

# Suicide following involuntary psychiatric care in Sweden: a descriptive nationwide study

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# Suicide following involuntary psychiatric care in Sweden: a descriptive nationwide study

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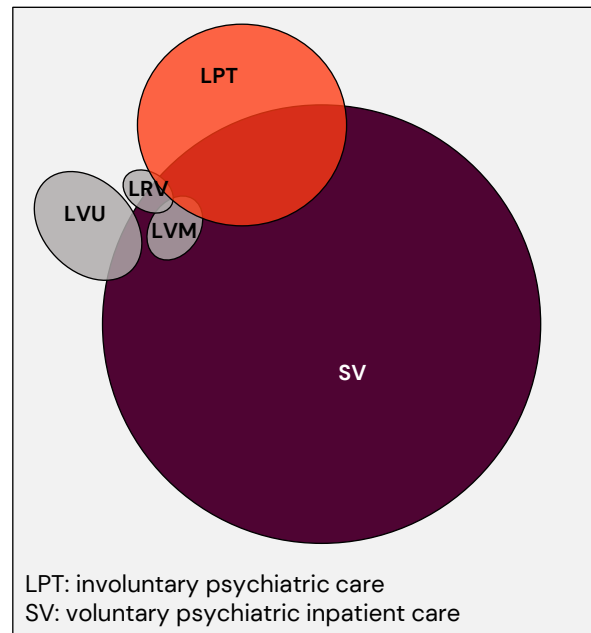
# Involuntary Psychiatric Care (IPC)

What we know from *psychiatric inpatients*:

- **200–300 fold increased suicide risk** compared to general population, depending on time-window (Chung et al., 2019)
- 50% of inpatient suicides occur **within 18 days of admission** (Madsen et al., 2012)

To what extent do these findings apply to the IPC population?

Involuntary and voluntary care forms in Sweden



Adapted from Socialstyrelsen, Department of Registers and Statistics, 2023.

## Suicide in Involuntary Psychiatric Care Patients

World's largest IPC  
dataset: n > 73,000

6 linked nationwide  
registries  
(2010-2020)



*Describe and  
Compare the  
Risk of Suicide*



### Establish Population Estimates

- Both during and after involuntary care
- Change in suicide risk over time
- Stratified by age and sex

### Compare Estimates Versus

- Psychiatric inpatients
- Psychiatric outpatients
- Total Population



170,729 IPC episodes

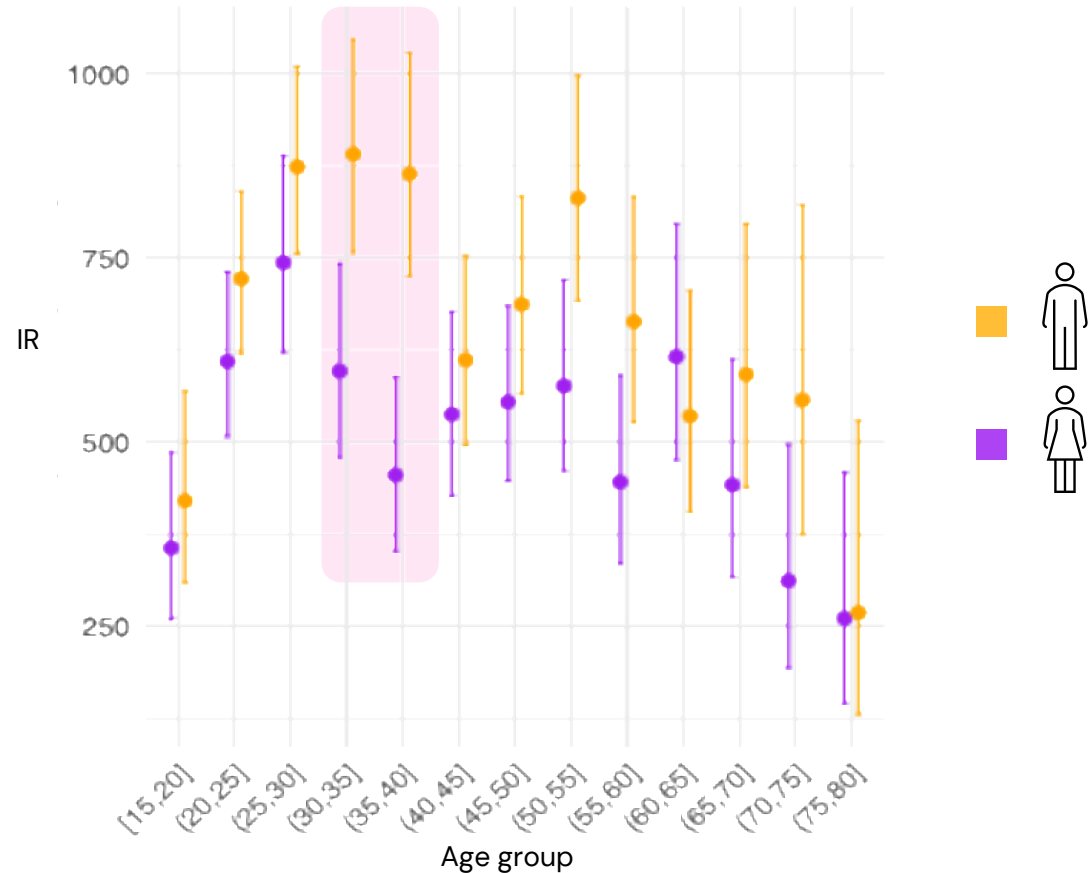
73,845 unique IPC patients  
( $M_{age} = 45.4$  years, 52% men)

2,127 (2.9%) died by suicide

### Suicide Incidence Rate in IPC Patients.

IR per 100,000 person-years. Median follow-up time: 4.7 years.

IPC patients who died by suicide were more often male (58.8% versus 41.2%)



# Suicide Incidence Rate:

615 (589, 641) per 100,000 person-years,  
median follow-up time = 4.7 years

**Table:** Suicide incidence rate in IPC patients.

Follow-up Time	IR (95% CI)
1 month	3517 (3072, 4023)
3 months	2229 (2018, 2460)
1 year	1340 (1254, 1431)
5 years	756 (723, 791)

Follow-up time since date of discharge.  
Incidence rates (IR) are given per 100'000 person-years.

The closer to  
discharge, the  
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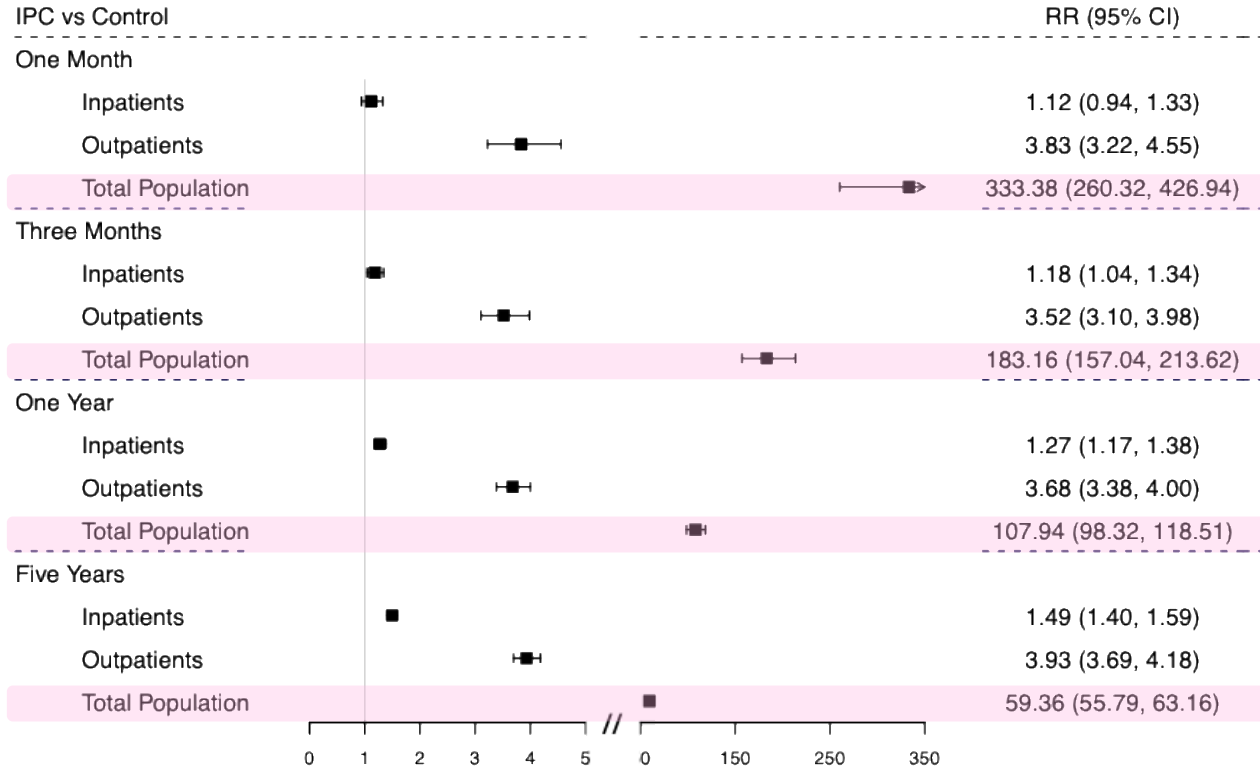
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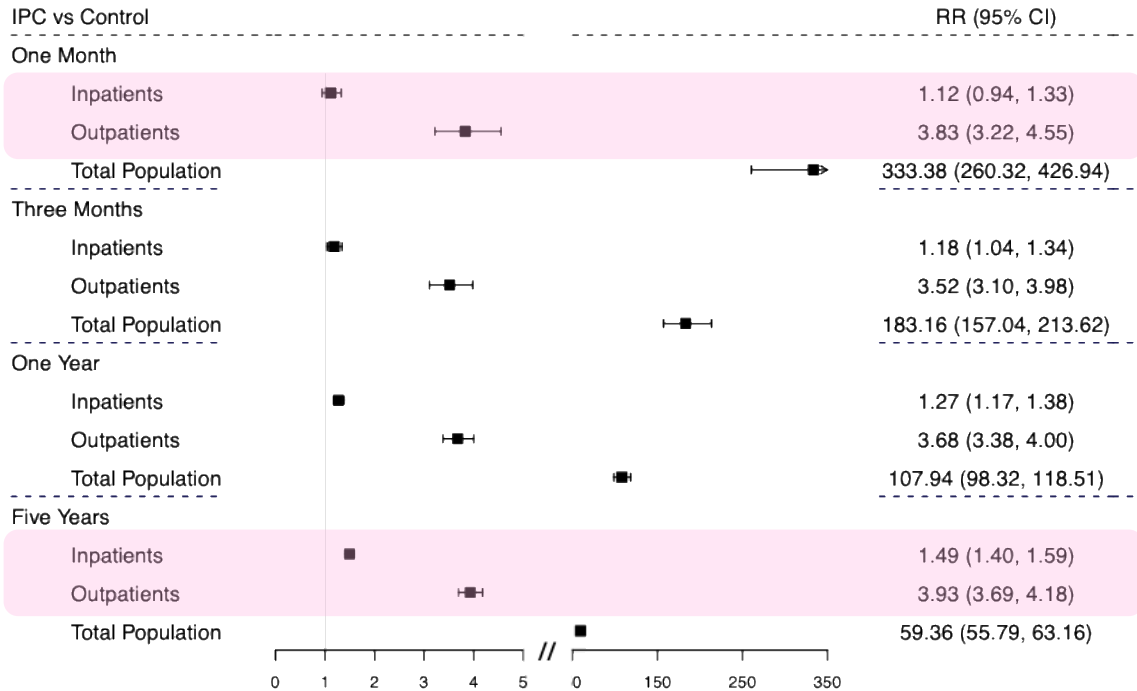
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# Relative Suicide Risk



# Relative Suicide Risk



Substantially elevated relative risk for IPC patients

# Methods of Suicide

**Table:** Method of suicide among IPC patients, stratified by sex.

Method	Female	Male	Total
	<i>n</i> = 885	<i>n</i> = 1268	<i>n</i> = 2153
Poisoning	401 (45.3)	409 (32.3)	810 (37.6)
Hanging, suffocation and strangulation	269 (30.4)	456 (36.0)	725 (33.7)
Jumping or lying before moving object	70 (7.9)	122 (9.6)	192 (8.9)
Jumping from a height	39 (4.4)	81 (6.4)	120 (5.6)
Drowning	54 (6.1)	55 (4.3)	109 (5.1)
Cutting or piercing	21 (2.4)	42 (3.3)	63 (2.9)
Smoke, fire, flames, steam, hot vapours, and hot objects	16 (1.8)	22 (1.7)	38 (1.8)
Gassing	6 (0.7)	23 (1.8)	29 (1.3)
Firearm or explosive	< 5	26 (2.1)	27 (1.3)
Other means	6 (0.7)	15 (1.2)	21 (1.0)
Crashing of motor vehicle	< 5	17 (1.3)	19 (0.9)

Data are count (%). No missingness.

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Sex specific  
method  
differences

# Conclusion

- **Higher rate** of suicide among **men**
- Highest suicide risk **closest to discharge**
- **Elevated suicide risk** compared to other clinical populations and total population
- More **violent suicide methods** in **men**

→ Suggest targets for prevention  
→ Inform further clinical research