Occupational Injury in Maori

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Overview

• Issues of ethnicity classification

• Maori occupational injury in relation to the NZ population:
  – ACC

• Possible explanations for differences in rates
Maori Occupational Injury: A moving target

- Ethnicity questions have changed at past 5 censuses
- Changes towards self-identified ethnicity definitions
  - E.g. death registrations, hospital admissions
- Differences in ethnic definitions between Govt. agencies
  - E.g. ACC & Accident Insurance Regulator
- Ethnicity not collected upon standard OSH accident/serious-harm notification form
- Uncertain/unknown accuracy of ethnicity information data (Death registrations, coronial files, ACC etc.)
Percentage of new ACC claims by ethnic group

Source: www.acc.co.nz
Fatalities Data

MWRFI study McCracken et al. (2001)

• Coronial files reviewed for work-related deaths from 1985-1994

• Ethnicity established from:
  – NZHIS death registrations
  – Coronial information
    • witness statements
    • police statements
    • Pathologists reports

• If identified as Maori in either source, classified as Maori for the study; else => non-Maori
Male Rate of Work Related Fatal Injury by Ethnicity and Year

Rate/100,000 workers

Maori Males (n=88)  non-Maori Males (n=725)

11.02  8.33

p=0.016
Rate of new work-related ACC entitlement claims, by ethnic group 1994-2001

Source: www.acc.co.nz
## Male Maori and Non-Maori Fatality Rates
(per 100,000 workers)

<table>
<thead>
<tr>
<th>Type of Rate</th>
<th>Maori</th>
<th>Non-Maori</th>
<th>Relative Risk</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude</td>
<td>11.02</td>
<td>8.33</td>
<td>1.32</td>
<td>(1.06-1.65)</td>
</tr>
<tr>
<td>Industry Standardised</td>
<td>10.03</td>
<td>Reference</td>
<td>1.19</td>
<td>(0.95-1.50)</td>
</tr>
<tr>
<td>Occupation Standardised</td>
<td>9.25</td>
<td>Reference</td>
<td>1.10</td>
<td>(0.86-1.41)</td>
</tr>
<tr>
<td>Type of Rate</td>
<td>N cases</td>
<td>Rate/100 workers</td>
<td>95% CI</td>
<td>Relative Risk</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>------------</td>
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<td>--------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Crude NZ European/Pakeha</td>
<td>146,662</td>
<td>10.1</td>
<td>(10.0 – 10.2)</td>
<td>Reference</td>
</tr>
<tr>
<td>Crude Maori</td>
<td>23,603</td>
<td>13.8</td>
<td>(13.6 – 14.0)</td>
<td>1.37</td>
</tr>
<tr>
<td>Age Standardised Maori</td>
<td>13.5</td>
<td>(13.3 – 13.6)</td>
<td>1.34</td>
<td></td>
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<tr>
<td>Occupation Standardised Maori</td>
<td>11.2</td>
<td>(11.0 – 11.3)</td>
<td>1.11</td>
<td></td>
</tr>
<tr>
<td>Age &amp; Occupation Standardised Maori</td>
<td>10.9</td>
<td>(10.7 – 11.0)</td>
<td>1.08</td>
<td></td>
</tr>
</tbody>
</table>
Summary

The higher overall rates of Maori occupational injury are due to the Maori workforce being concentrated in the highest risk occupations and industries:

- **Fatalities**: Occupational distribution explains ~70% of the difference between Maori and Non-Maori

- **ACC New claims**: Occupational/age distribution explains ~75% of the difference between NZ European/Pakeha
Priorities for Maori: Data

1. Ethnicity should be added to the standard OSH accident/serious-harm notification form

2. The new StatsNZ injury information manager should consider routine data matching activities between their datasets (including the Census), to improve readily available ethnicity data

3. The current ethnicity question should be retained for the 2006 Census
Priorities for Maori: Injury Prevention

• *Longer-term*: The socio-economic forces that have created these occupational disparities need to be addressed

• *Short-term*: Effective targeting of high risk industries and occupations will pay a proportionally higher dividend for Maori