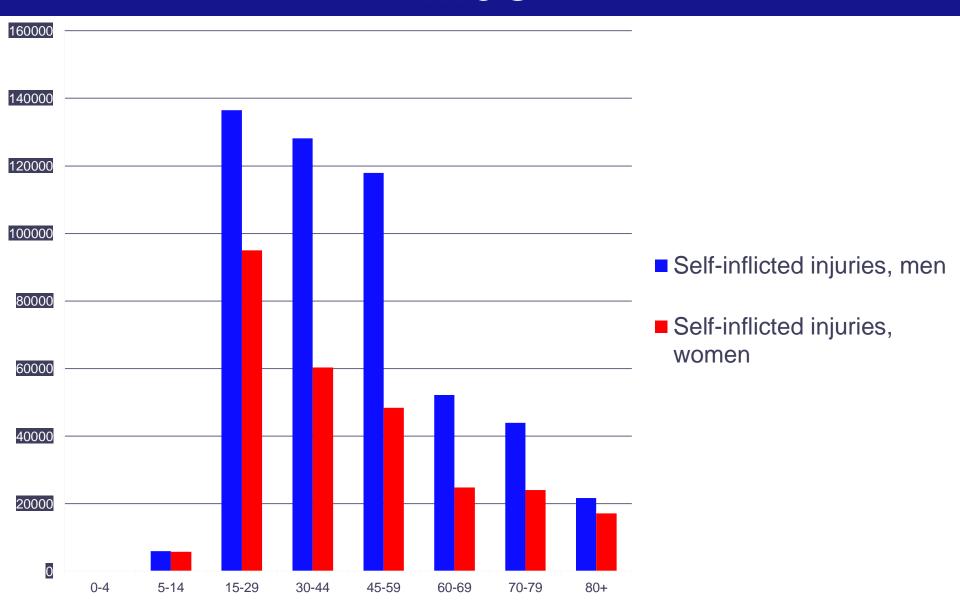
1 million suicides each year

- More than homicides and victims of var worldwide
- Twice as much as traffic accidents in Denmark

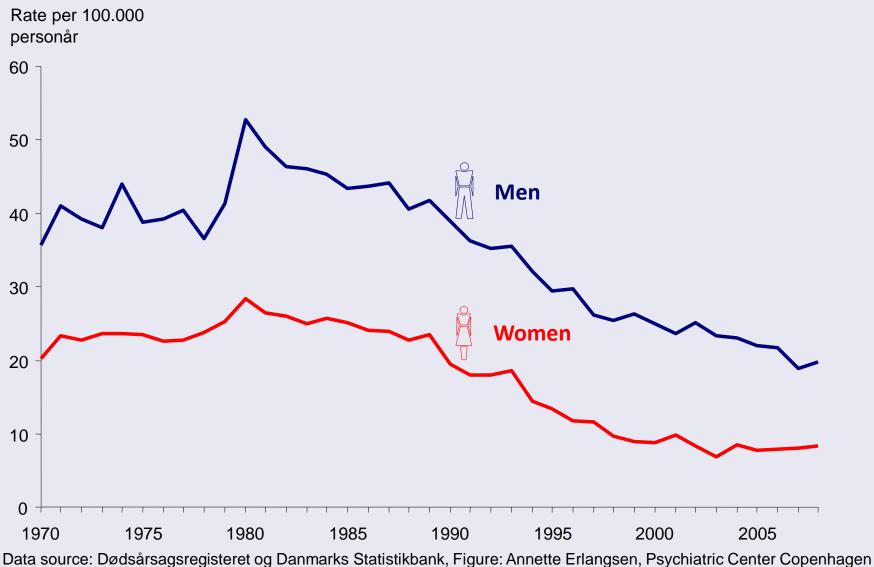
Unintentional deaths, World wide



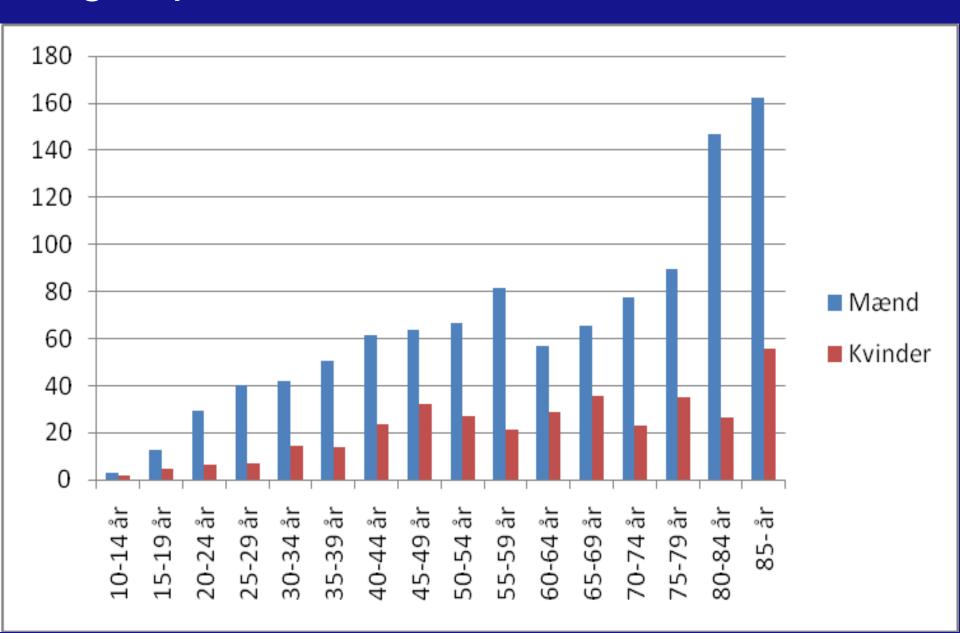
Suicides in age groups world wide



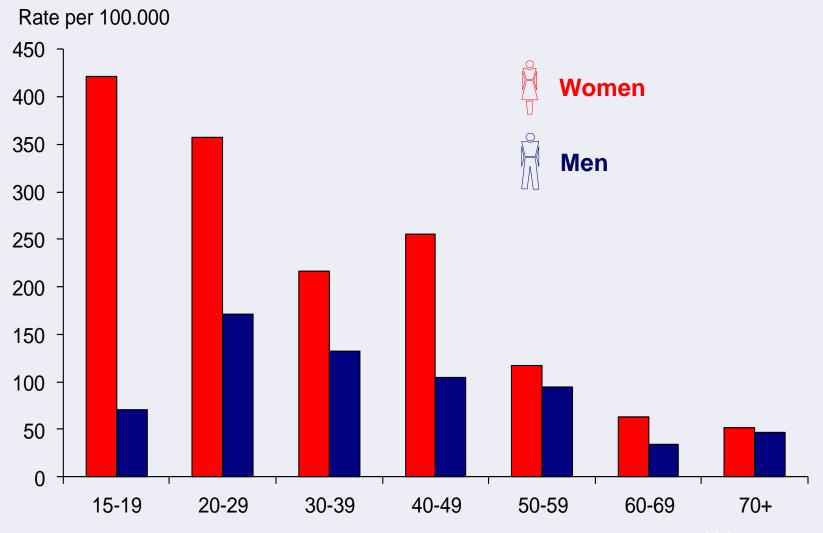
Suicides per 100.000 per year, Danmark, 1970-2008



Age-specific suicide rates, Denmark 2009

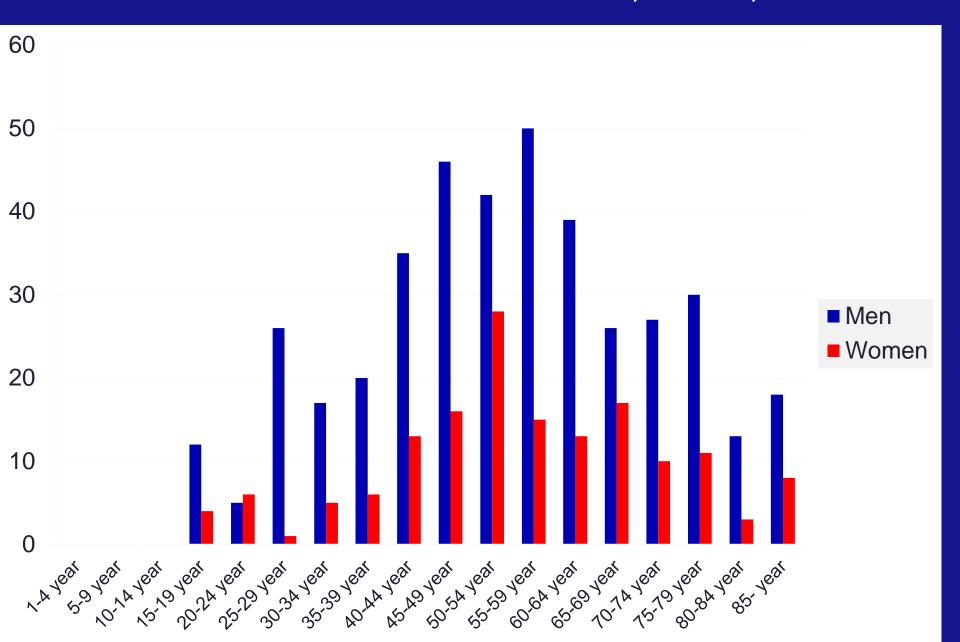


Age specific rates for suicide attempts, 2008 Funen



Kilde: Selvmordsforsøgsregisteret og Danmarks Statistikbank, beregninger: Annette Erlangsen PhD, Psykiatrisk Center København

Number of suicides in Denmark, 2010,



A complication

Suicidal acts can be considered severe and preventable complications to a range of diseases and conditions in which social aspects play an important role.

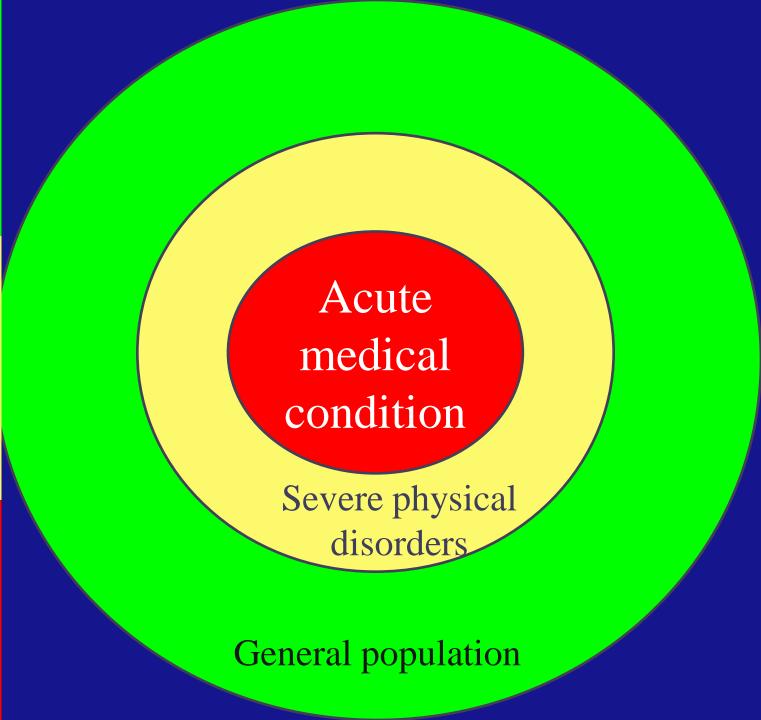
Universal, Selected, and Indicated prevention (USI)

- Universal preventive interventions address an entire population;
- Selective interventions address a subset of the total population; individuals who are at greater risk for suicidal behaviour;
- Indicated preventions are targeted at individuals who have already begun self-destructive behaviour.

Encourage and facilitate healthy life style, monitor health condition, identify early stages of illness

Primary and secondary care: Monitor healths condition and provide relevant treatment for medical disorders

Intensive care unit: stabilize heart rythm, blood pressure and ensure respiration



Encourage and facilitate health life style, monitor health condition, identify early stages of illness

Primary and secondary care: Monitor healths condition and provide relevant treatment for medical disorders

Intensive care unit: stabilize heart rythm, blood pressure and ensure respiration





Severe physical disorders

Enhance
protective factors.
Reduce stressors.
Ensure easy access
to care
Restrict access to
dangerous means

Identify risk groups and monitor risk of suicide.

Educate staff.

Ensure treatment

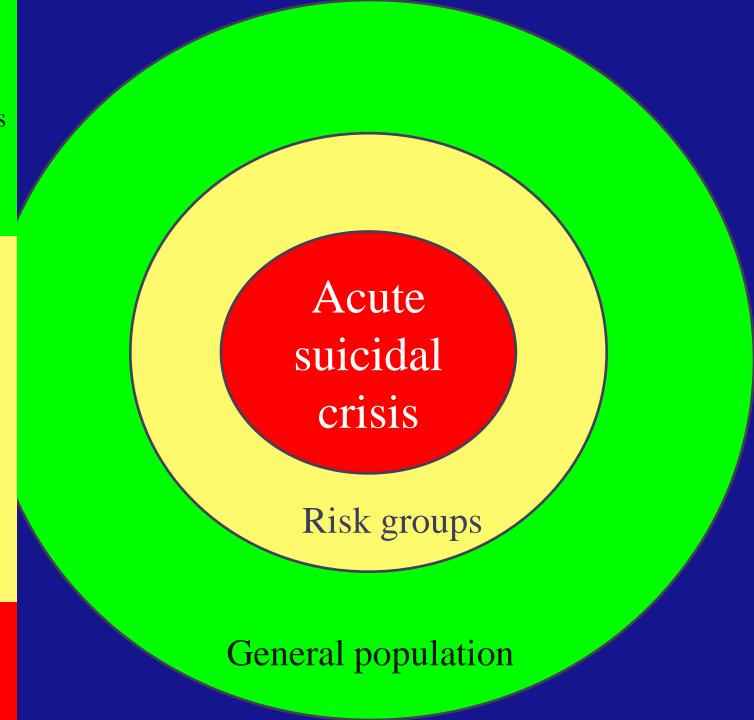
of relevant

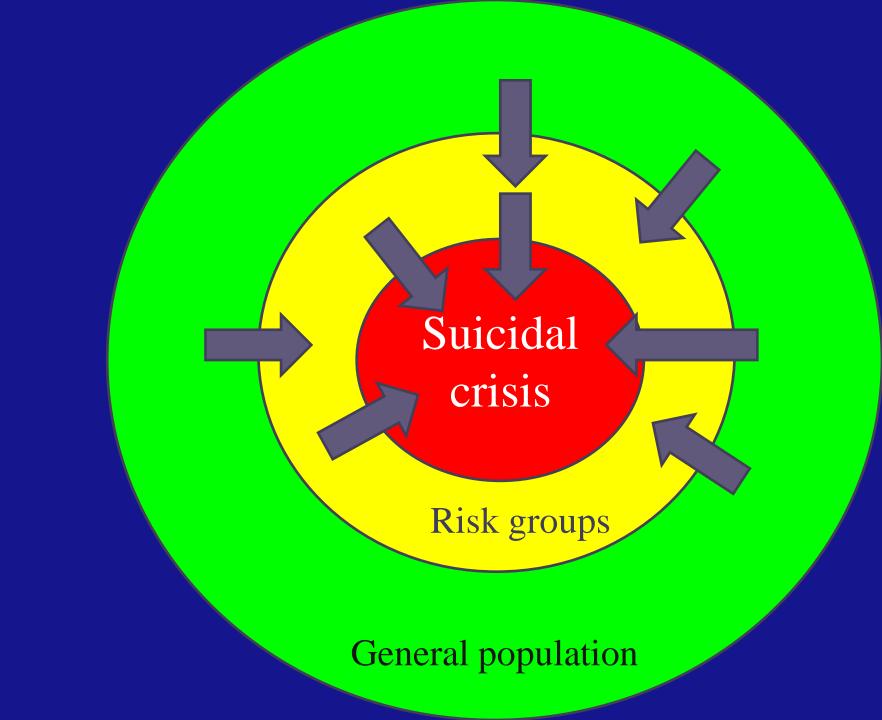
disorders

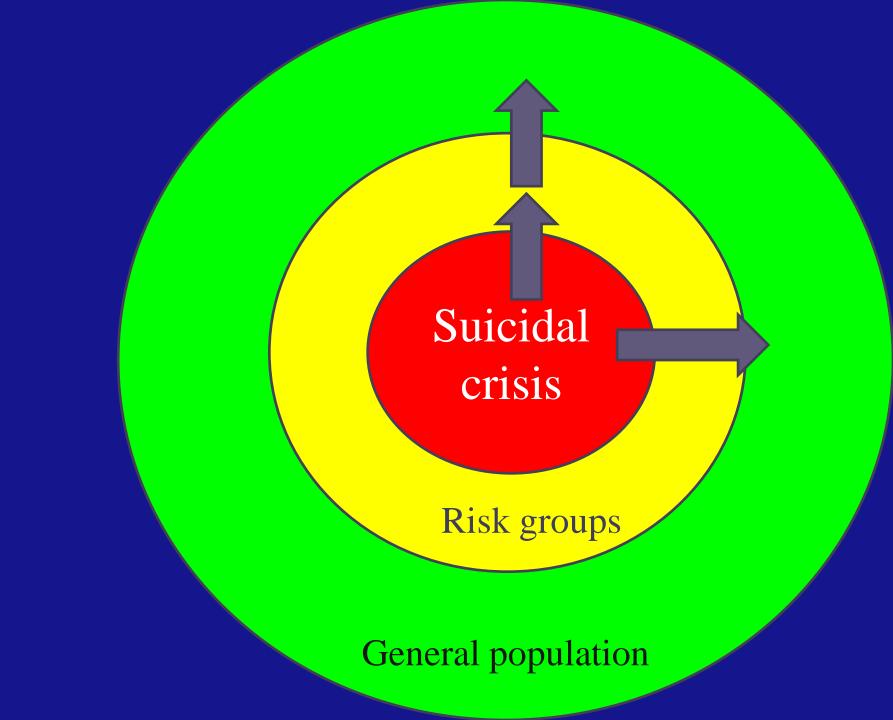
Ensure help in

difficult social situations

Ensure survival, stabilize critical situation







- •Universal interventions:
- •Ensuring safe and secure living conditions
- •Ensuring psychological healthy environment
- •Prevention of mental and physical disorders
- •Restrict alcohol and substance abuse
- •Restricted access to dangerous means for suicide

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Figure 3. Method specific suicide rates per 100.000 Danish women, from 1970 to 2000, selfpoisoning.

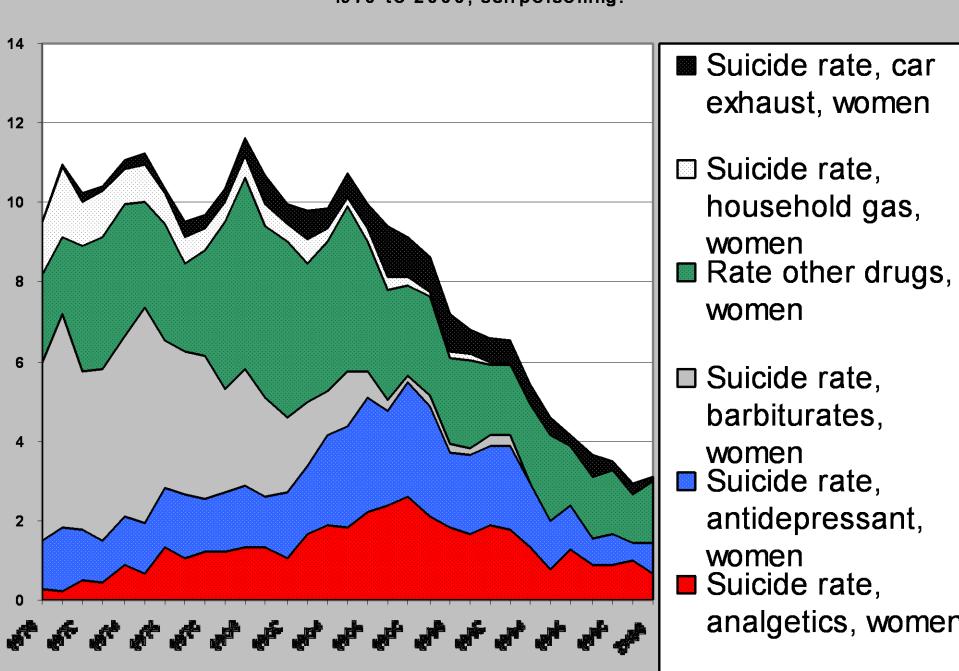
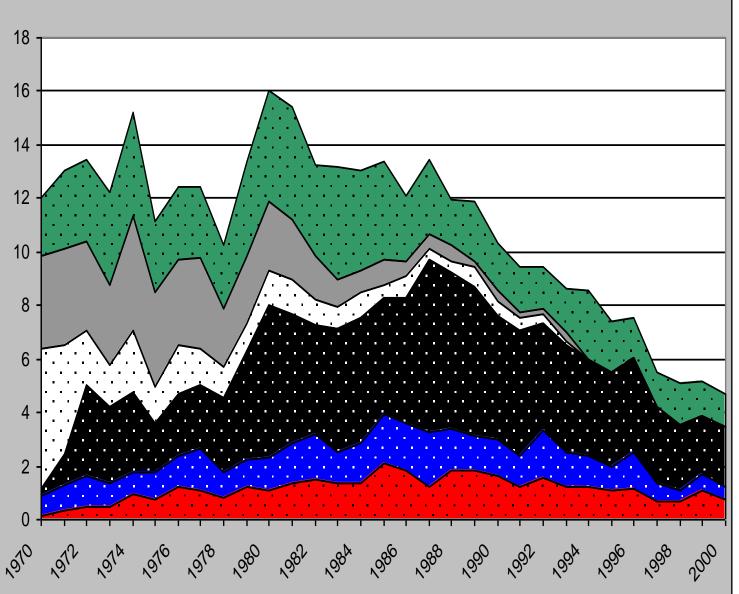
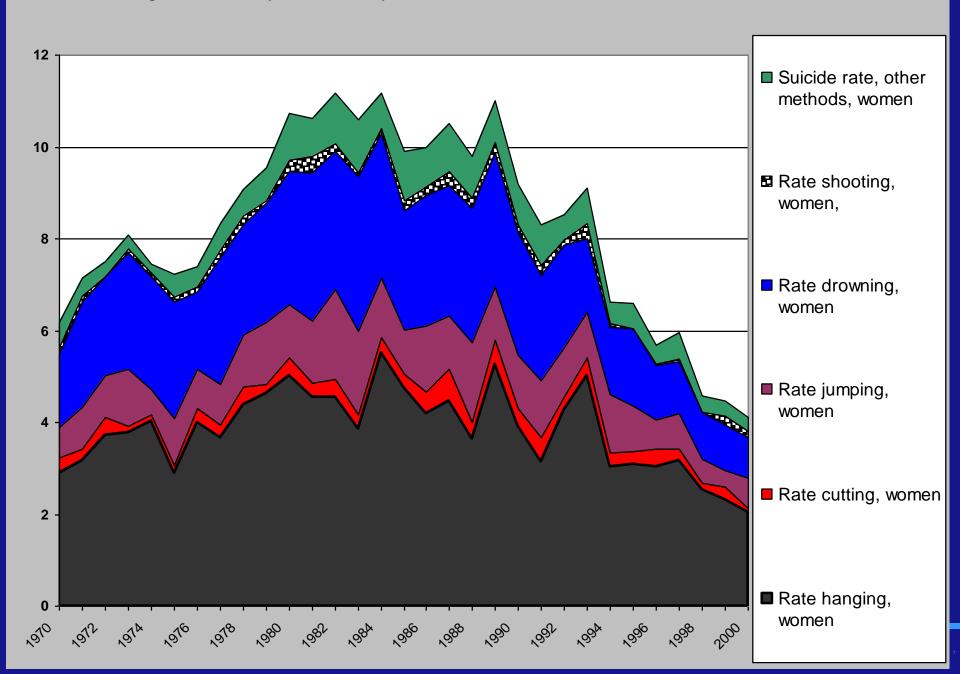


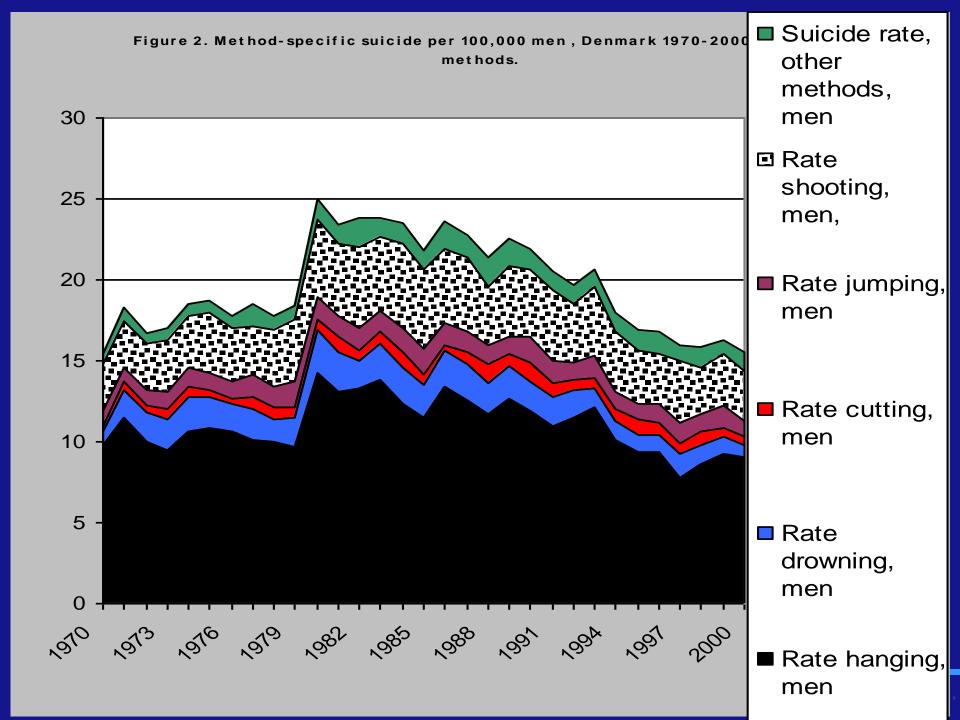
Figure 1. Method-specific suicide per 100,000 men , Denmark 1970-2000, self-poisoning.

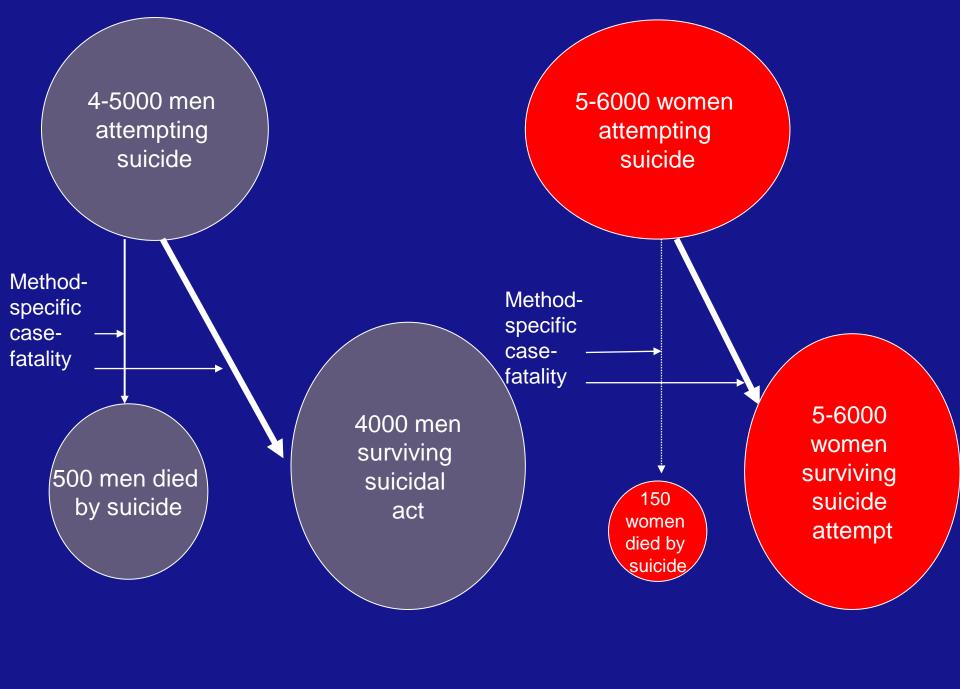


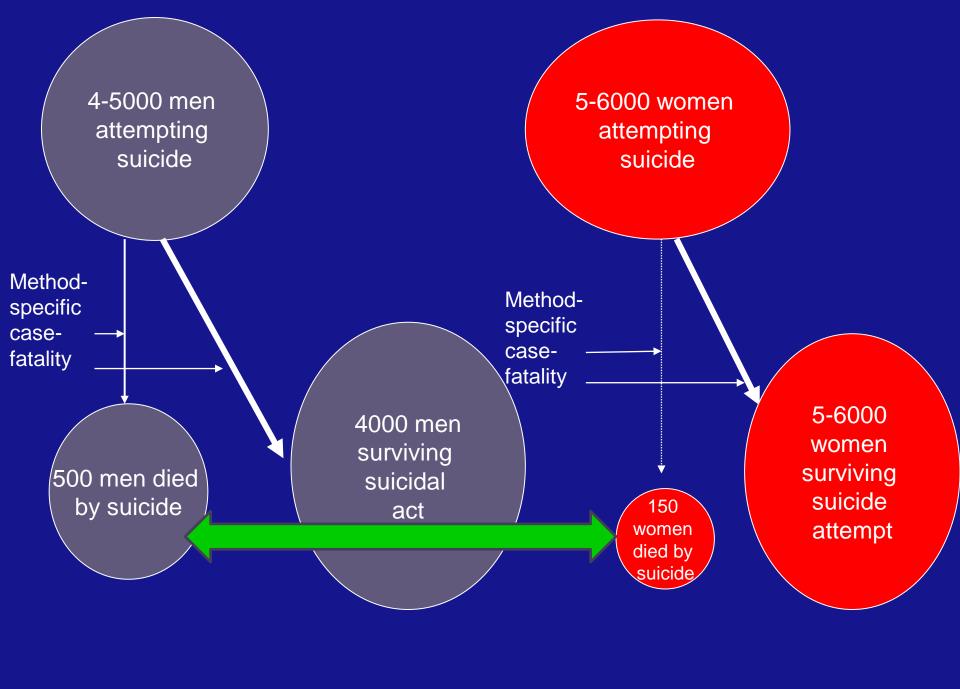
- Rate other drugs,men
- Suicide rate, barbiturates, men
- ☐ Suicide rate, household gas, men
- Suicide rate, car exhaust, men
- Suicide rate, antidepressants, men
- Suicide rate, analgetics, men

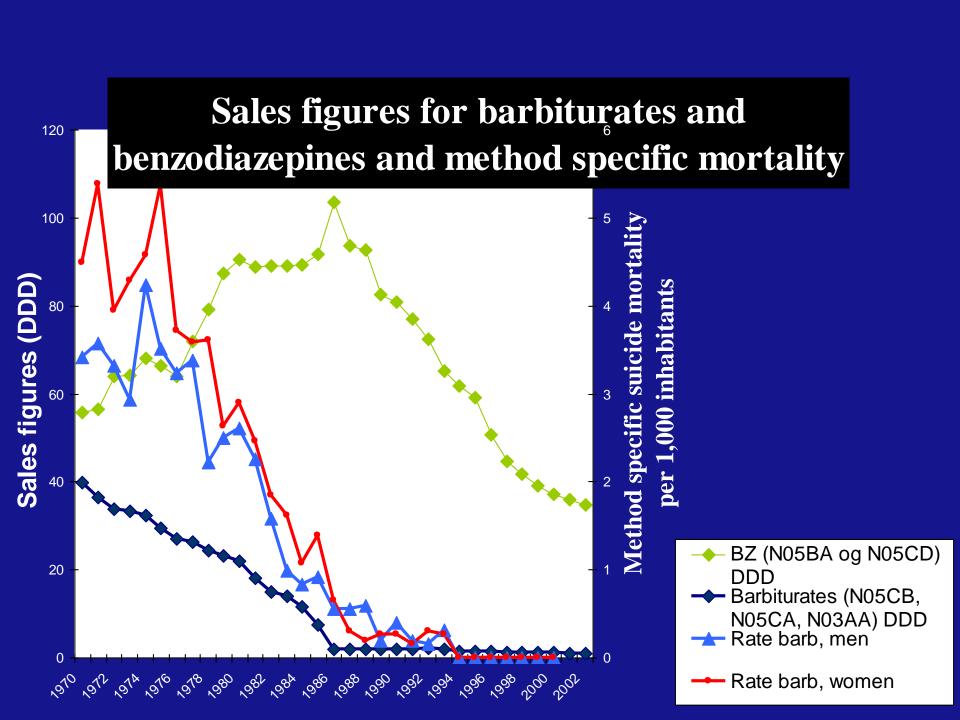
Figure 4. Method-specific suicides per 100.000 Danish women, from 1970 to 2000, violent methods



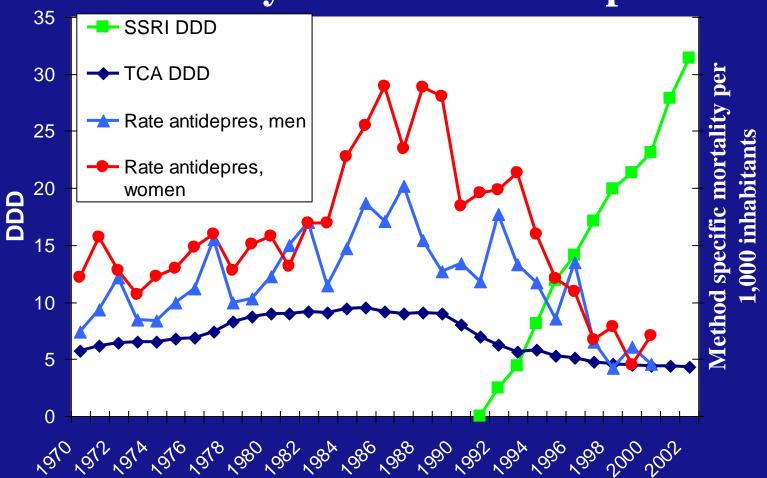






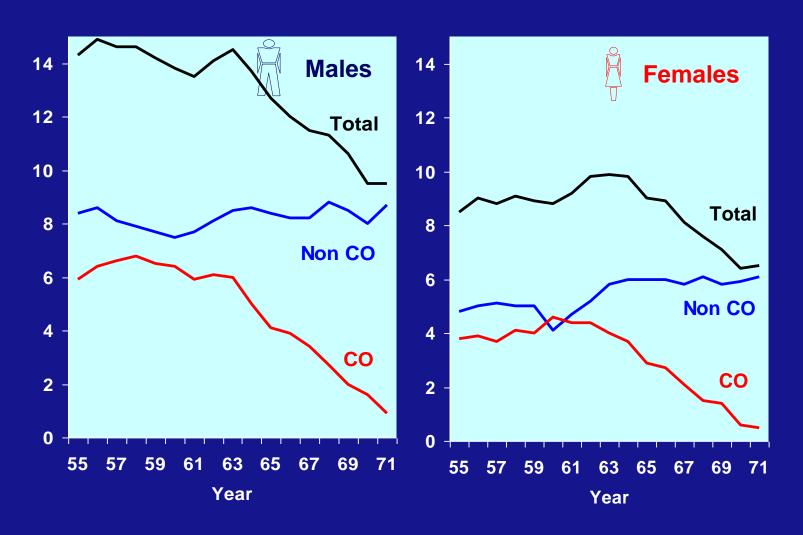


Sales of antidepressants and suicide mortality rates with antidepressants



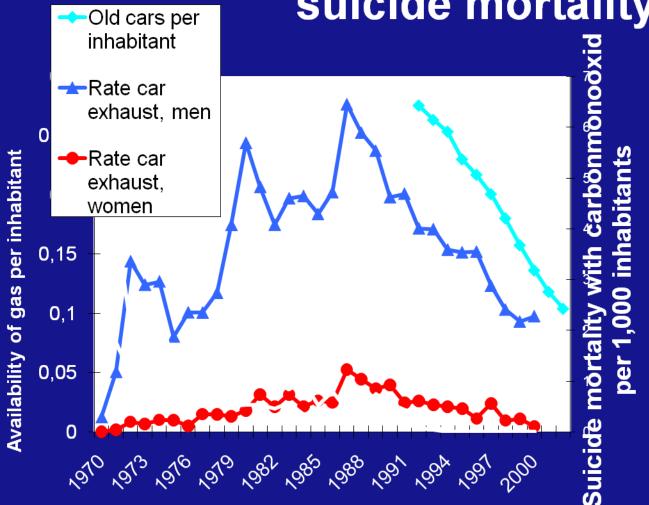
The coal gas story

(Kreitman, 1976)

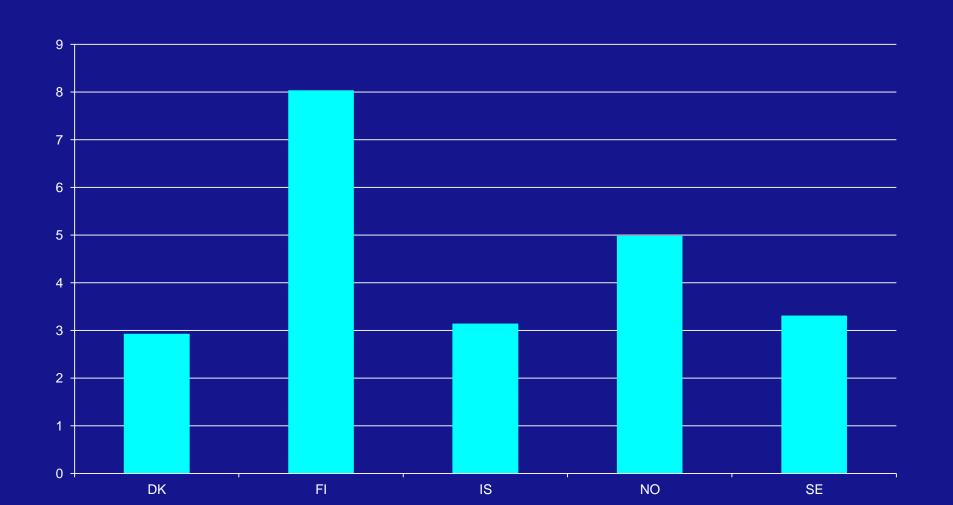


Sex-specific suicide rates by mode of death: England & Wales

Availability of carbonmonooxide car exhaust and method specific suicide mortality



Suicide by firearms per 100,000 males (+15 years) in Denmark, Finland, Iceland, Norway and Sweden



Universal prevention

Consider how to restrict access to suicide with

- Firearms
- Pesticides
- Medication
- Bridges, trains

Risk groups:

People with:

- affective disorders
- •schizophrenia
- •substance abuse
- personality disorders
- physical illness
- bereavement
- •divorce
- •loss of job
- •criminal record
- chomeless

Increased suicide risk

•affective disorders: RR 20

•schizophrenia: RR 20

•substance abuse: RR 15

•personality disorders:RR 20

•suicide attempt: RR 30

•physical illness: RR 2

•bereavement RR 3

•divorce RR 2

•loss of job RR 2

•criminal record RR 3

•homeless RR 7

Most crucial risk factors

Large potential for prevention: PAF:

• Admitted or recently discharged (psych) 25 percent

• Recent suicide attempt 16 percent

• Elderly men 13 percent

• Alcohol abuse 23 percent

• Criminal record 12 percent

- •Reduce treatment gap
- Analyze risk of suicide in possible risk groups
- •Ensure the best management of difficult conditions
- •Educate responsible staff members in risk of suicide
- Monitor evaluation of risk of suicide in risk groups
- •Monitor the risk of suicide in risk groups
- •Restrict access to dangerous means for suicide in institutions

Risk groups:

People with:

- affective disorders
- •schizophrenia
- •substance abuse
- personalitydisorders
- physical illness
- bereavement
- •divorce
- •loss of job
- •criminal record
- •homeless

People in difficult social situations:

- •Bereavement
- Divorce
- Unemployment
- •Homelessness
- Criminal record
- •Bankrupt

People with mental disorders:

Affective disorders

Schizophrenia

Substance abuse

Personality disorders

Cumulative absolute risk of suicide

(%) – 36 years follow-up			
		Men	Women
Disorder		Cumulative incidence	Cumulative incidence
Schizophrenia		6.47	4.87

5.72

Schizophrenia like disorders

Bipolar affective disorder Other affective disorders

Substance abuse, psychiatric

Substance abuse, somatic

Anorectic disorder

Any mental illness

No mental illness

6.42

7.63

6.54

4.68

2.44

0.68

3.63

3.97

4.74

3.70

3.42

1.63

1.97

1.89

0.20

Nordentoft, Mortensen and Pedersen, Arch Gen Psych, October 2011

Cumulative incidence of suicide up to 30 years after first psychiatric contact. (%) People admitted after deliberate self-harm.

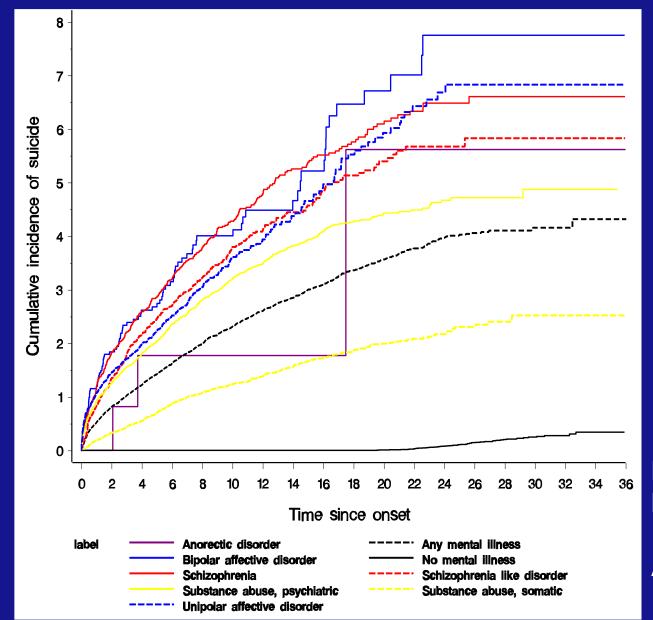
	Males	Females
Disorder	Cumulative incidence	Cumulative incidence
Schizophrenia	10.26	10.85
Schizophrenia-like disorders	9.98	8.00
Bipolar affective disorder	17.08	9.39
Unipolar affective disorders	10.48	6.51
Substance abuse, psychiatric hospital	6.54	5.04
Substance abuse, somatic hospital	5.53	4.03
Anorectic disorder		4.38

Any mental illness

4.57

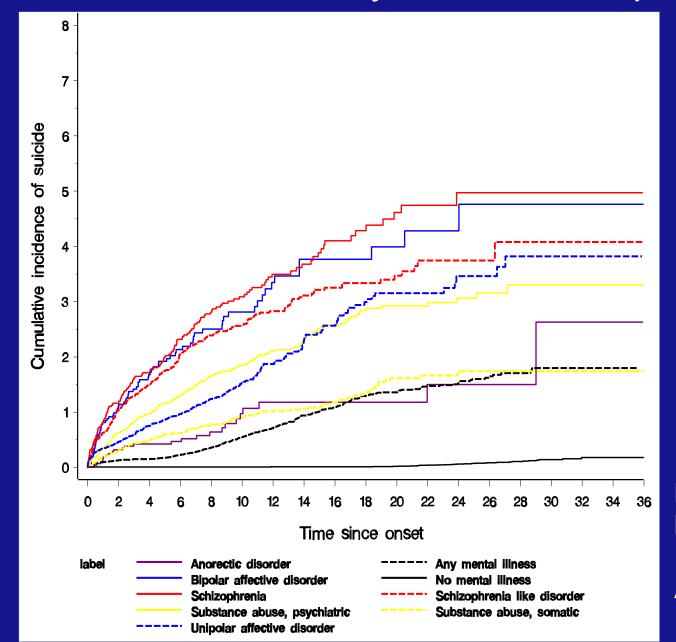
8.10

Absolut risk of suicide, 36 years follow-up. Men



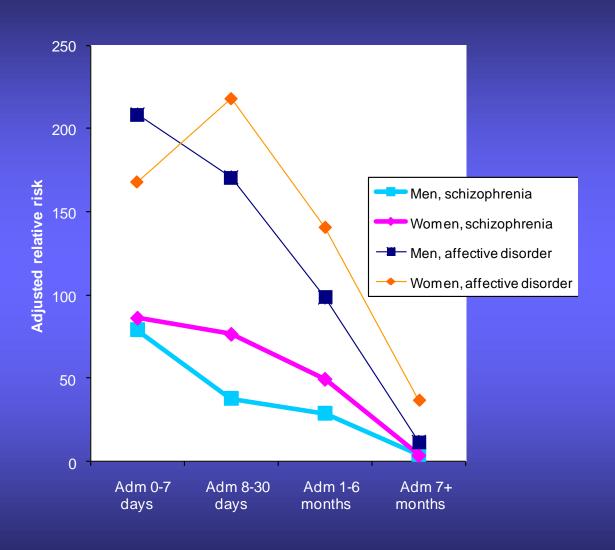
Nordentoft, Mortensen, Pedersen, Arch Gen Psych, 2011

Absolut risk of suicide 36 years follow-up. Women



Nordentoft, Mortensen, Pedersen, Arch Gen Psych, 2011

Suicide during admission. Patients with schizophrenia and affective disorder compared to never admitted patients



High number of in-patient suicides

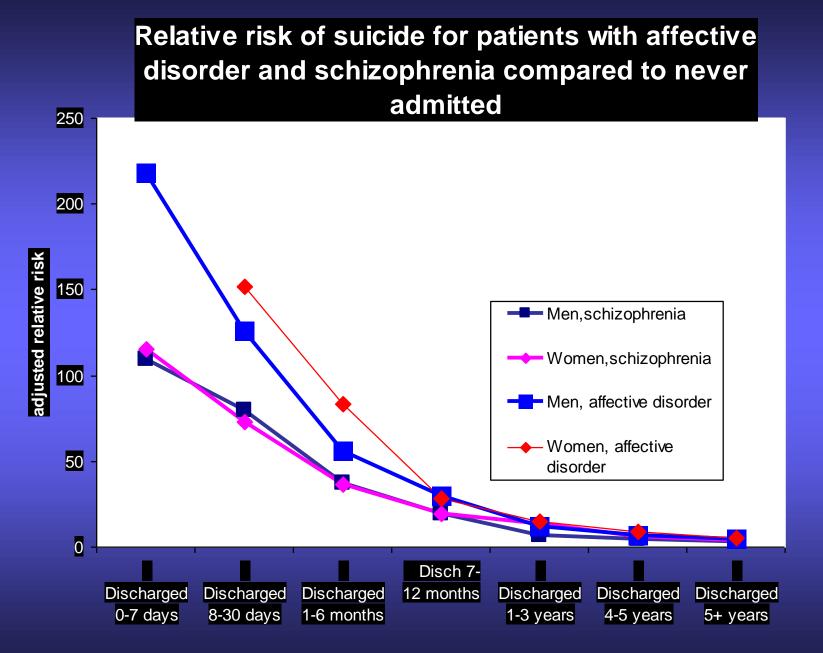
• 860 suicides per 100,000 in-patient years

Anti-ligature coat hook



Designed to discourage the attachment of ligatures

- Will only support the weight of an average overcoat
- Adjustable spring weight
- Tamper proof fixings included
- Stainless steel, grade 316 or aluminium



Avoid after-discharge suicides

- Assess risk of suicide before discharge
 - Provide assessment tools for clinicians
- Make sure out-patient treatment is well prepared
- Start out-patient treatment shortly after discharge

Percent Attributable Risk (PAR) for psychiatric hospitalisation was

Women 53 percent

Men 33 percent

Qin P, Nordentoft M. Suicide risk in relation to psychiatric hospitalization: evidence based on longitudinal registers. Arch Gen Psychiatry 2005 Apr;62(4):427-32.

Take care of the men

- •They might hide their mental health problems
- •Or mental health services might reluctant to take care of them

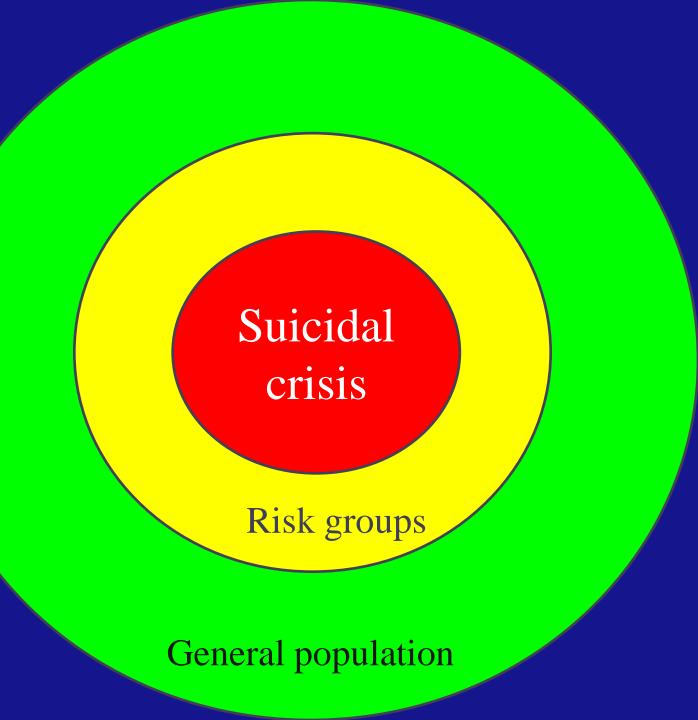
Treating mental illness should have a high priority in suicide prevention strategies

Deliberate self-harm

- People who deliberately harmed themselves form a specific high risk group
- Up to 2 percent commit suicide with in one year
- Up to 10 percent commit suicide in long term follow-up studies

Indicated prevention:

- •Compulsory admission
- •Locked ward
- •Psychiatric emergency outreach
- Psychiatric emergency rooms
- •Crisis cards
- •Antisuicide kits
- •Help lines
- •Restricted access to dangerous means for suicide in psychiatric wards

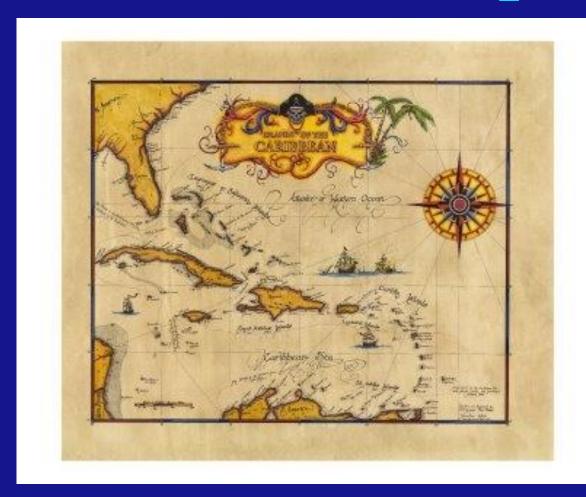


Crisis plan

- •Try to distract myself
- •Watch TV, draw, paint, surf internet, messenger
- •Think: "I have tried this before it will end soon"
- •Run in the park
- •Write my thoughts down in my diary
- •Take Truxal 25 mg
- •Repeat. "I have promised not to hurt myself"
- •Call Lis from OPUS 20607556
- •Call my parents 33316274
- •Call Lene 28763268
- •Call Jacob 25245576
- •Call Life line 70201201 (all days 11-23)
- •Call psychiatric outreach via doctor on call 70130041
- Take a taxi to psychiatric emergency room,

Bispebjerg Bakke 23, 35312300

We need a map



In order to understand the magnitude of the problem

We need a plan

General population Risk groups Acute suicidal crisis

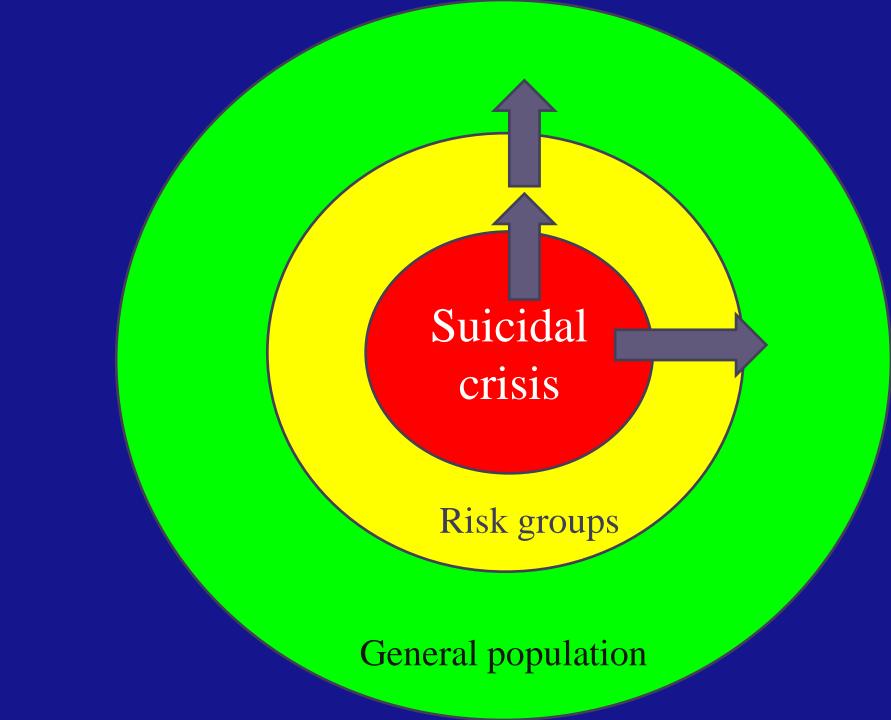
To plan how to deal with the problem

We need a governing body



Analyse risk of suicide in different groups
Monitor risk of suicide
Make recommendations
Assess quality of care
Initiate interventions and research
Advice stake holders

In order to make sure something is really happening



Thank you for your attention!