Population Mortality and Morbidity in Ireland



Agenda

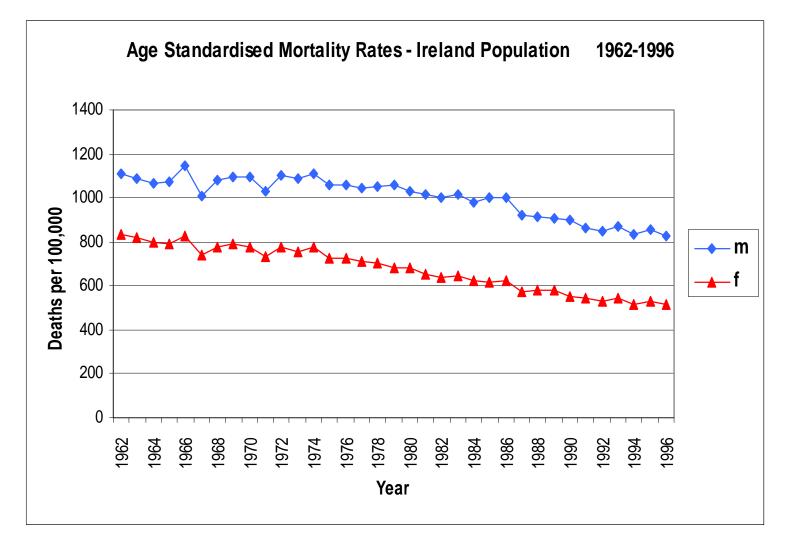
- Mostly good news
 - But some bad news
- Cohort analysis
- Years lost analysis
- Lessons from study



Part 1

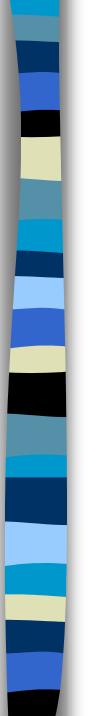
The good news

Irish Population Mortality 1962-1996



Mortality Improvement by Age Group

	Males	Females	
Age-band	% Reduction	% Reduction	
04	80%	77%	
5-14	51%	73%	
15-24	-13%	37%	
25-34	3%	47%	
35-44	38%	57%	
45-54	42%	52%	
55-64	34%	42%	
65-74	19%	36%	
75-84	15%	32%	
85+	18%	23%	

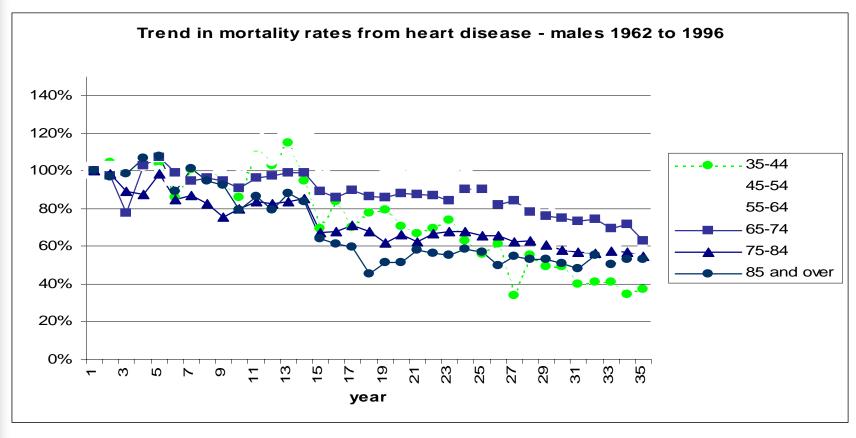


Cardiovascular diseases

43% of all deaths are due to such conditions

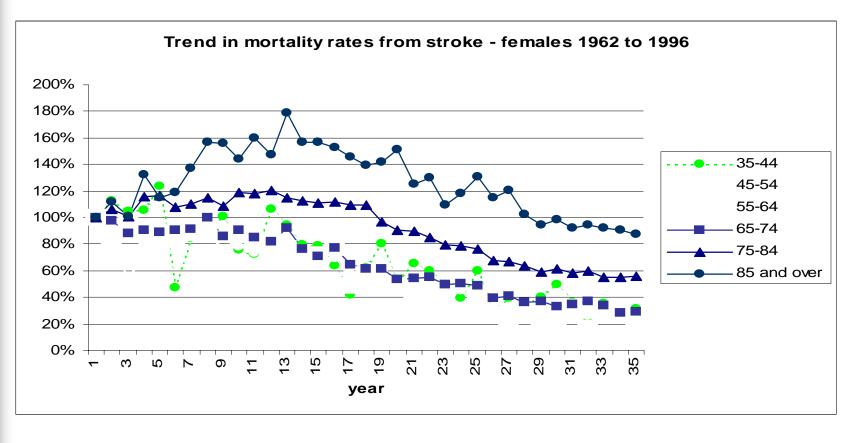
Cardiovascular - Heart disease

- For heart disease, trend is downwards for both males and females
- Mirrors international experience, though fall is at a faster rate than EU average
 - However, is still higher than EU average



Cardiovascular - Stroke

- Trend is downwards for incidence of death due to a stroke for both males and females
- Fall again is at a faster rate than EU average
- So, much so that there is no statistical difference between Ireland and EU average experience



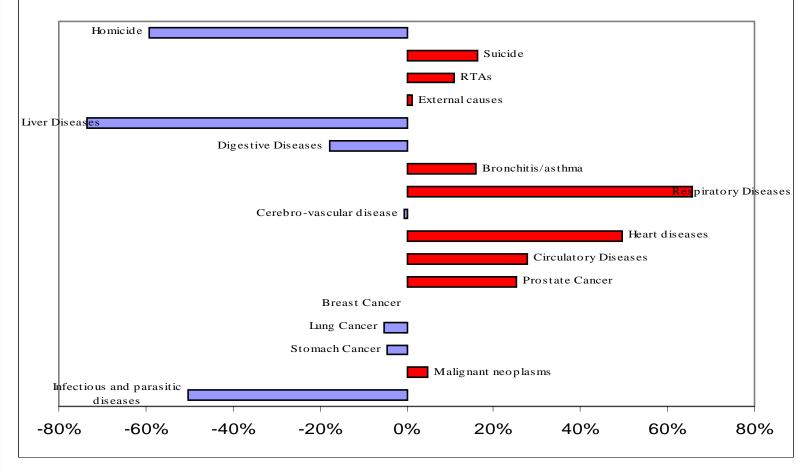




The bad news

International Experience Comparisons

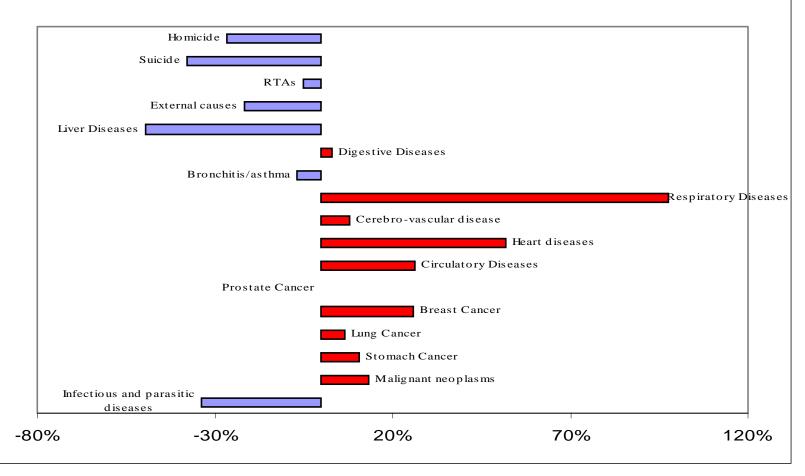
Irish male age standardised mortality rates expressed as percentage of average sample country rates



Source – Calculated from WHO Statistical Information System Mortality Data. Countries: Ireland, Scotland, Denmark, Germany, US, England & Wales, Australia, France, Greece, Sweden, Japan. 1996 for all except Australia 1995.

International Experience Comparisons

Irish female age standardised rates expressed as a percentage of average sample country rates

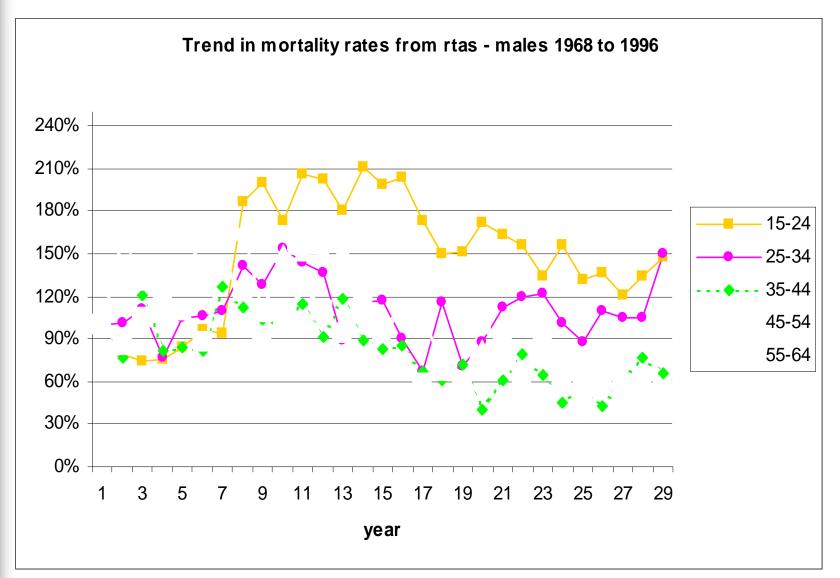


Source – Calculated from WHO Statistical Information System Mortality Data. Countries: Ireland, Scotland, Denmark, Germany, US, England & Wales, Australia, France, Greece, Sweden, Japan. 1996 for all except Australia 1995.

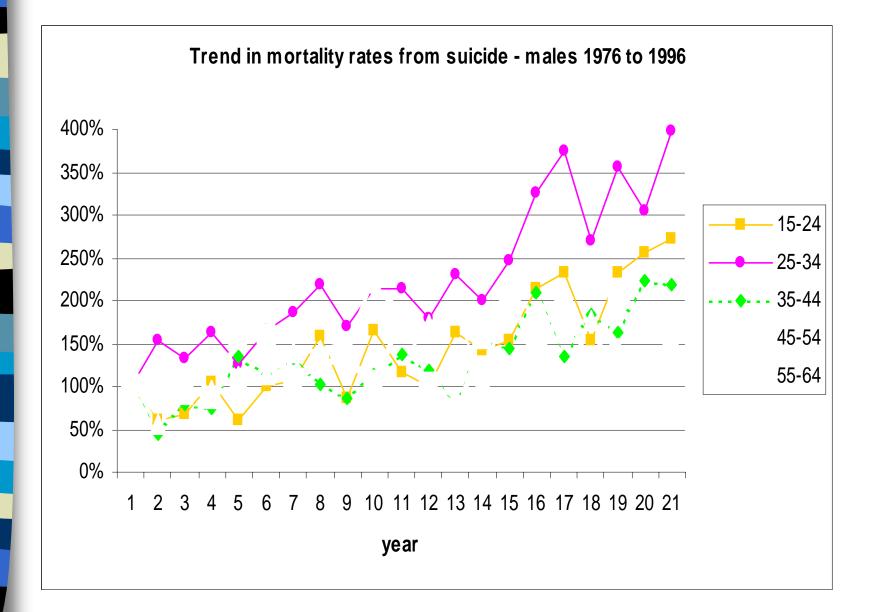
Mortality rates by cause for 15-34 year olds

	Males	Males	Females	Females
Cause	15-24	25-34	15-24	25-34
Infectious and Parasitic	2%	1%	7%	1%
Diseases				
Malignant Neoplasms	7%	9%	10%	23%
All Circulatory Diseases	3%	7%	11%	10%
Injury and Poisoning	75%	66%	44%	40%
Road Traffic Accidents	33%	24%	16%	18%
Suicide	25%	26%	15%	12%
Homicide	1%	1%	0%	3%
Other	16%	15%	12%	7%
All Other Diseases	13%	19%	28%	26%

Mortality Rates from Road Traffic Accidents 1962 - 1996



Mortality Rates from Suicide 1962 - 1996





Suicide

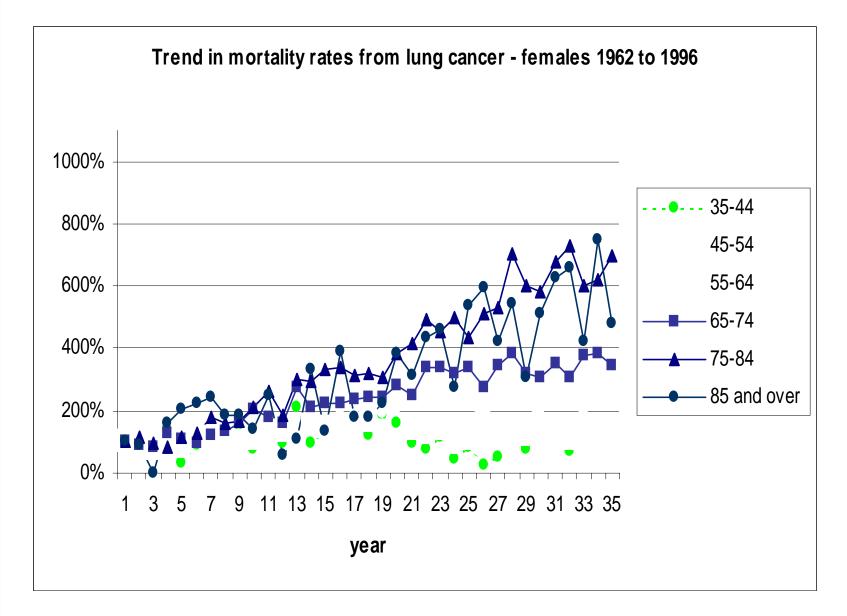
- Rate of suicide has risen sharply over the last 20 years
- Possible reasons for the increase include:
 - Underlying rate has increased significantly
 - Reporting may have increased
 - Coding may be more accurate
- One of main cause of deaths within 15-34 age group
- Significantly higher incidence among males than females
- Particularly high incidence rate among young males



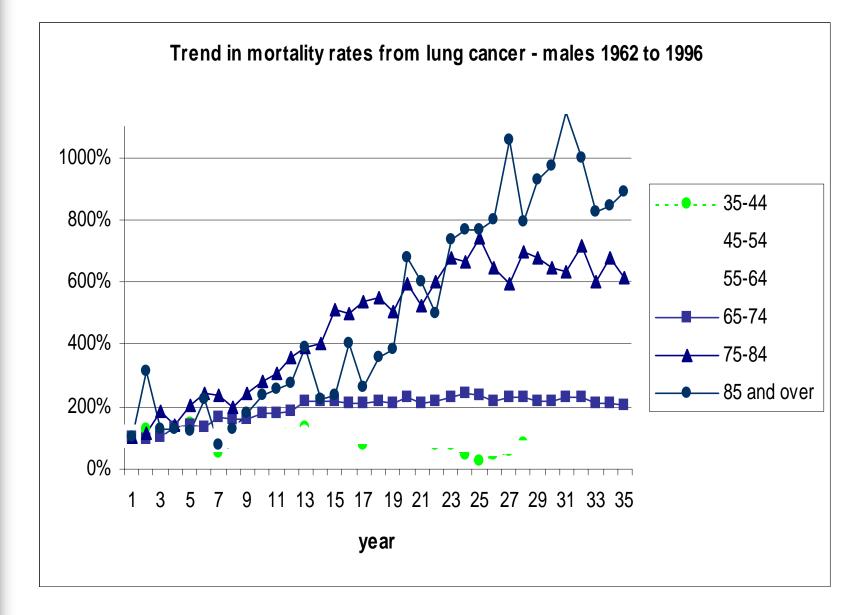
Cancer

Second largest cause of death in Ireland

Mortality Rates from Lung Cancer 1962 - 1996

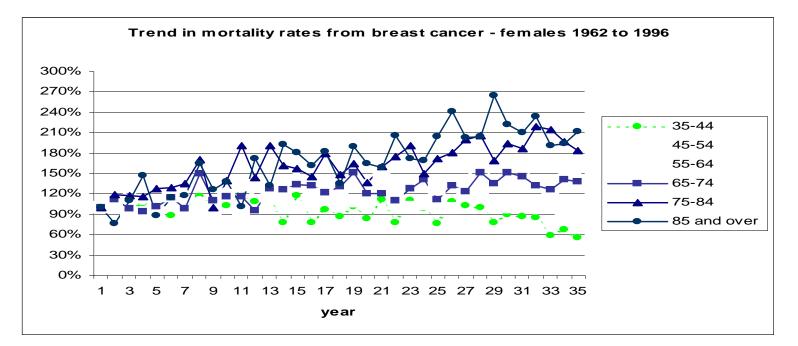


Mortality Rates from Lung Cancer 1962 - 1996



Cancer – Breast cancer

- Ireland has one of the highest rates of breast cancer in the EU
- Trend for incidence at younger ages is downwards
- For older lives, trends appears to be upward
- Could be explained by differences in screening programmes
- Western world has significantly higher incidence of breast cancer than developing world

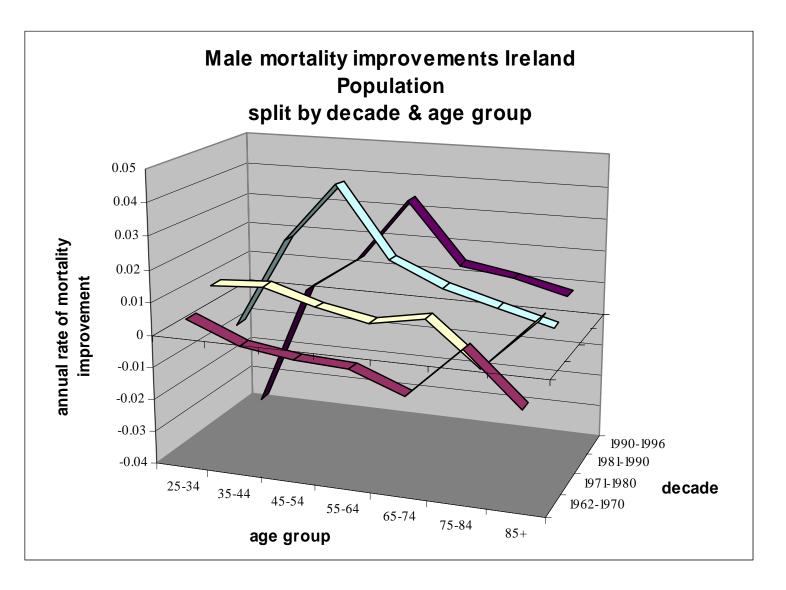




Part 3

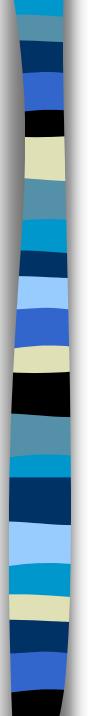
Cohort analysis

Male mortality improvements by decade & age group



Female mortality improvements by decade & age group



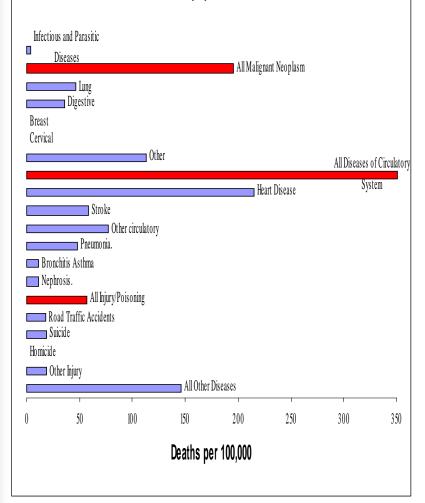


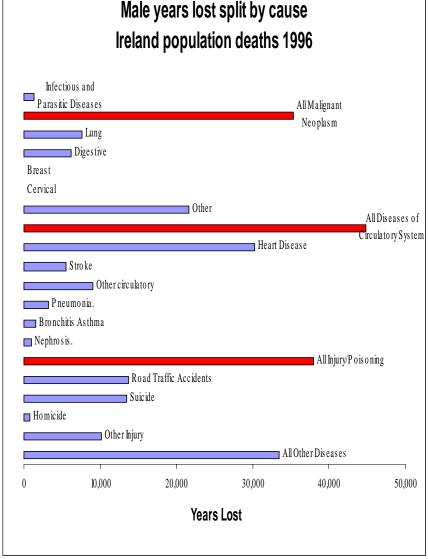
Part 4

Assessing impact of diseases on population health

Males Cause of Death versus Years' Lost

Male age standardised rate split by cause Ireland population 1996





Females Cause of Death versus Years' Lost

Female age standardised rate split by cause Female years lost split by cause Population deaths 1996 Ireland population 1996 Infectious and Infectious and Parasitic Parasitic Diseases All Malignant П Diseases All Malignant Neoplasm Neoplasm Lung Lung Digestive Digestive Breast Breast Cervical Cervical Other Other All Diseases of Circulatory All Diseases of Circulatory System System Heart Disease Heart Disease Stroke Stro ke Other circulatory Other circulatory Pneumonia. P neumonia. Bronchitis Asthma Bronchitis Asthma Nephrosis. Nephrosis. All Injury/Poisoning All Injury/Poisoning Road Traffic Accidents Road Traffic Accidents Suicide Homicide Suicide Other Injury Homicide All Other Diseases Other Injury All Other Diseases 50 100 150 200 250 0 10.000 20.000 30.000 40.000 50.000 Deaths per 100,000 Years Lost

Part 5: Lessons from study

- 1. Media attention
- 2. Years' lost concept
- 3. Importance of non-illness mortality
- 4. Complexity
- 5. Can we fix it Yes we can!