



UNIVERSITY *of* OTAGO
TE WHARE WĀNANGA O OTĀGO

Occupational Injury in Maori

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INJURY PREVENTION RESEARCH UNIT



NGAI TAHU

Overview

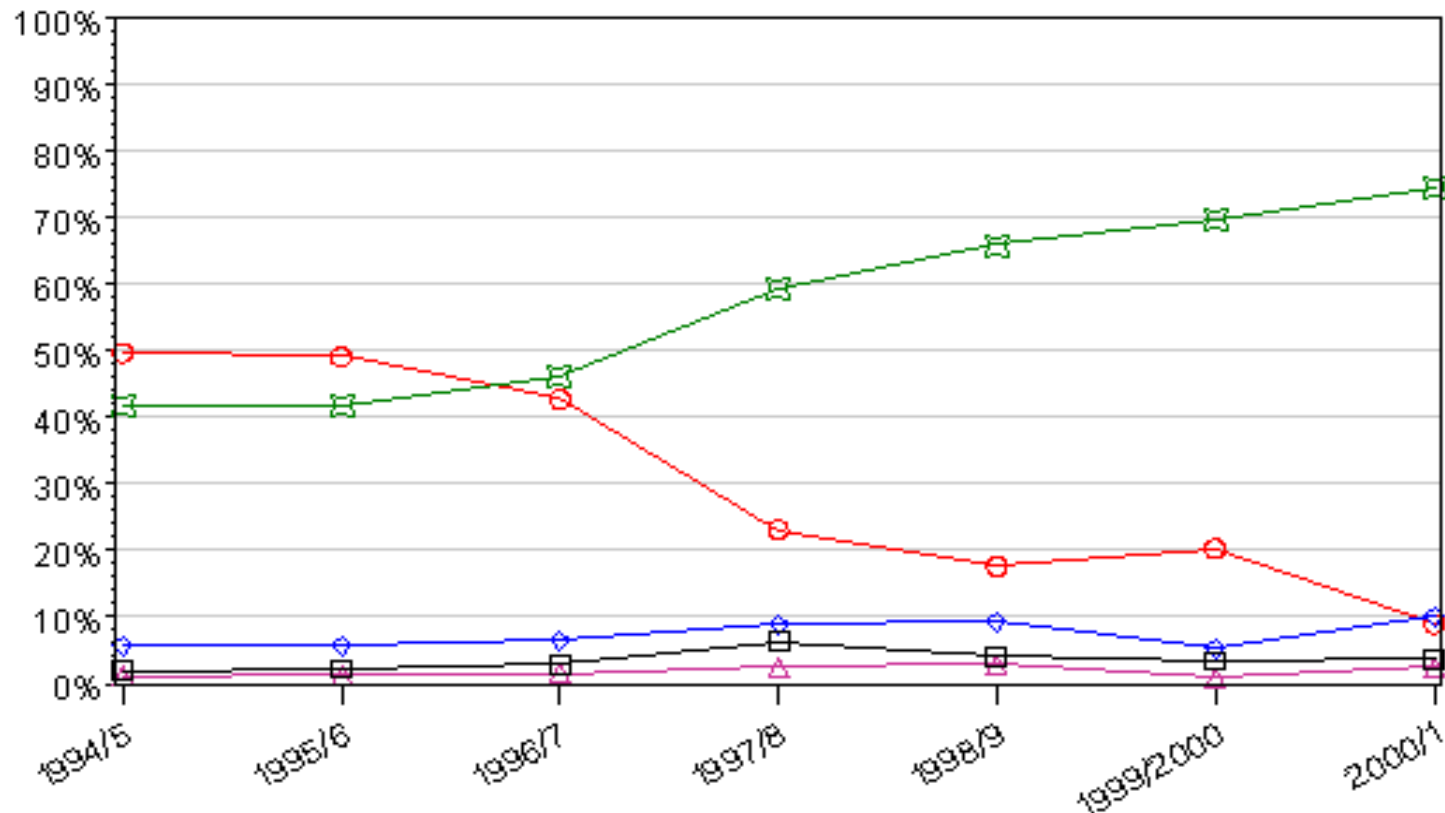
- **Issues of ethnicity classification**
- **Maori occupational injury in relation to the NZ population:**
 - **Fatalities (1985-1994)**
 - **ACC**
- **Possible explanations for differences in rates**

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

Percentage
of New
Claims



○-○-○ Unknown

■-■-■ Pākēha/European

◇-◇-◇ New Zealand Māori

△-△-△ Pacific Island

□-□-□ Other

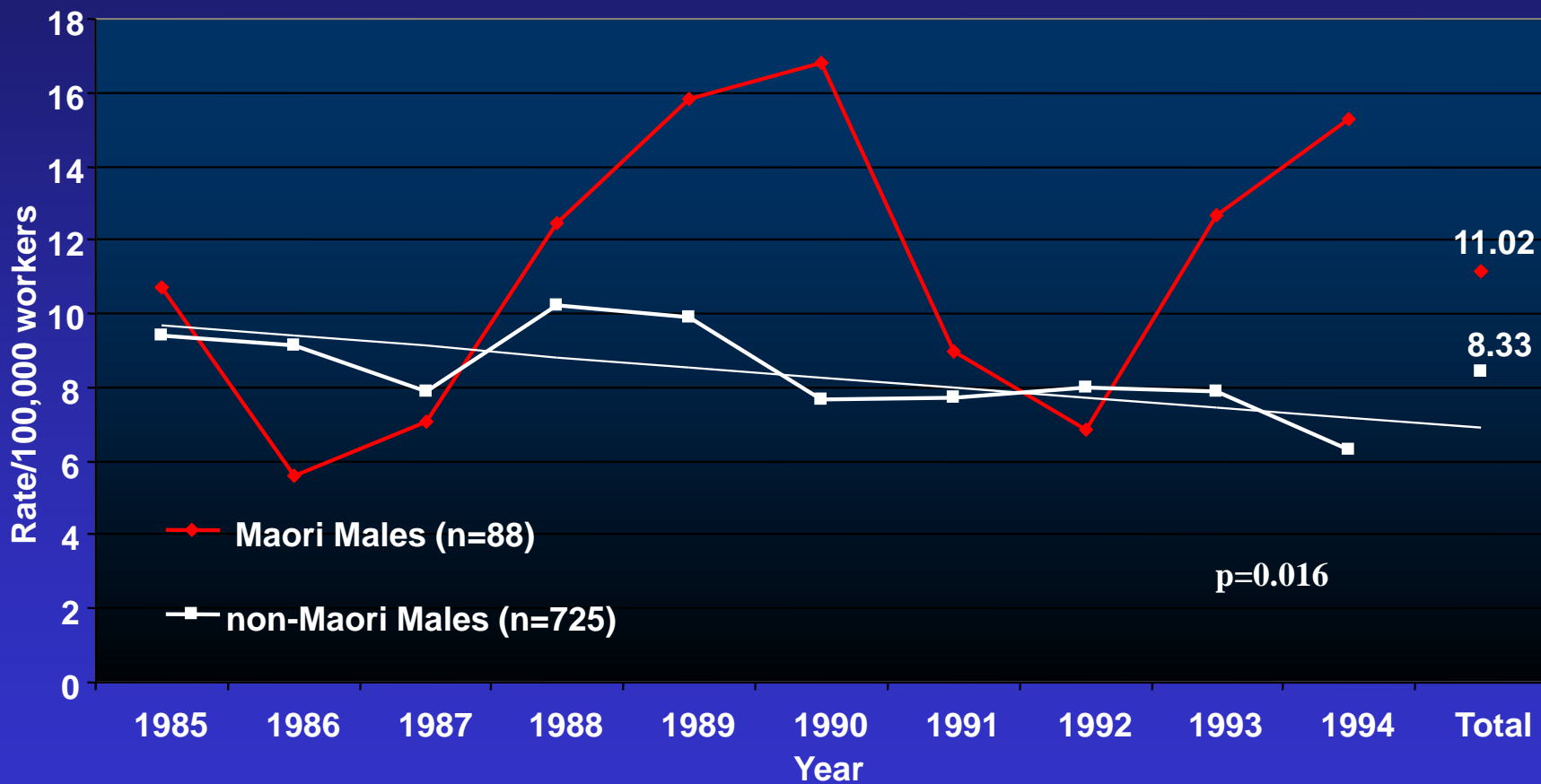
Source: www.acc.co.nz

Fatalities Data

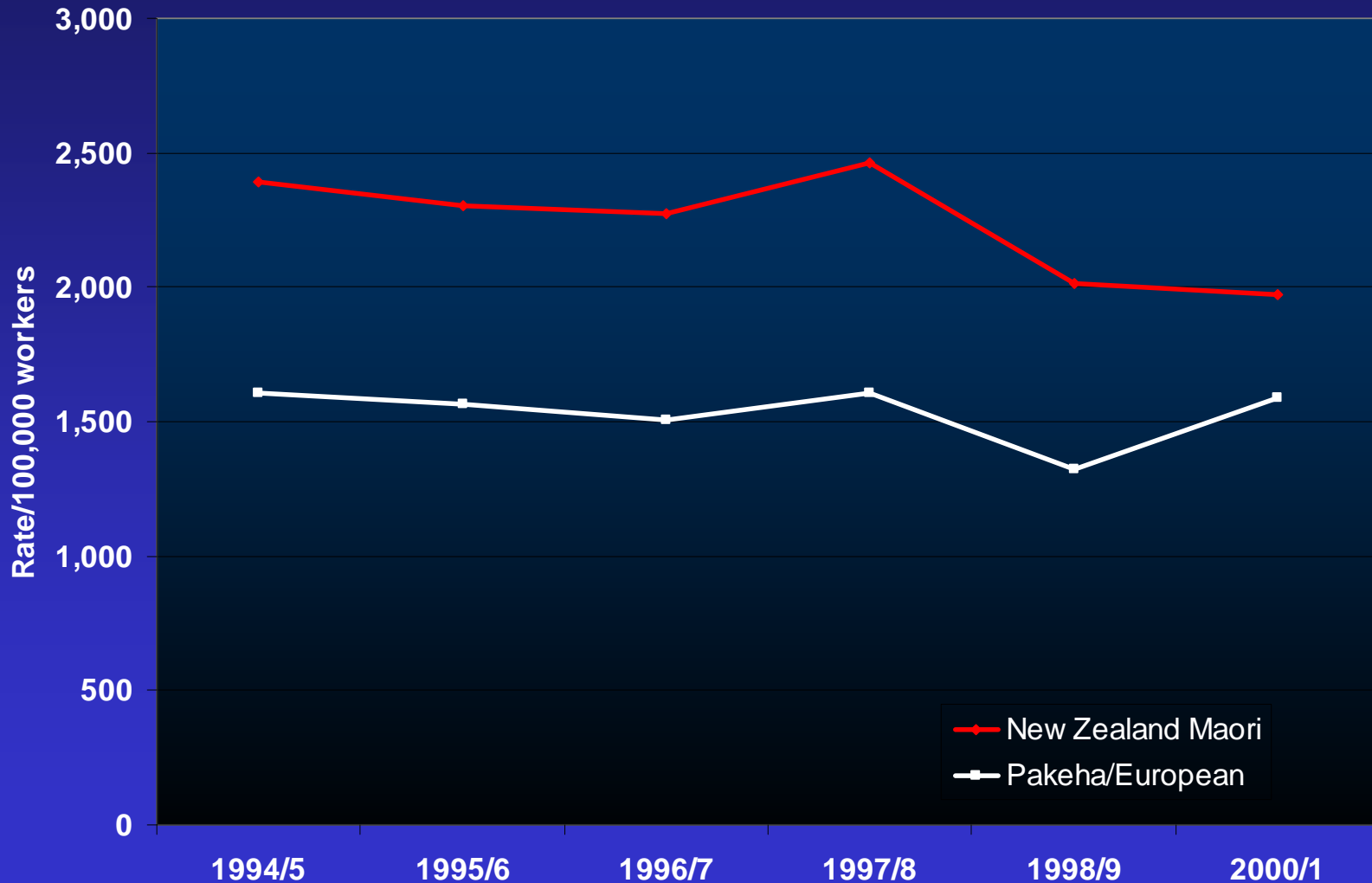
MWRFI study McCracken et al. (2001)

- **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



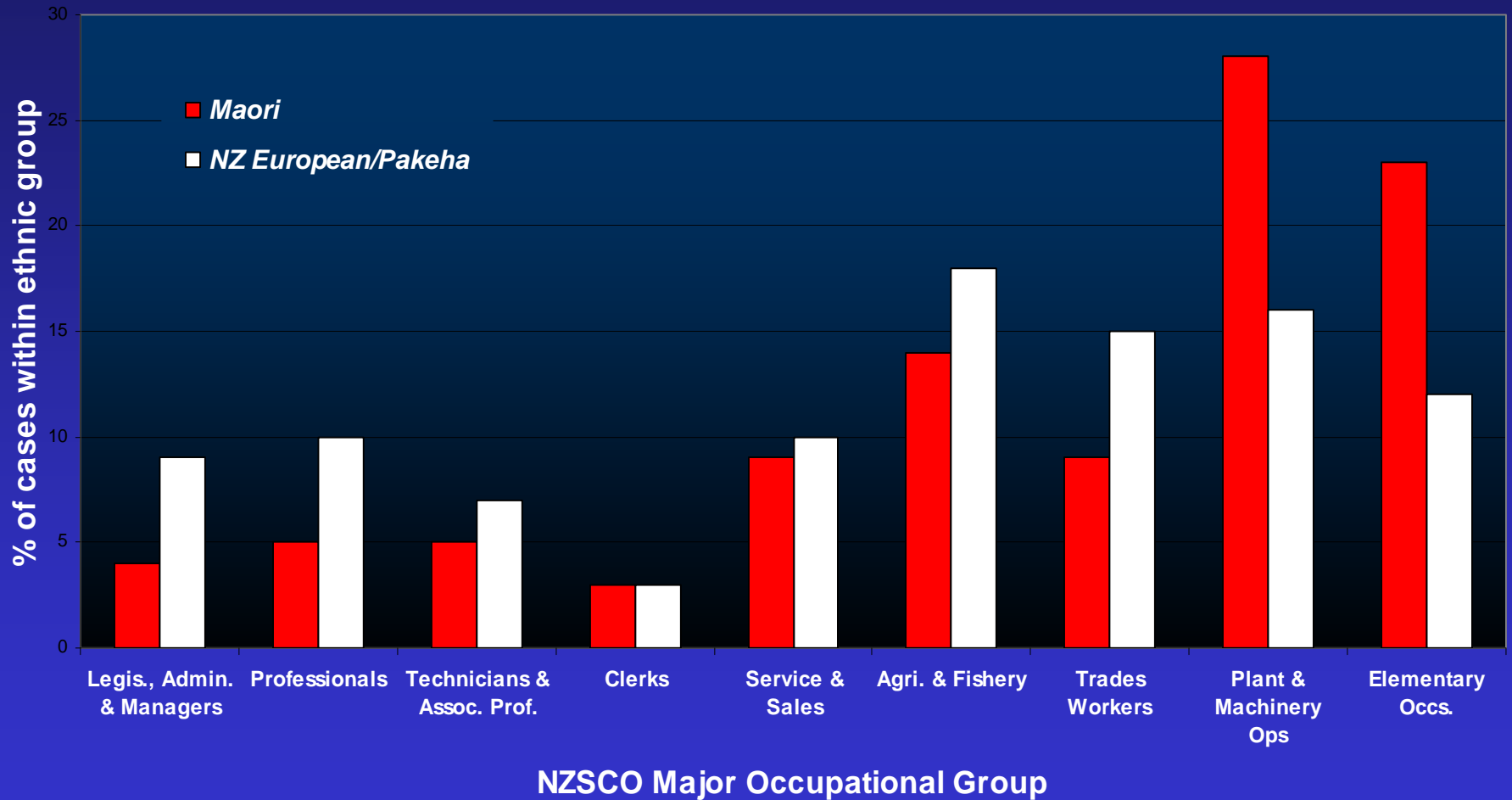
Rate of new work-related ACC entitlement claims, by ethnic group 1994-2001



Male Maori and Non-Maori Fatality Rates (per 100,000 workers)

| <i>Type of Rate</i> | <i>Maori</i> | <i>Non-Maori</i> | <i>Relative Risk</i> | <i>95% CI</i> |
|--------------------------------|--------------|------------------|----------------------|--------------------|
| Crude | 11.02 | 8.33 | 1.32 | (1.06-1.65) |
| Industry Standardised | 10.03 | Reference | 1.19 | (0.95-1.50) |
| Occupation Standardised | 9.25 | Reference | 1.10 | (0.86-1.41) |

Distribution of new ACC work-related claims within Ethnic Group (ACC 2001/2002)



Work Related Injury Rates by Ethnic Group (ACC New Claims 2001/2002)

| <i>Type of Rate</i> | <i>N cases</i> | <i>Rate/100 workers</i> | <i>95% CI</i> | <i>Relative Risk</i> |
|--|-----------------|-------------------------|----------------------|----------------------|
| Crude NZ European/Pakeha | 146, 662 | 10.1 | (10.0 – 10.2) | Reference |
| Crude Maori | 23,603 | 13.8 | (13.6 – 14.0) | 1.37 |
| Age Standardised Maori | | 13.5 | (13.3 – 13.6) | 1.34 |
| Occupation Standardised Maori | | 11.2 | (11.0 – 11.3) | 1.11 |
| Age & Occupation Standardised Maori | | 10.9 | (10.7 – 11.0) | 1.08 |

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