

**New Zealand has more ethnicities than there are countries in the world.**

**But what about hospices?**

**Genesis Oncology Trust  
Palliative Care Lecture Series  
7 April 2016**



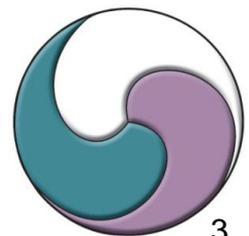
# Outline

- New Zealand and “Superdiversity”
- Ethnicity of Births, Population and Deaths
- Collecting and Reporting on Ethnicity
- Ethnicity of Deaths in New Zealand
  - Historic Evidence
  - Future Projections
- Ethnicity of Patients and Deaths for Hospices
- Why does ethnicity collection matter?



# Statistics NZ: Census 2013

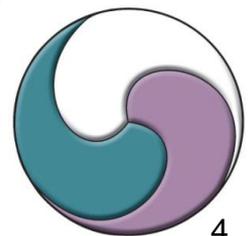
- **Increase** in identification with ethnicity groups since Census 2006:
  - **14%** with at least one European ethnicity
  - **6%** with Māori ethnicity
  - **33%** with at least one Asian ethnicity
  - **11%** with at least one Pacific ethnicity
  - **35%** with at least one Middle Eastern/Latin American/African (MELAA) ethnicity.
- The number of people identifying with the Indian ethnic group increased **48 %** between 2006 and 2013, compared with an increase of **16 %** for the Chinese ethnic group.
- The Filipino population more than tripled in size since 2001 and increased **138%** from 2006.



# “Superdiversity”

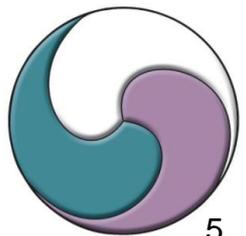
- Academics define superdiverse cities and countries as those where more than **25%** of the resident population is comprised of migrants or those where more than **100 nationalities** are represented.
- **New Zealand is superdiverse now** – predominantly in Auckland:
  - almost **50%** of the population are Māori, Asian and Pacific peoples
  - **44%** were not born in New Zealand
  - there are over **200 ethnicities**.
- New Zealand is the fifth most ethnically diverse country in the OECD.
- New Zealand is now home to **160 languages**, and this will increase.
- There can be no business as usual, as the talent pool, customers and citizens have changed.
- New Zealand needs to adjust faster and invest in measures to ensure we are maximising the benefits of superdiversity (**the diversity dividend**) while managing the risks and challenges.

**Source:** Mai Chen, (2015) Superdiversity Stocktake: Implications for Business, Government & New Zealand, Superdiversity Centre for Law, Policy and Business, <http://www.superdiversity.org/>

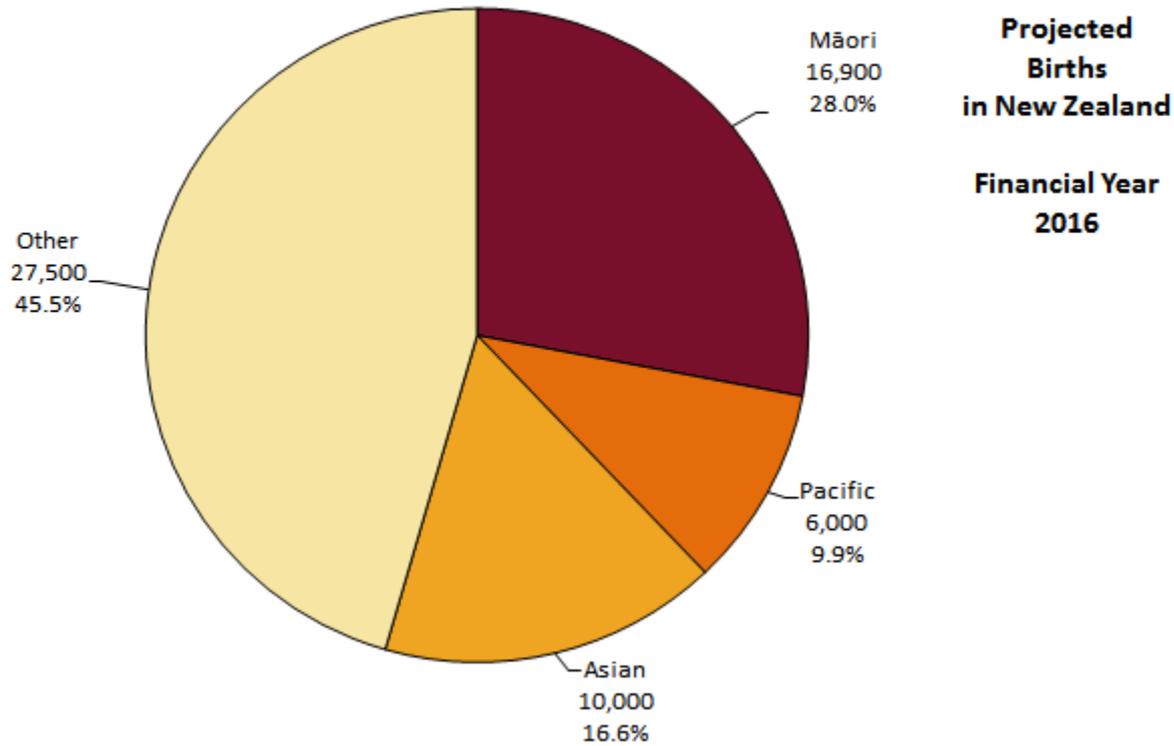


# Ethnicity

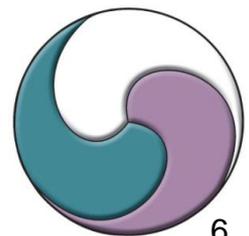
## Births, Population, Deaths



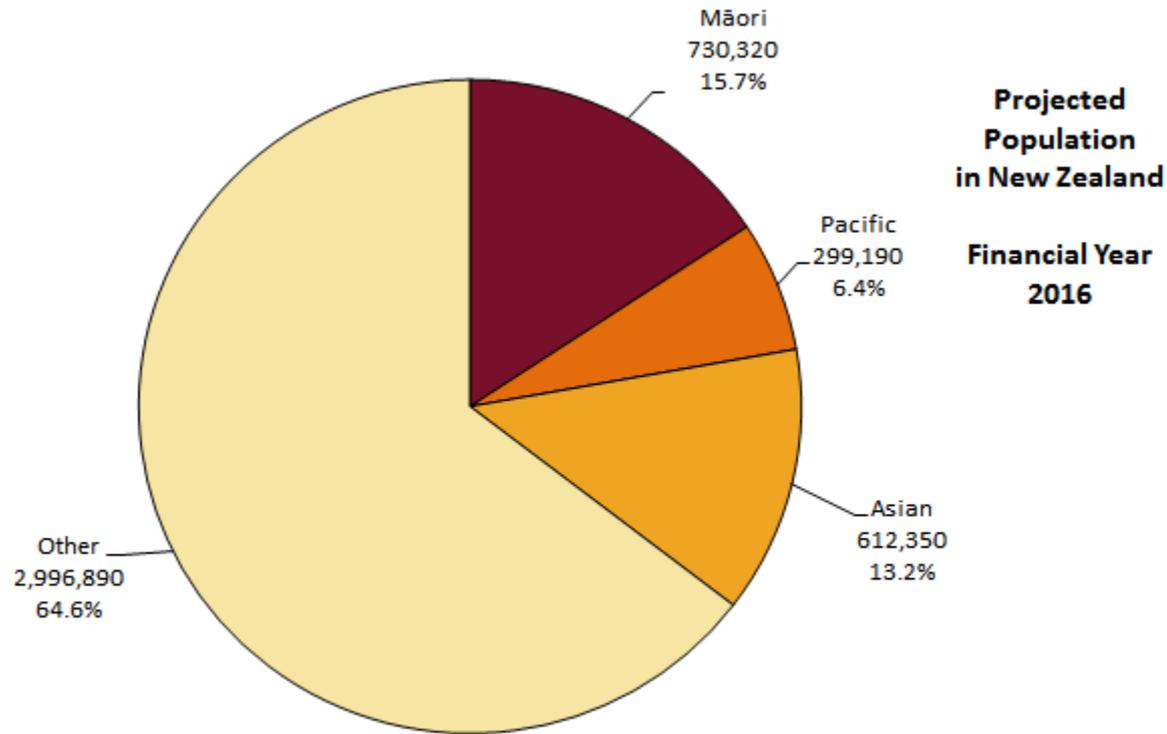
# Ethnicity of Births FY2016



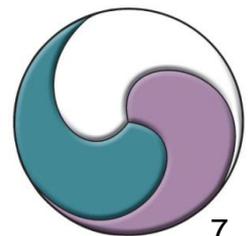
**28.0%** of births are projected to be Māori in FY 2016. Māori, Pacific and Asian together are **54.5%** of births.



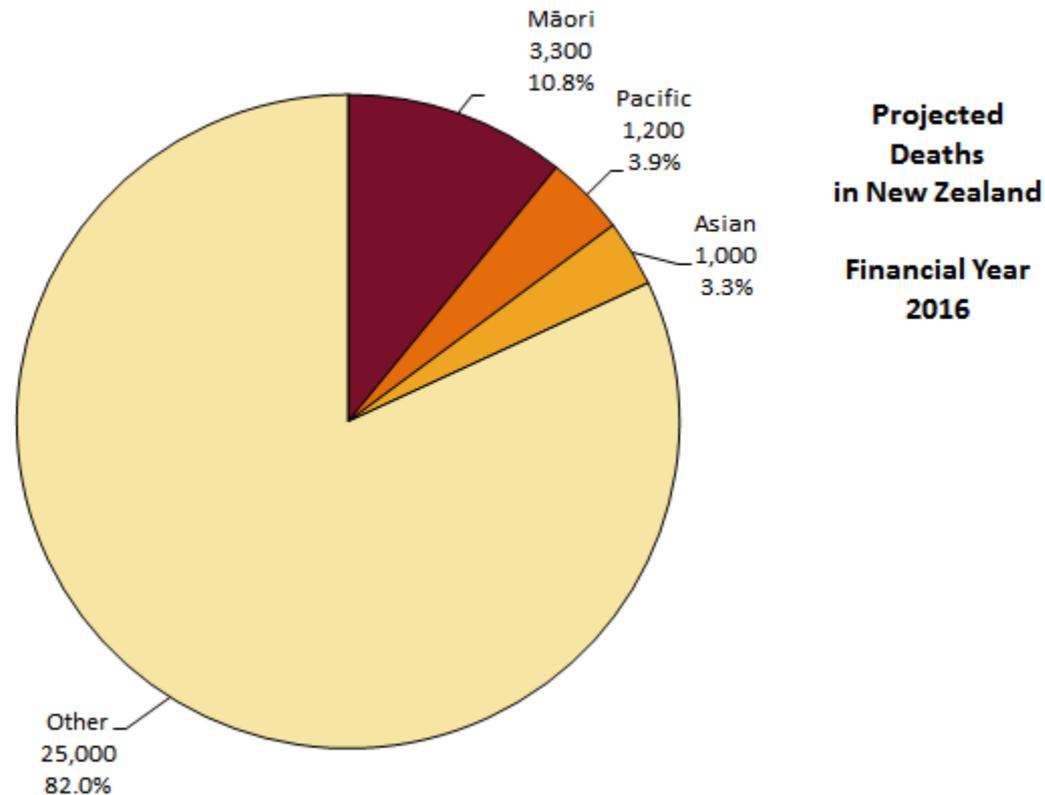
# Ethnicity of Population FY2016



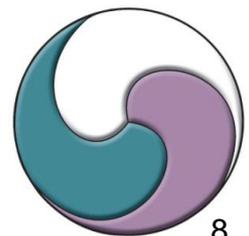
**15.7%** of the population are projected to be Māori in FY 2016. Māori, Pacific and Asian together are **35.4%** of the population.



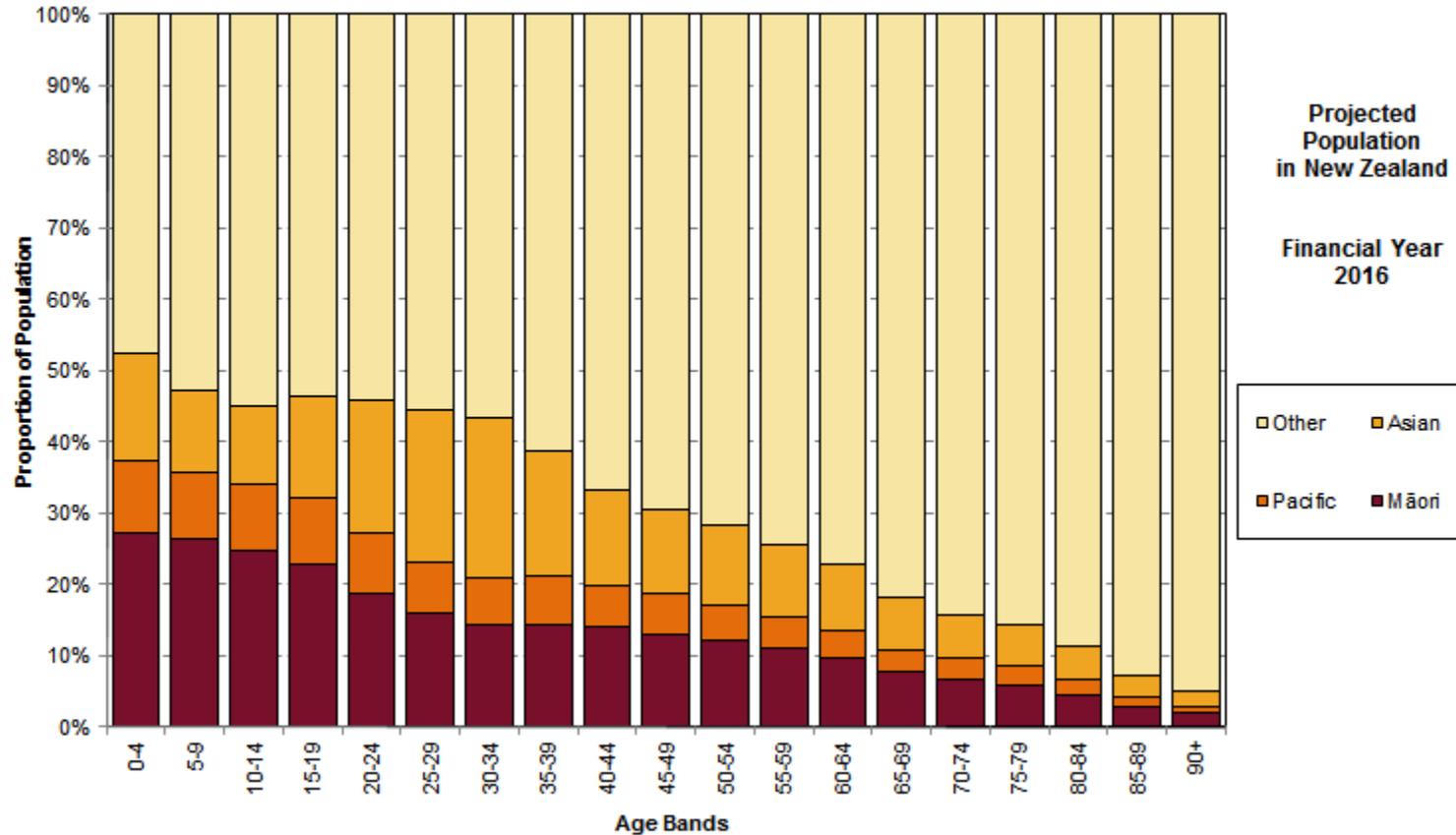
# Ethnicity of Deaths FY2016



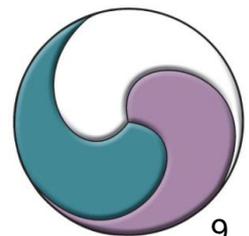
**10.8%** of deaths are projected to be Māori in FY 2016. Māori, Pacific and Asian together are **18.0%** of deaths.



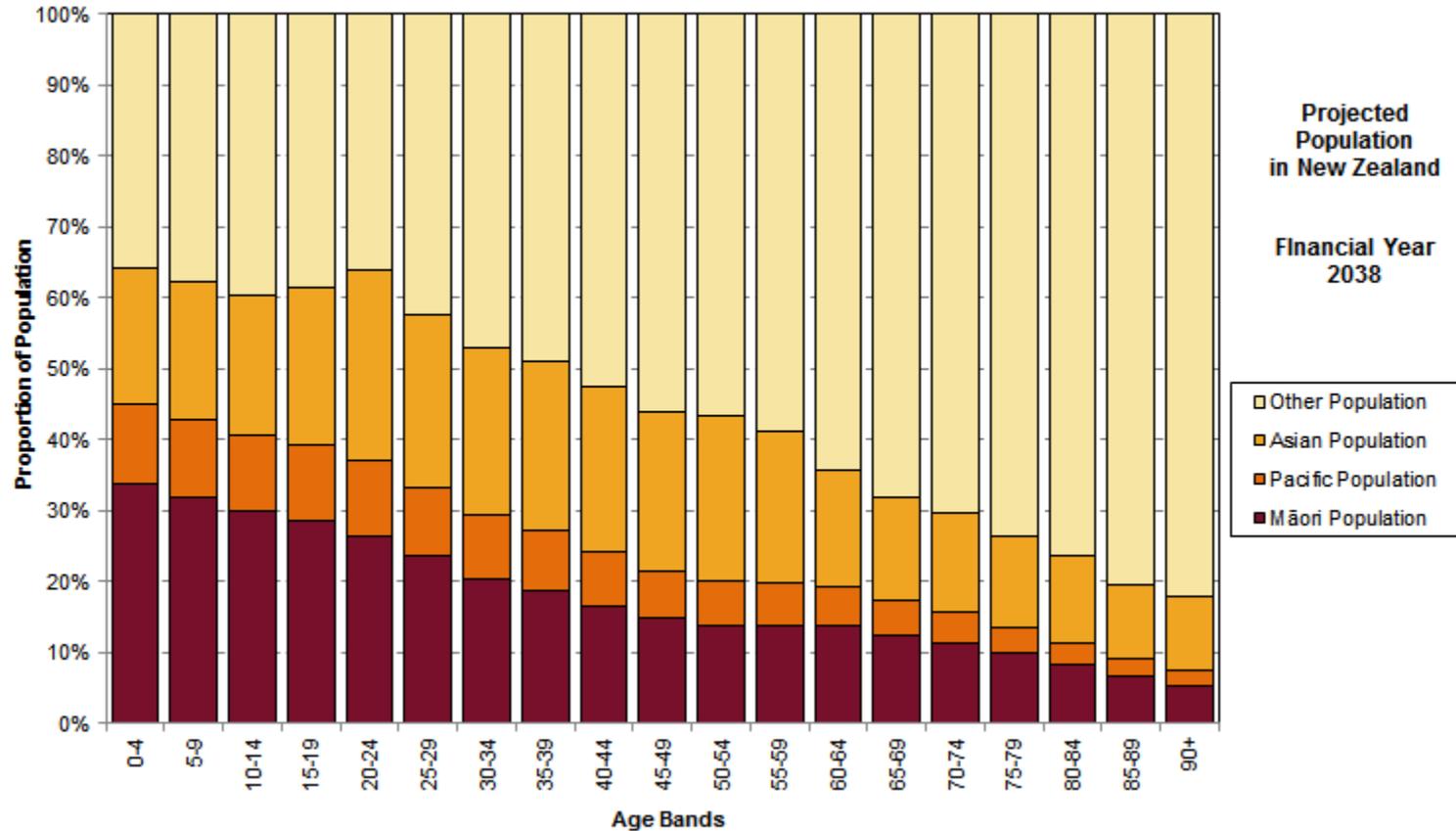
# Ethnicity of Population FY2016



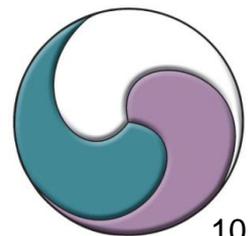
The ethnicity of the population has a very strong pattern by age, with proportionally more Māori, Pacific and Asian lives at younger ages.



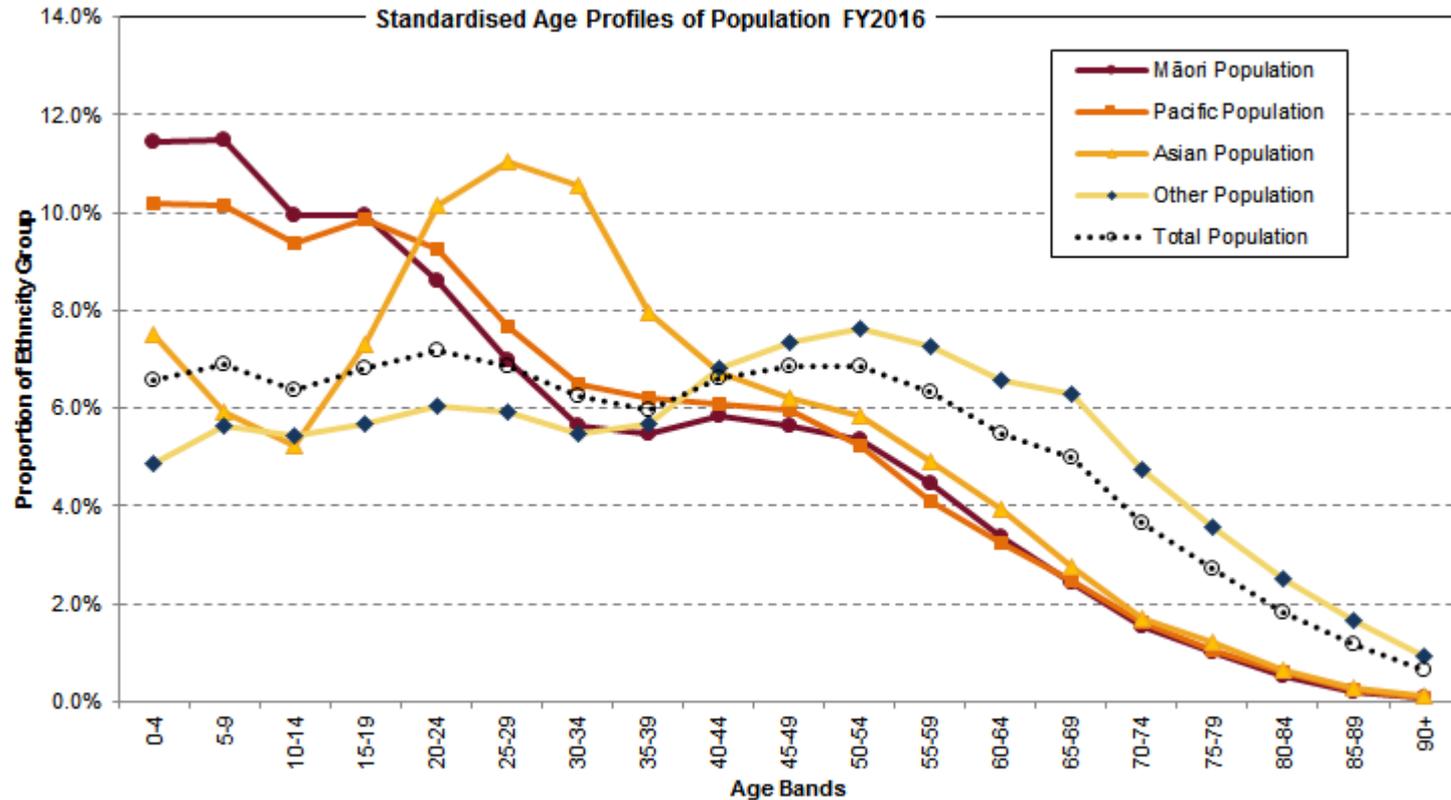
# Ethnicity of Population FY2038



The ethnicity of the population has a very strong pattern by age, with proportionally more Māori, Pacific and Asian lives at younger ages.



# Age Profiles Population FY2016



Māori and Pacific populations have a similar shape with many young children. The Asian population has a large number of young adults. The Other population has few children and a much older “tail”.



# **Ethnicity**

## **Collecting and Reporting**

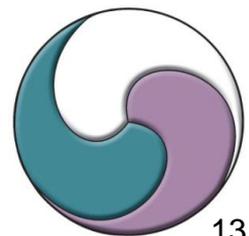


# Statistical Standard for Ethnicity, 2005



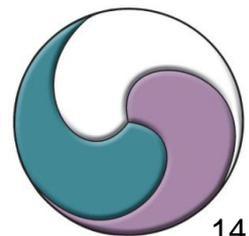
## Statistical Standard for ethnicity

- “Ethnicity is the ethnic group or groups that people identify with or feel they belong to. Ethnicity is a measure of cultural affiliation, as opposed to race, ancestry, nationality or citizenship. Ethnicity is self perceived and people can belong to more than one ethnic group.”
- <http://www.stats.govt.nz/methods/classifications-and-standards/classification-related-stats-standards/ethnicity.aspx>



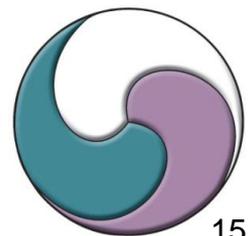
# Statistics New Zealand Ethnicity Standards (2005)

- “The standard classification of ethnicity is a hierarchical classification of four levels.
  - **Level 1** of the classification has six categories and is used solely for output.
  - **Level 2** has 21 categories
  - **Level 3** has 36 categories
  - **Level 4** has 233 categories – excluding residual categories. The residual categories are defined in Glossary and references.”
- **MOH** describes a **Level 0** which is a “super-aggregate” level with either:
  - three codes - Māori, Pacific peoples and Other; or
  - four codes - includes Asian as well.
  - The four-code version is used for the prioritised ethnicity projections.



# Levels in Statistics NZ Ethnicity Classification

Level 1	Level 2	Level 3	Level 4	
3	<b>Pacific Peoples</b>			
	30	<b>Pacific Peoples nfd</b>		
		300	Pacific Peoples nfd	
			30000	Pacific Peoples nfd
	31	<b>Samoan</b>		
		311	Samoan	
			31111	Samoan
	32	<b>Cook Islands Maori</b>		
		321	Cook Islands Maori	
			32100	Cook Islands Maori nfd
			32111	Aitutaki Islander
			32112	Atiu Islander
			32113	Mangaia Islander
			32114	Manihiki Islander
			32115	Mauke Islander
			32116	Mitiaro Islander
			32117	Palmerston Islander
			32118	Penrhyn Islander
			32119	Pukapuka Islander
			32120	Rakahanga Islander
			32121	Rarotongan
	33	<b>Tongan</b>		
		331	Tongan	
		33111	Tongan	

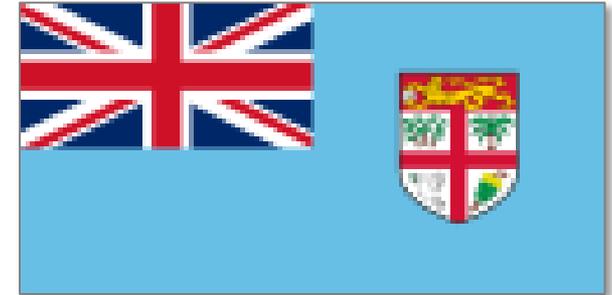


# Ethnicity is not Nationality or Geography

## Examples from Fiji:

- Fijian Indian are grouped under **Asian**

4	Asian			
	43	Indian		
		431	Indian	
			43100	Indian nfd
			43111	Bengali
			43112	Fijian Indian
			43113	Gujarati
			43114	Indian Tamil
			43115	Punjabi
			43116	Sikh
			43117	Anglo Indian
			43199	Indian nec



- Others are grouped under **Pacific Peoples**

3	Pacific Peoples			
	36	Fijian		
		361	Fijian	
			36111	Fijian



# Collection of Ethnicity

- **Report of the Review of the Measurement of Ethnicity, June 2004**
- The statistical standard for ethnicity was developed to ensure that ethnicity is collected **consistently** for all surveys and administrative collections.
- All collections of official statistics measuring ethnicity should have the capacity to record and report **six ethnicity responses** for each individual, or the minimum of three responses when six cannot be implemented immediately.
- The method of reporting ethnicity in all collections of official statistics should be **self-identification**.
- The practice of prioritising ethnic group responses to one per individual will be discontinued.





# HISO Data Standards



Published December 2011  
Updated June 2013

## National Specialist Palliative Care Data Definitions Standard

**HISO 10039.2**

To be used in conjunction with  
HISO 10039.1  
National Specialist Palliative Care Business Process Standard



## HISO 10046 Consumer Health Identity Interim Standard

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Published December 2013



# HISO Data Standards

Six fields for self-identified ethnicity

Captured to Level 4 codes



# More than One Ethnicity in 2013

- **Self-identification with more than one ethnicity: 11.2 %**
- More than half of Māori (**53.5 %**) identified with two or more ethnic groups. Māori was the only major ethnic group in which people were more likely to identify with two or more major ethnic groups than one.
- Almost half (**48.9 %**) of Māori identified with at least one of the European ethnicities.
- For other major ethnic groups, identification with two or more groups:
  - European – **13.3%**
  - Asian – **9.9 %**
  - Pacific peoples – **37.2 %**
  - Middle Eastern/Latin American/African – **16.8 %**
- Younger people identify with more ethnic groups than older people and this difference has increased since the 2006 Census.
  - Children 0-14 years – **22.8%**
  - 65 years and over – **2.6 %**



# Reporting of Ethnicity

- **Total response (overlapping):** Typically done for Level 1 categories European; Māori; Pacific Peoples; Asian; MELAA; Other Ethnicity; Residual categories (Don't know, did not answer etc.).
  - **Warning:** this always adds up to more than 100%
  - **113%** of those that answered ethnicity question in Census 2013
- **Sole/combination:** Statistics NZ 2005 standards discuss three approaches: a very detailed way, 15 categories or 8 categories.
- **Prioritised:** this has been discontinued by Statistics NZ but confusingly is still the way the MOH data for planning is presented. It is also the way that deaths are recorded in the MORT database of deaths which we use extensively. To compare, we need to prioritise the deaths in the order of Māori, Pacific Peoples, Asian, Other.



# Reporting for Research

- Boyd, Matt, Blakely, Tony, & Atkinson, June. (2016). **Ethnic counts on mortality, New Zealand Cancer Registry and census data: 2006-2011.** *N Z Med J*, 129 (1429), 22-39.
- Three methods described in detail, with description of coding approach used:
  - **Total ethnicity**
  - **Prioritised ethnicity**
  - **Sole ethnicity**
- Agreement in ethnic counts between the census and the Cancer Registry has improved.
- By region, Māori deaths and cancer registrations are underestimated more in DHBs with low proportions of Māori in their population.



# Inequality or Inequity?

- Blakely, T., Shaw, C., Atkinson, J., Cunningham, R., & Sarfati, D. (2011). **Social inequalities or inequities in cancer incidence? Repeated census-cancer cohort studies, New Zealand 1981-1986 to 2001-2004.** *Cancer Causes Control*, 22(9), 1307-1318.
- **Judging when inequalities in cancer incidence are inequities**
- “Not all social group differences or inequalities in health, and cancer incidence in particular, can be called inequities.
- The authors quote Whitehead (1992) who defines health inequities as: ‘... differences which are unnecessary and avoidable, but in addition are considered unfair and unjust. ....’

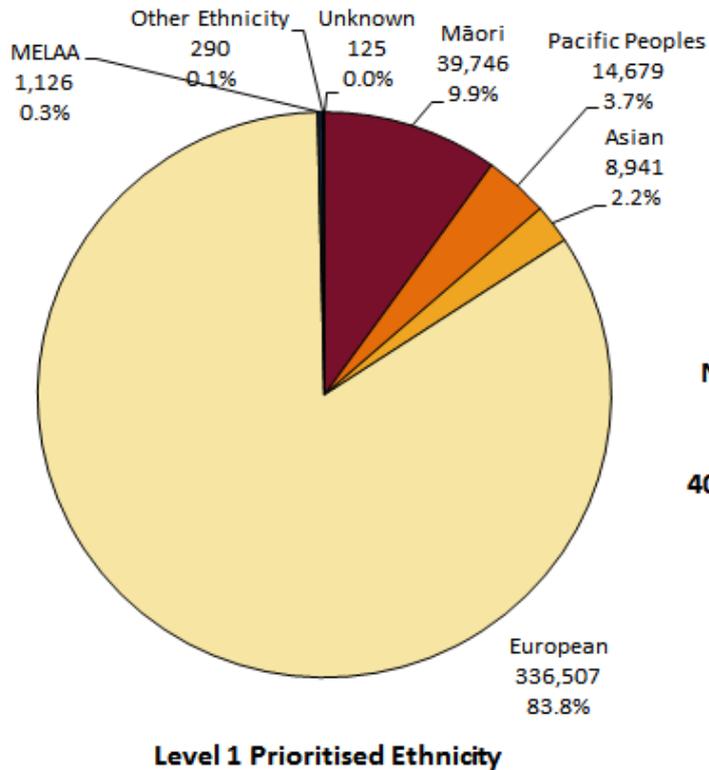


# **Ethnicity of Deaths**

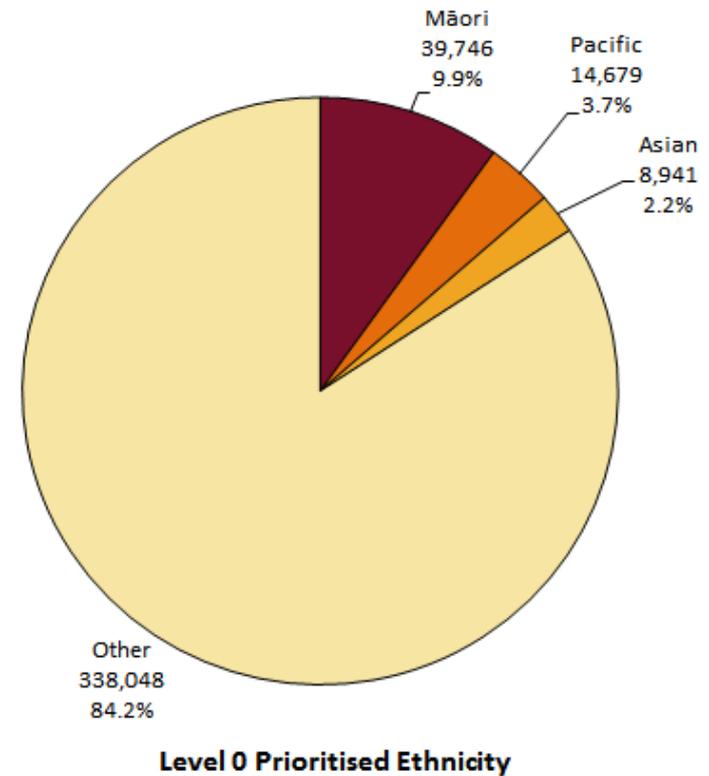
## **MORT data 2000-2013**



# Ethnicity of Deaths in New Zealand 2000-2013



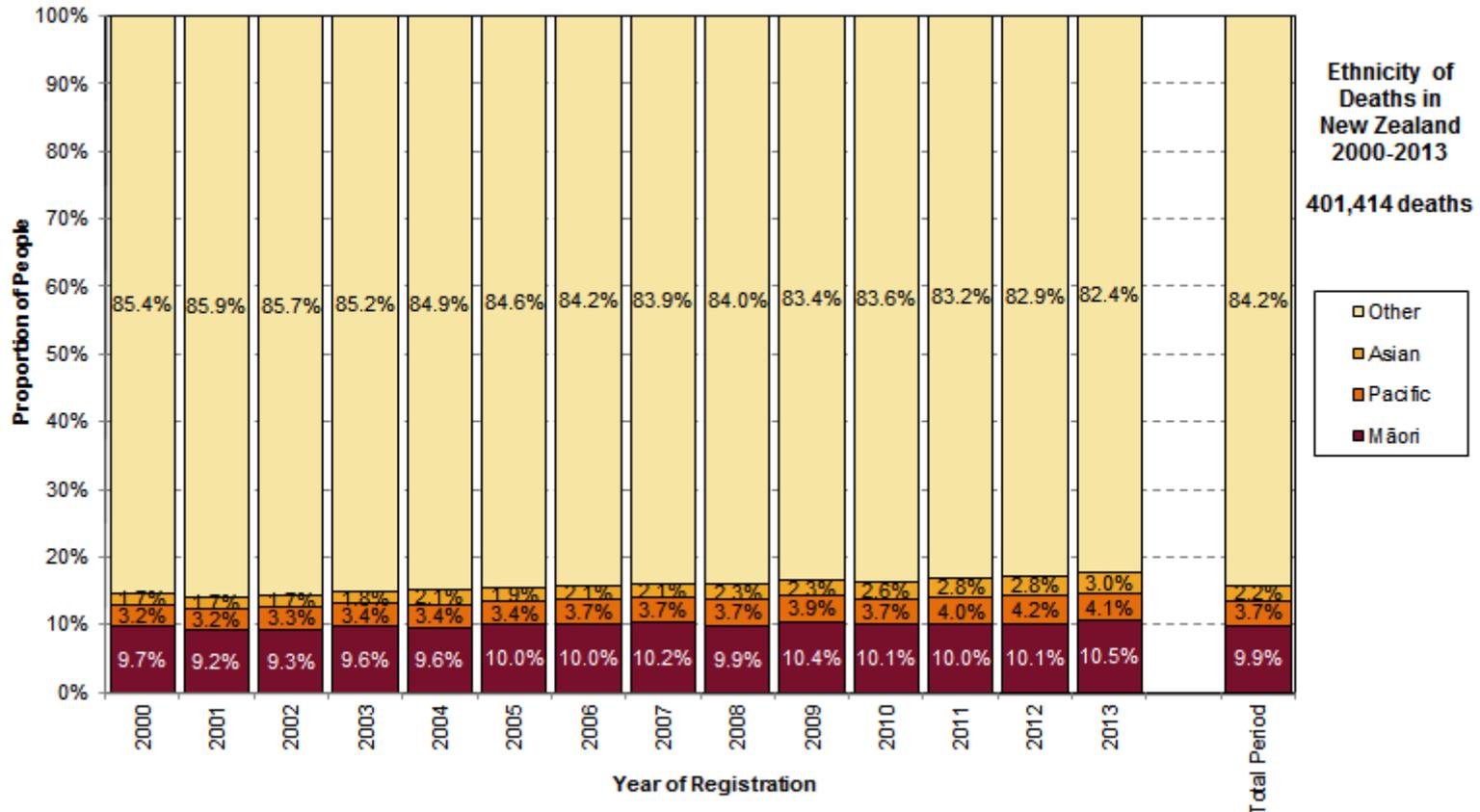
**Ethnicity of Deaths in New Zealand 2000-2013**  
401,414 deaths



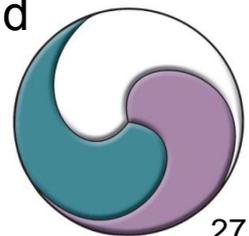
Very little difference between using Level 1 ethnicity and Level 0 ethnicity. MELAA, Other and Unknown groups very small so will use Level 0 for further analysis.



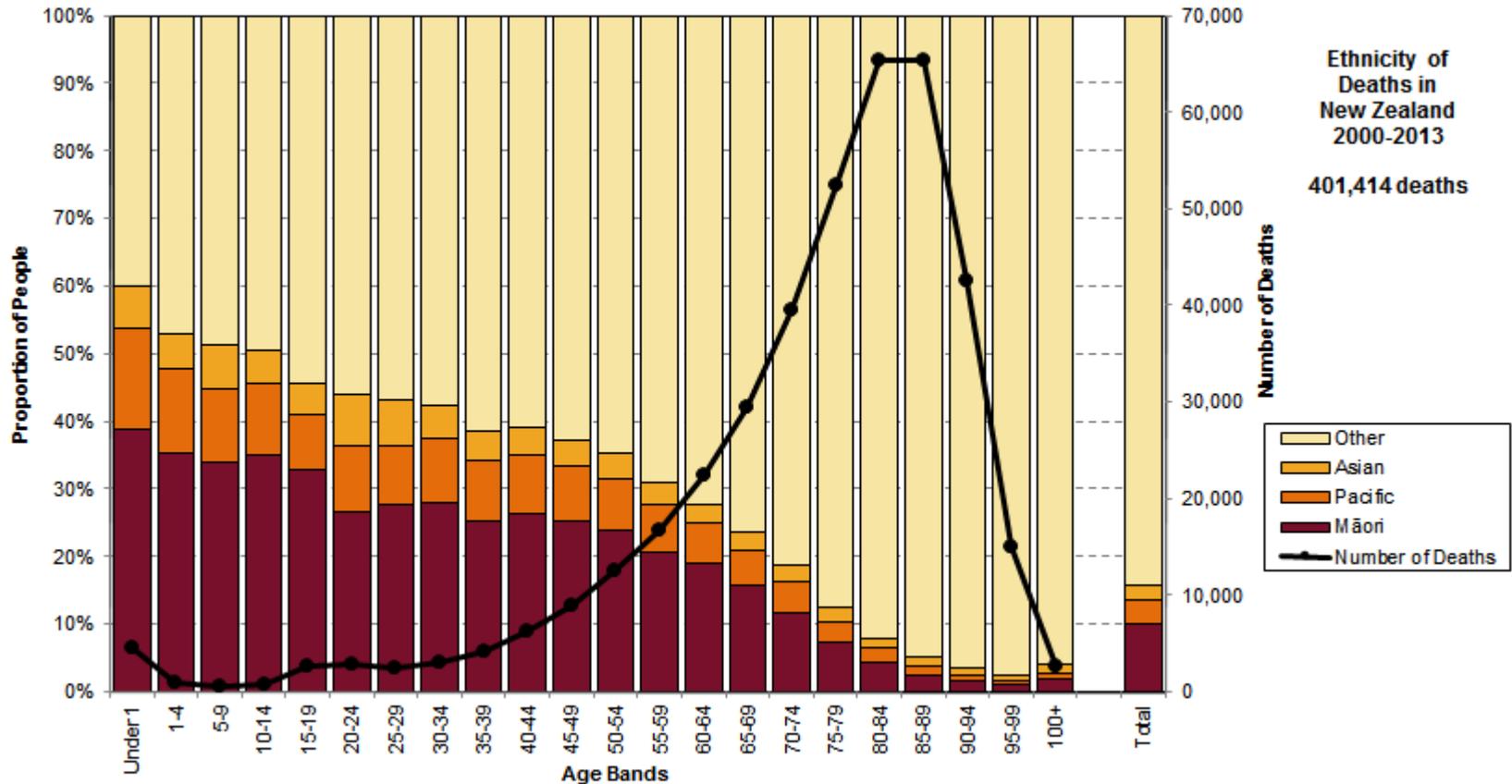
# Ethnicity of Deaths in New Zealand 2000-2013



Small proportionate increases for Māori and Pacific deaths. More rapid increase in Asian deaths but off a very low base.



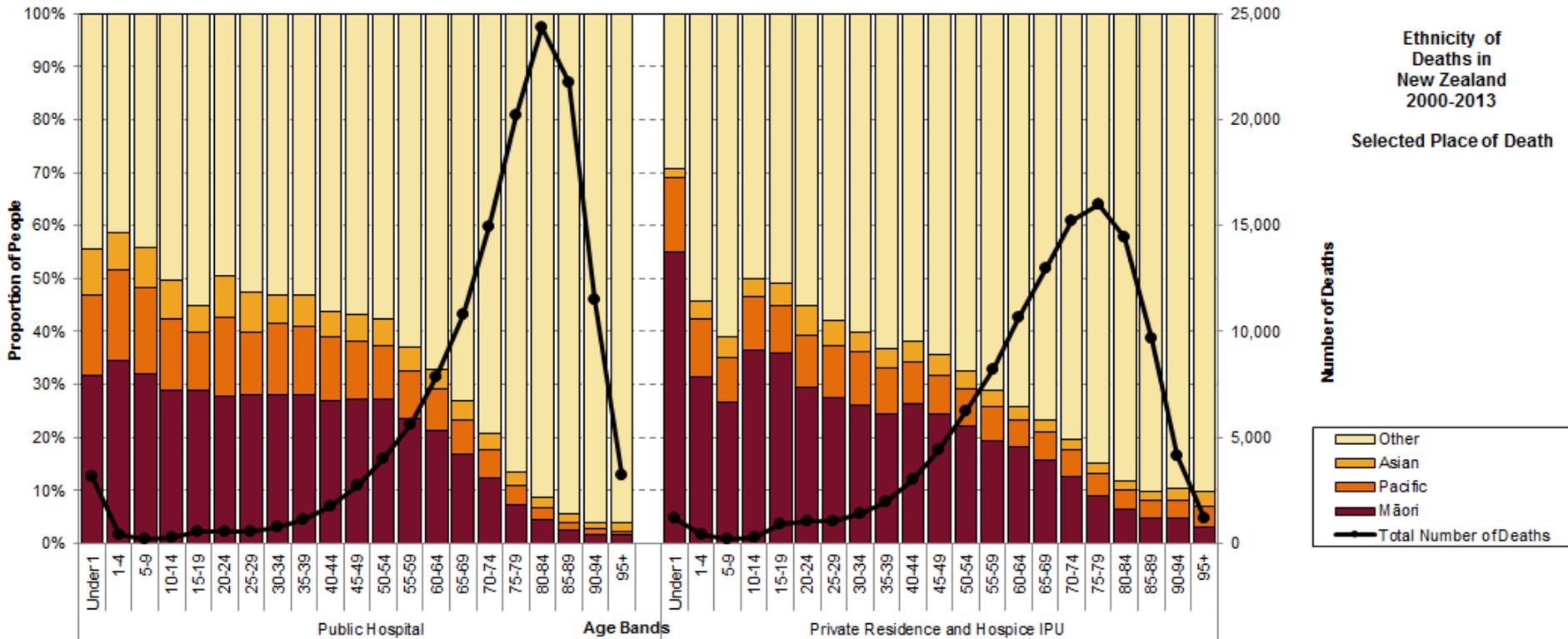
# Ethnicity of Deaths in New Zealand 2000-2013



Very strong pattern by age with proportionately many more Māori, Pacific and Asian deaths at younger ages.



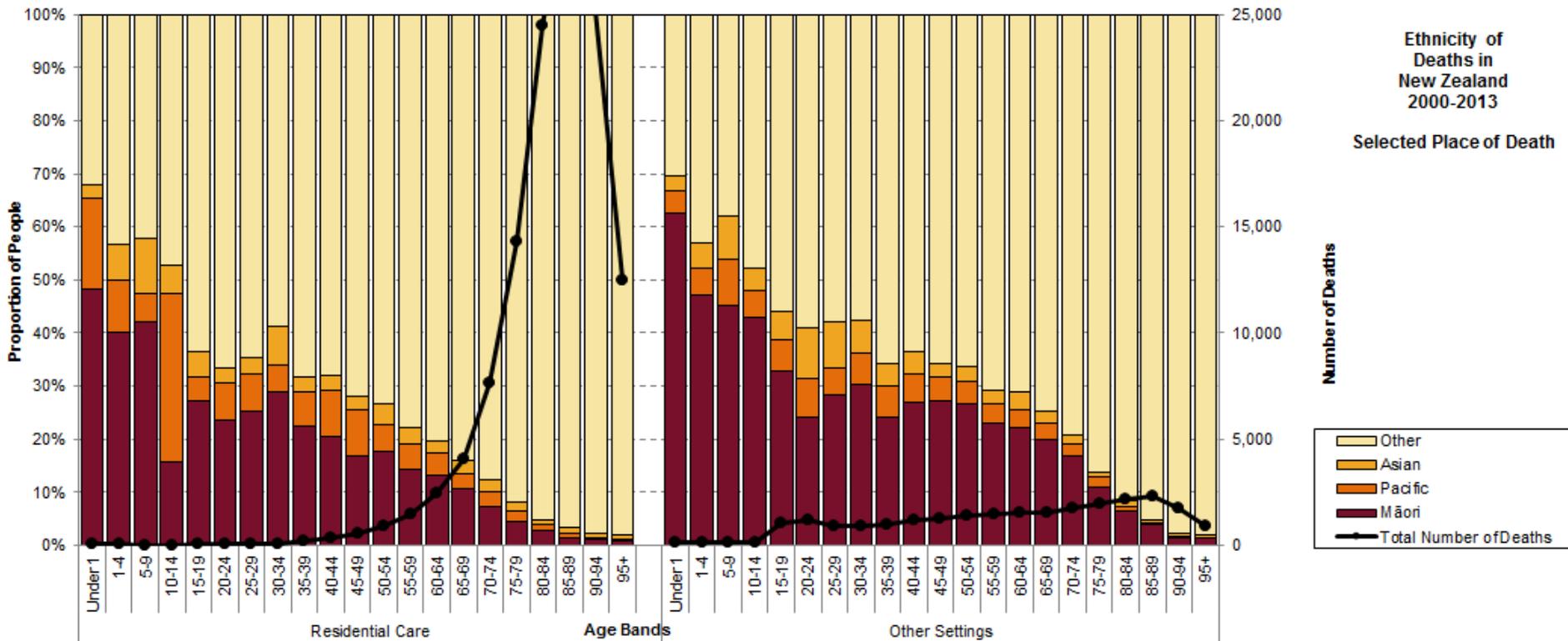
# Ethnicity of Deaths in Public Hospitals and Community



The strong wedge shape by age is apparent in both settings.



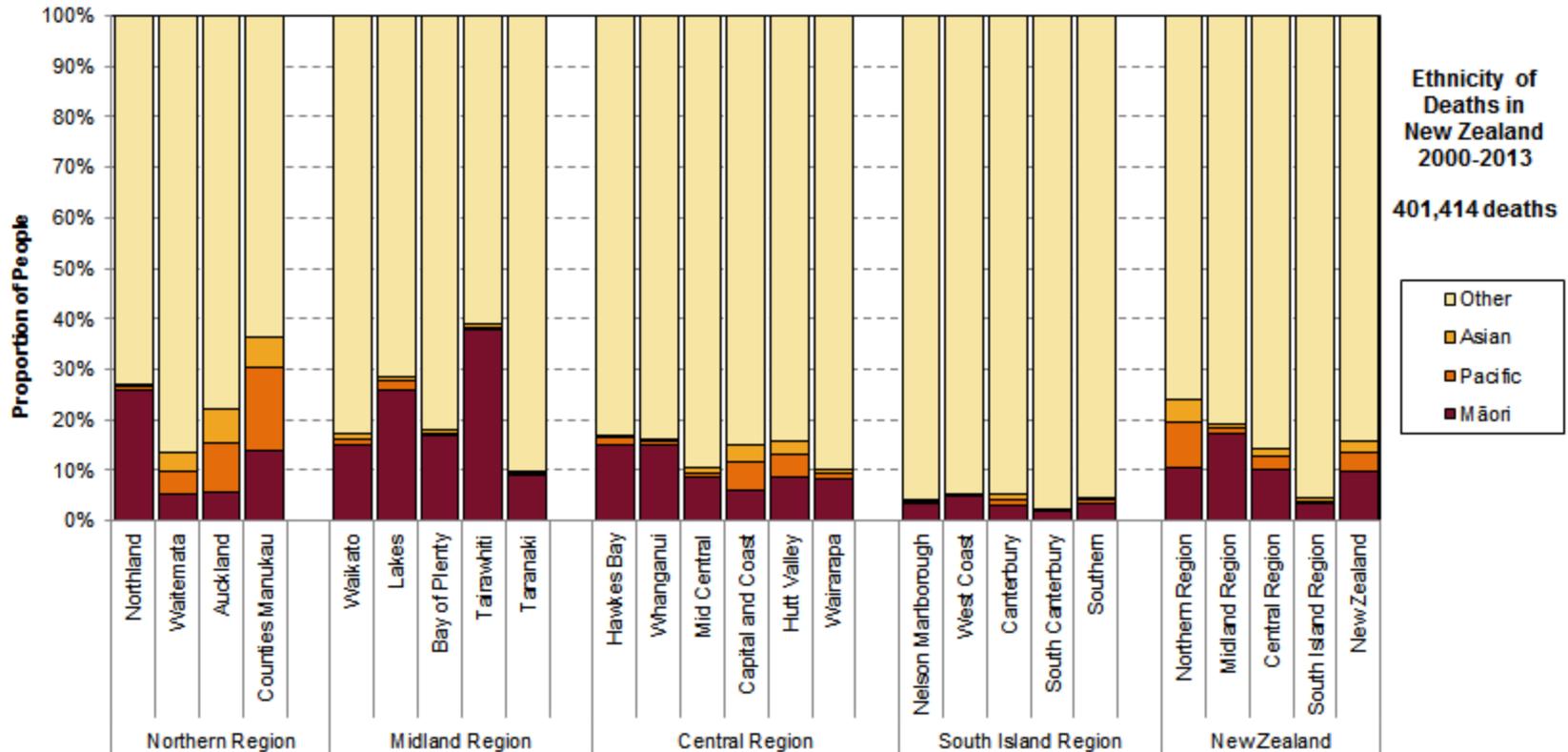
# Ethnicity of Deaths in Residential Care and Other Settings



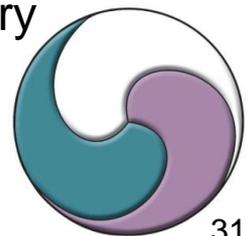
Again, the wedge shape is very strong in both settings. Note however very small numbers of deaths in residential care at younger ages.



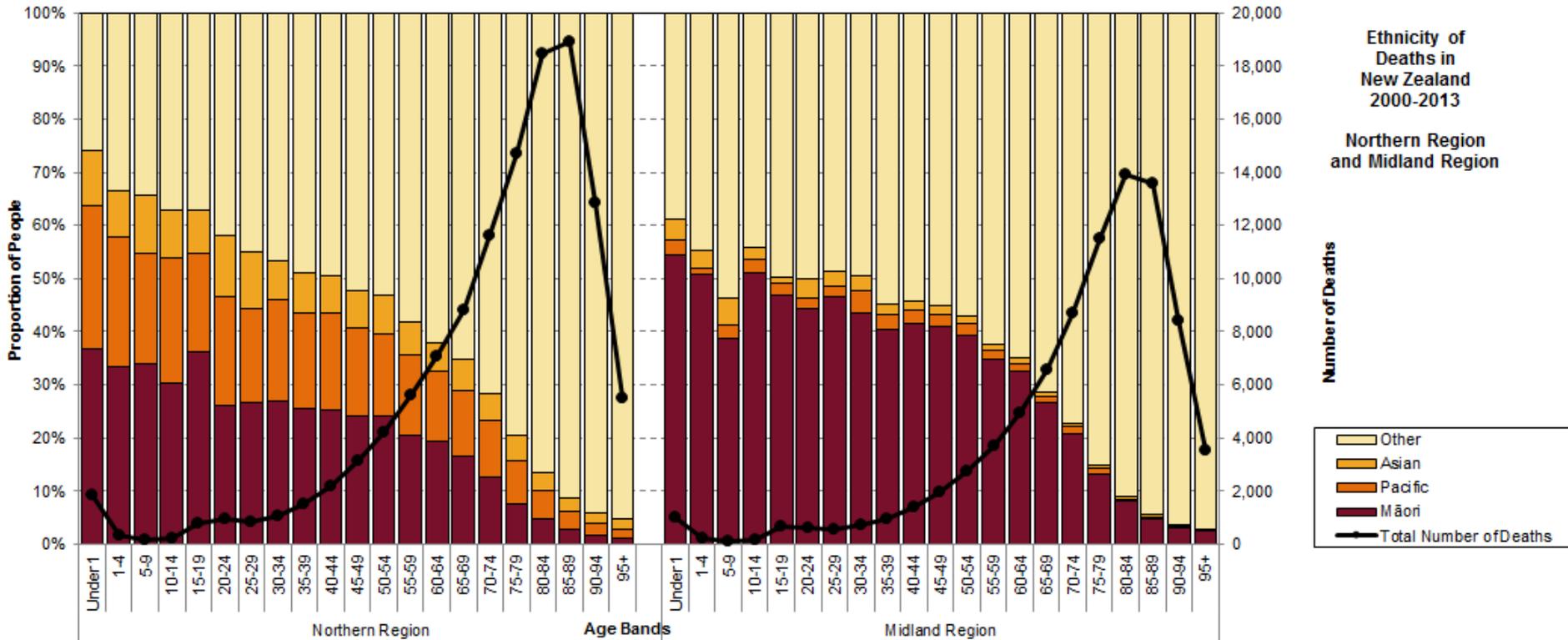
# Ethnicity of Deaths in New Zealand 2000-2013



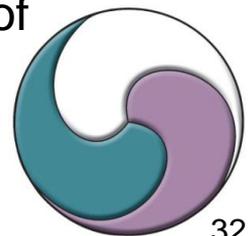
Vital to consider the ethnicity in each region and DHB as there are very large differences.



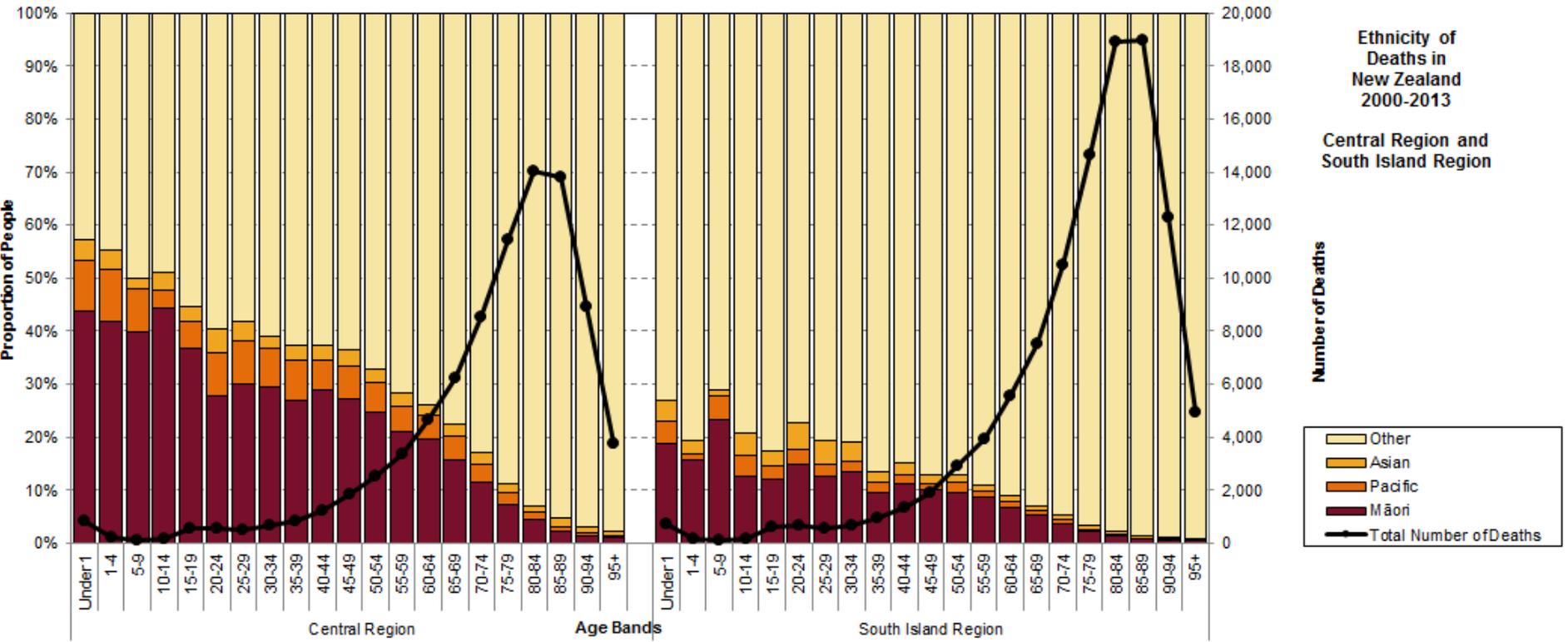
# Ethnicity of Deaths in Northern and Midland Regions



Northern region is the most ethnically diverse, with large proportions of Pacific and Asian lives.



# Ethnicity of Deaths in Central and South Island Regions



South Island region has historically been the least ethnically diverse, but recent changes in rural areas and for the Christchurch rebuild.



# **Ethnicity of Deaths**

## **Future Projections to 2038**

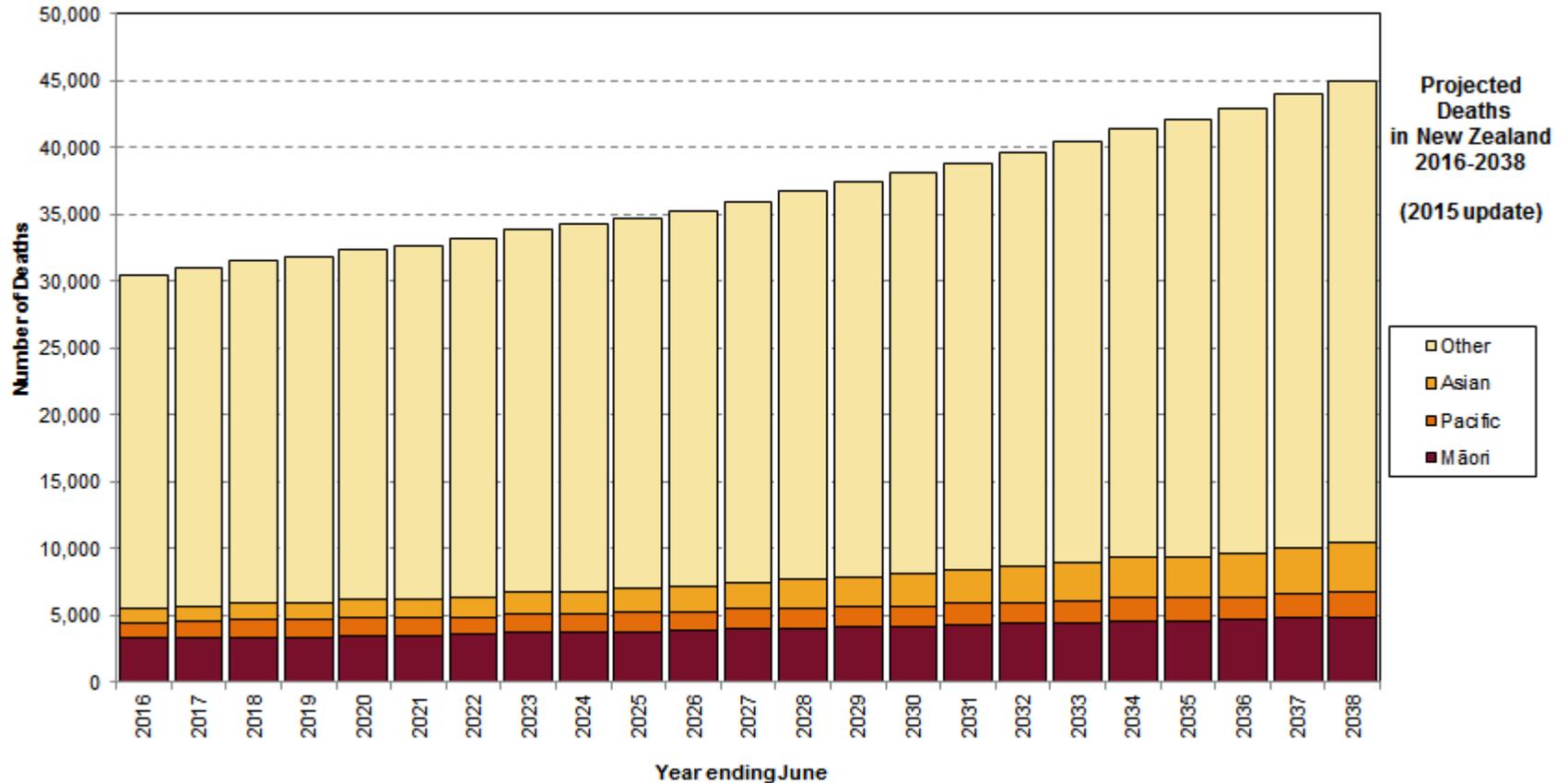


# Projections of Deaths to 2038

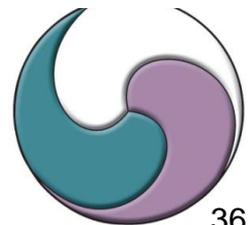
- There are projected to be **30,500** deaths in year to June 2016, with the **40,000** level each year being reached in 17 years in the year to **June 2033** (40,500 deaths).
- In the five years that follow, annual deaths increase by about 1,000 each year to reach **45,000** deaths a year in the year to **June 2038**, which is 22 years away.
- Thus over the 22 year-period, the number of deaths each year is projected to increase by **48%** from current levels.
  - Māori – increase by **48%**
  - Pacific – increase by **50%**
  - Asian – increase by **270%** (to 370% of 2016 levels)
  - Other – increase by **38%**



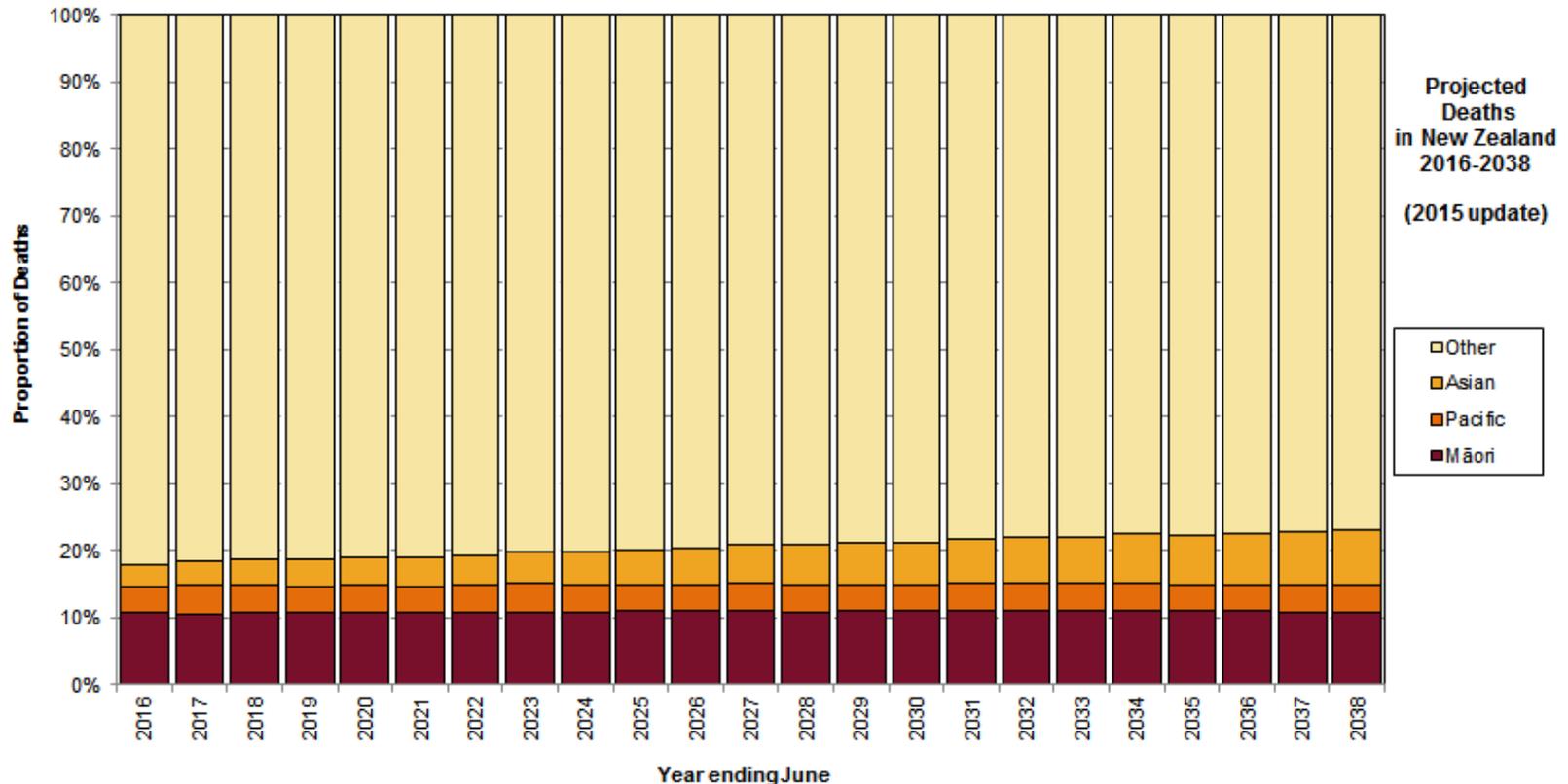
# Ethnicity Projected New Zealand Deaths 2016-2038



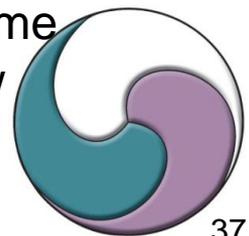
Deaths for all ethnicity groups are projected to increase in absolute numbers over the time period.



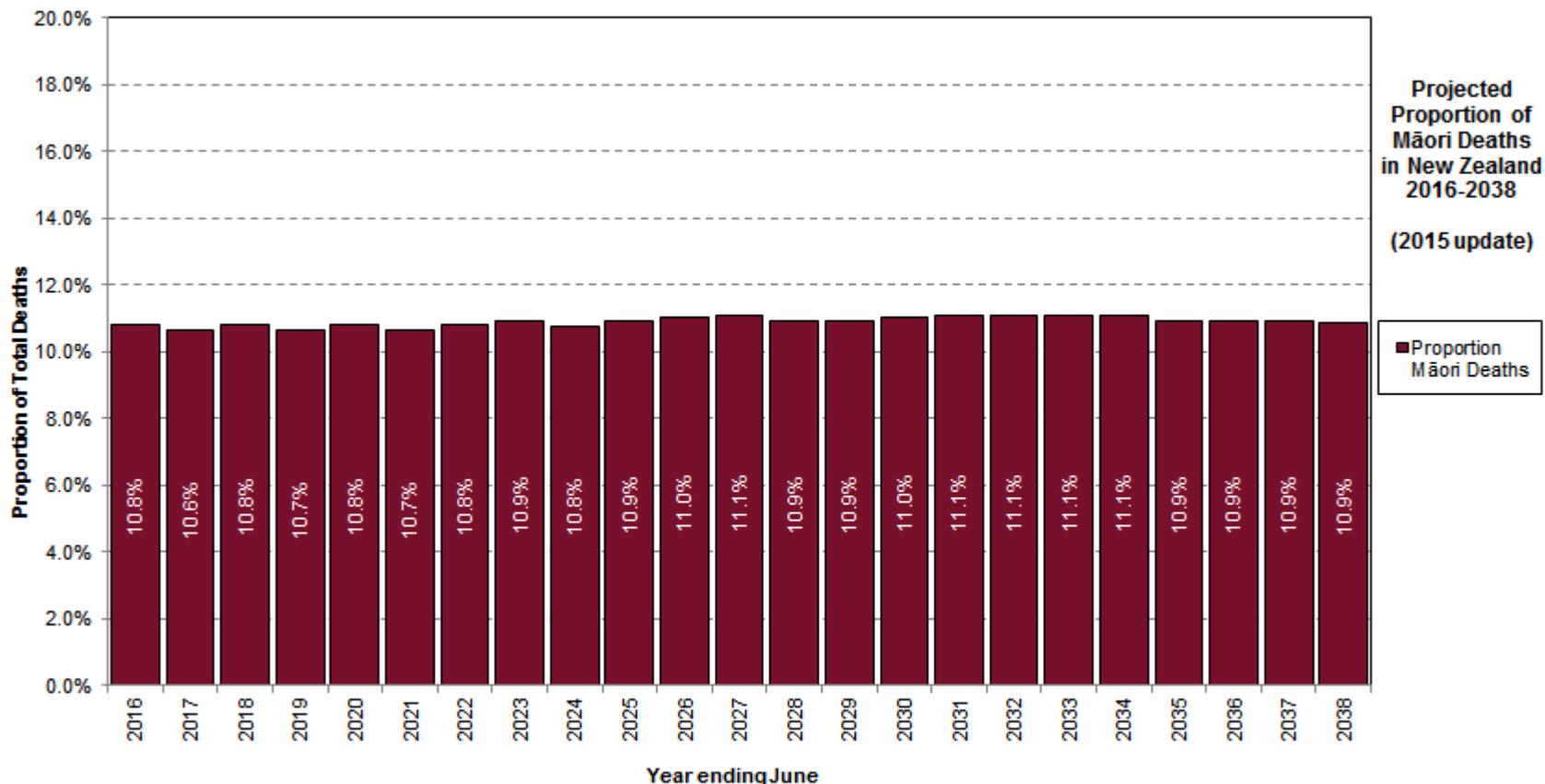
# Ethnicity Projected New Zealand Deaths 2016-2038



In proportional terms, Māori and Pacific deaths remain at roughly the same level throughout the period. Asian deaths increase substantially off a low base while Other deaths decrease proportionately.

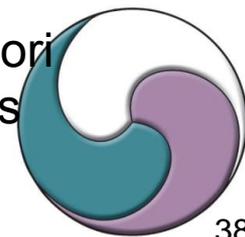


# Projected Proportion of Māori Deaths 2016-2038

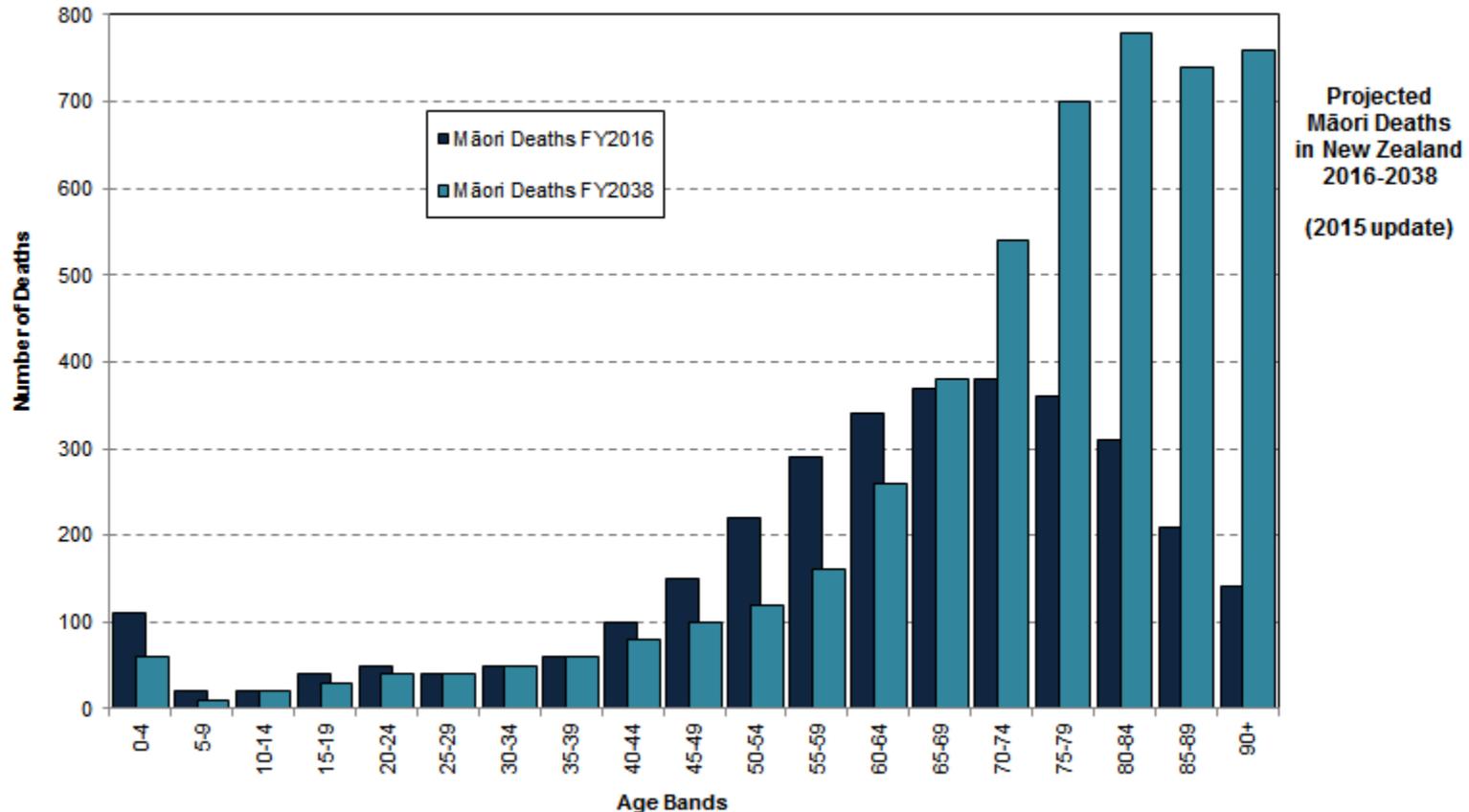


Despite a growing Māori population, over the period from 2016 to 2038 there is projected to be barely any change in the overall proportion of Māori deaths to total deaths in New Zealand. This is a reflection of Māori deaths occurring increasingly at older ages.

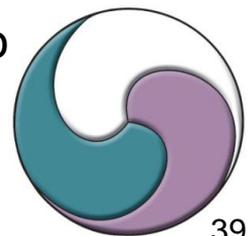
Source: Analysis of projections produced by Statistics New Zealand according to assumptions specified by the Ministry of Health, 2015 update.



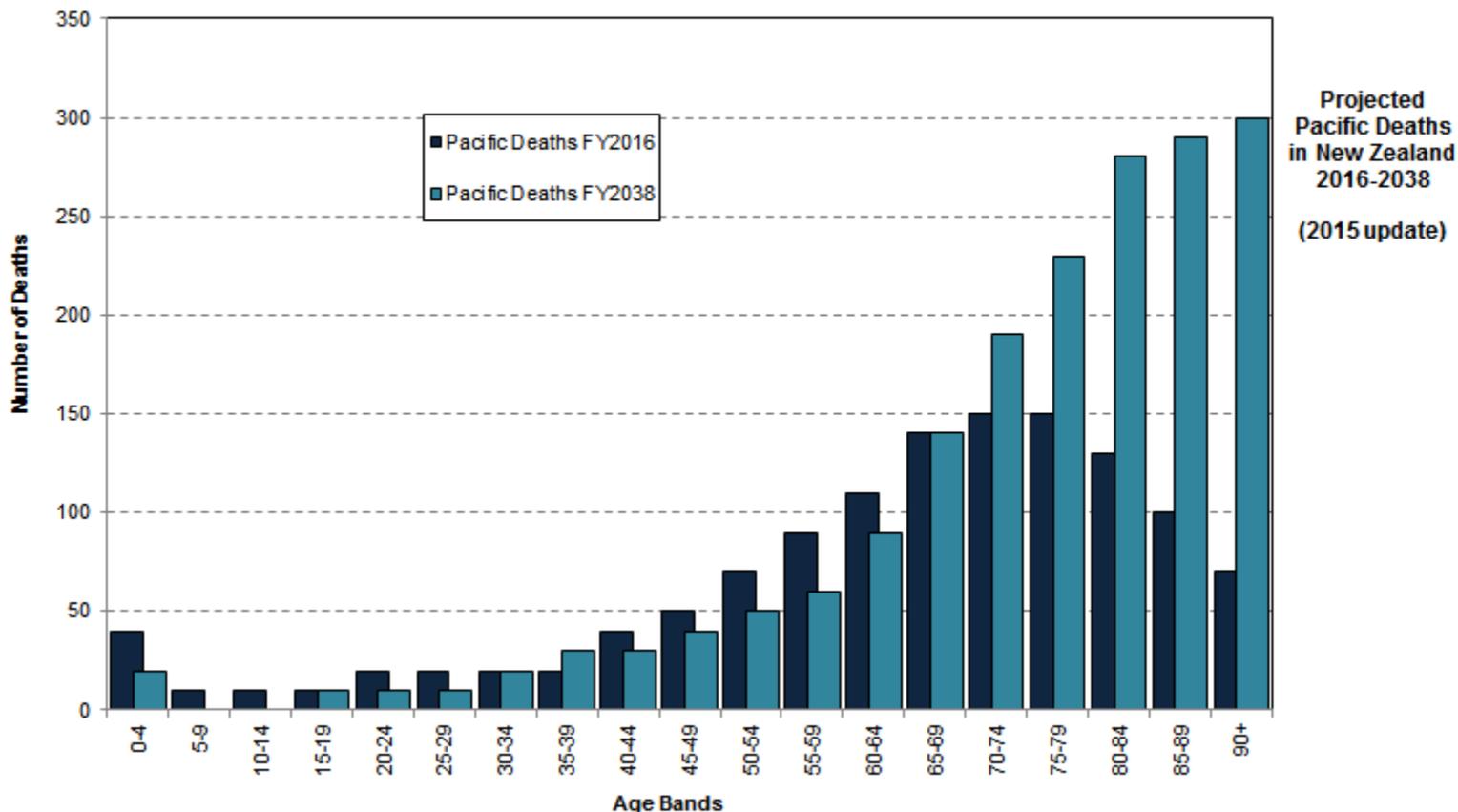
# Projected Māori Deaths FY2016 and FY2038



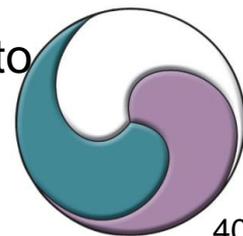
The projections show substantial ageing of Māori deaths over the period with many more deaths at the oldest ages. Māori deaths are projected to increase by **48%** from 2016 to 2038.



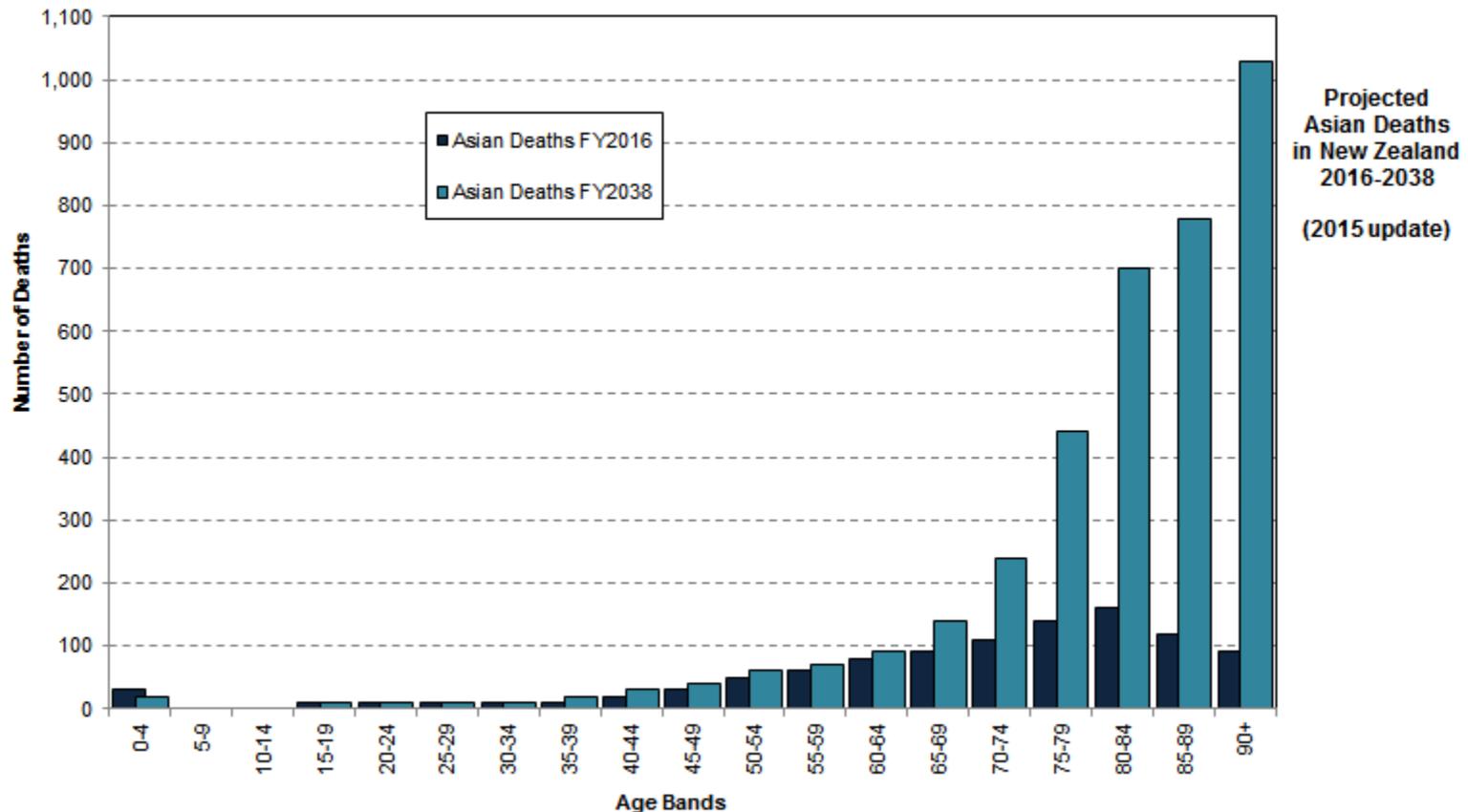
# Projected Pacific Deaths FY2016 and FY2038



The projections show substantial ageing of Māori deaths over the period with many more deaths at the oldest ages. Pacific deaths are projected to increase by **50%** from 2016 to 2038.

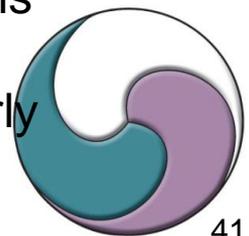


# Projected Asian Deaths FY2016 and FY2038

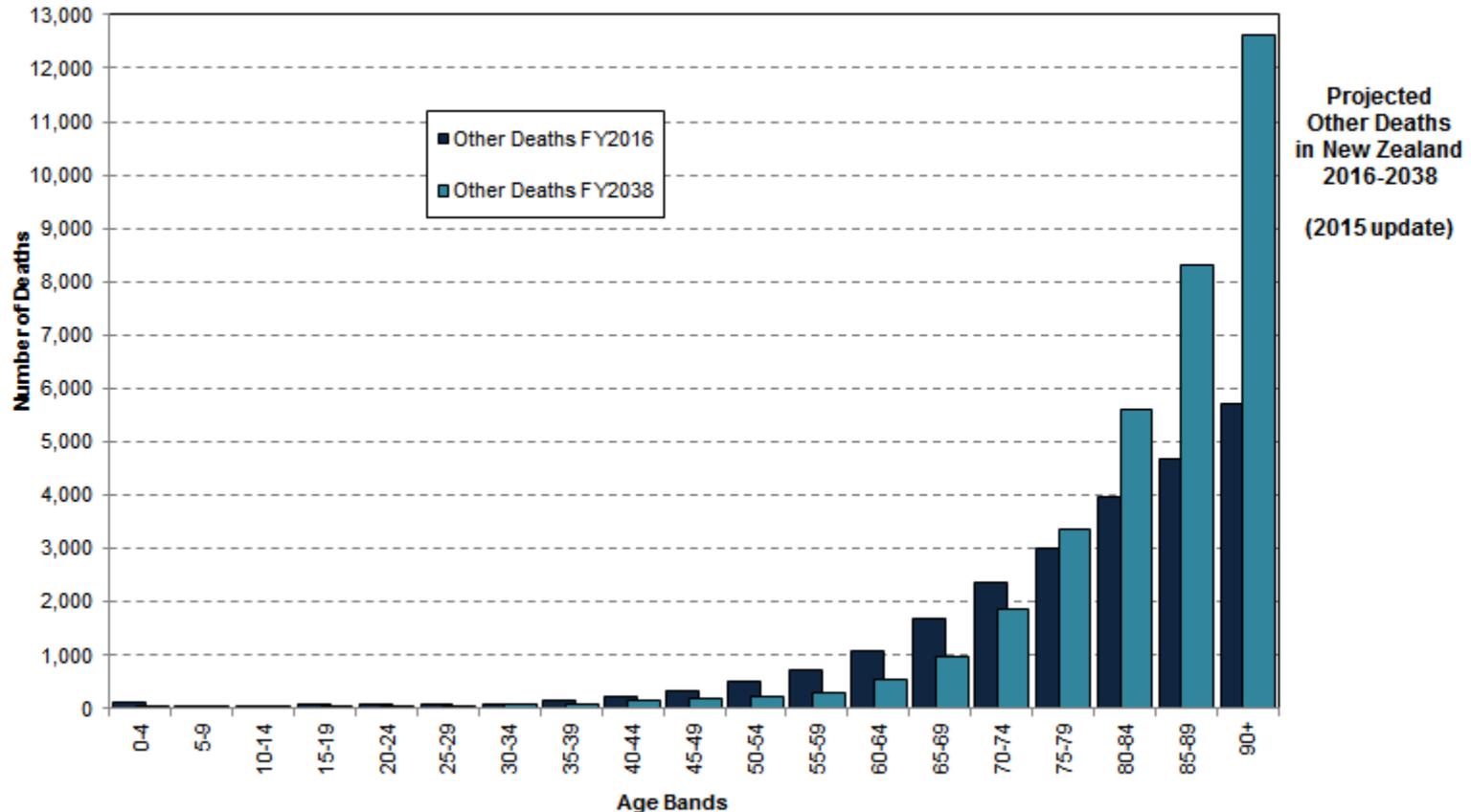


The projections show a very large increase in the number of Asian deaths by 2038. There is little change in shape at younger ages but many more deaths at the older ages. Asian deaths are projected to increase by nearly four times from 2016 to 2038 (**370%** of 2016 levels).

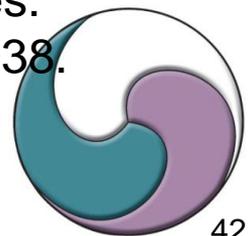
**Source:** Analysis of projections produced by Statistics New Zealand according to assumptions specified by the Ministry of Health, 2015 update.



# Projected Other Deaths FY2016 and FY2038



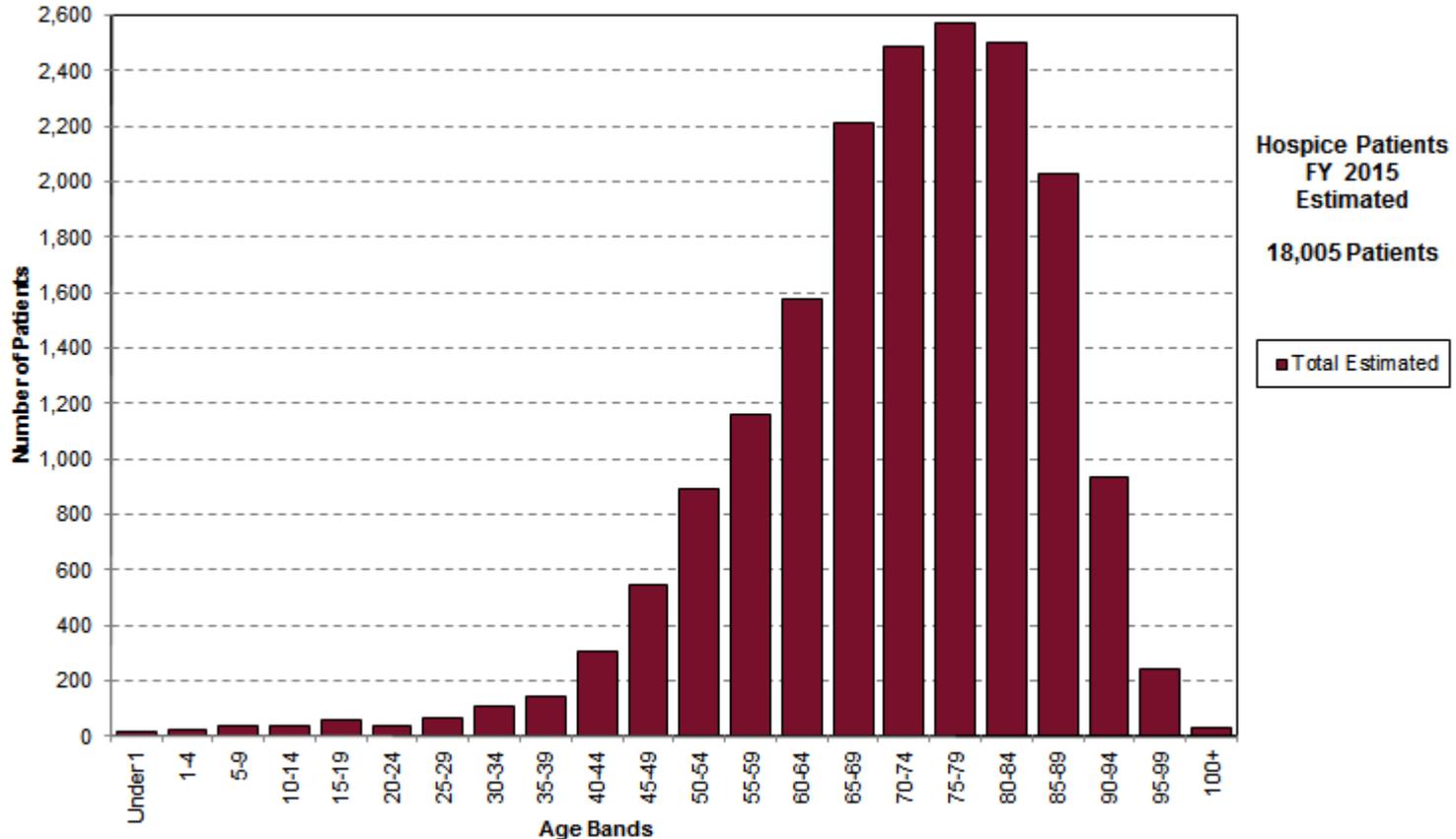
The shape becomes more steep and there are more deaths at older ages. Other ethnicity deaths are projected to increase by **38%** from 2016 to 2038.



# Ethnicity of Patients and Deaths



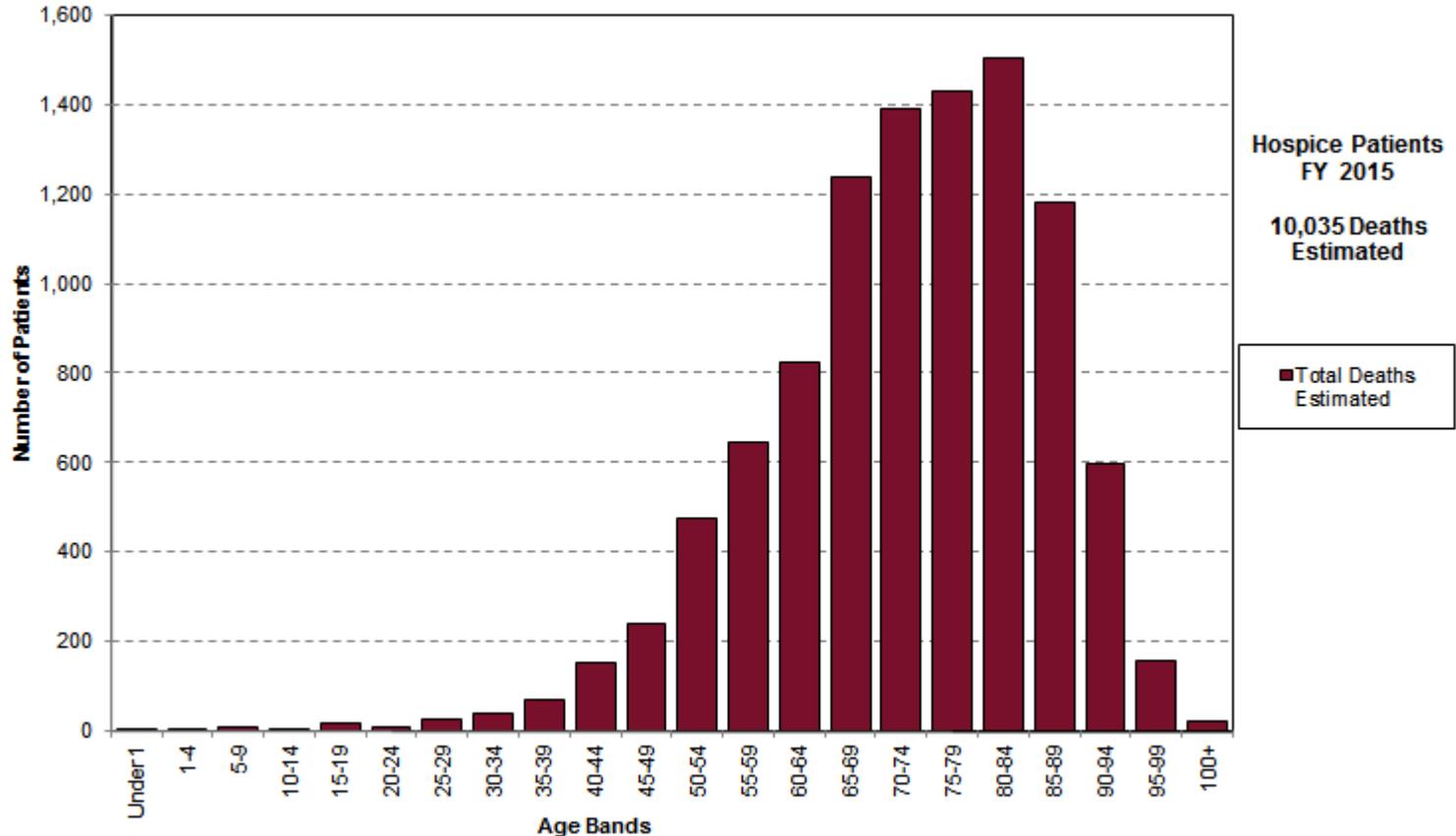
## Age of Hospice Patients FY2015



Best estimate we have of hospice patients by age bands at a national level, in order to compare to projected and actual deaths in New Zealand.



## Deaths in FY2015



Best estimate we have of deaths of hospice patients by age bands at a national level, in order to compare to projected and actual deaths in New Zealand.

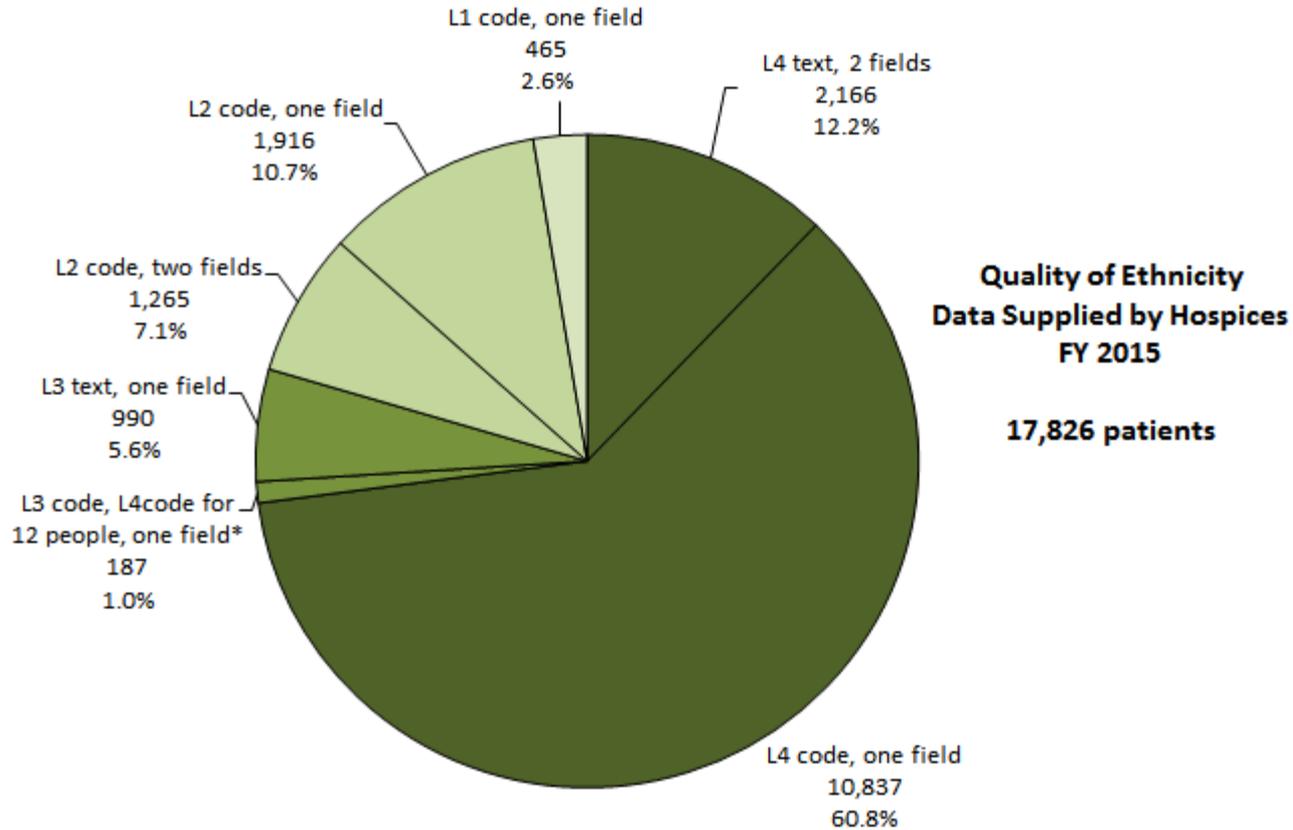


## Data Quality FY2015: Ethnicity

- **All 28 hospices** submitting data provided ethnicity information
- Many different ways of storing and submitting ethnicity (analysis follows)
- No hospice is yet submitting in the HISO-required format
  - Level 4 code and six possible fields for ethnicity
- Only two hospices submitted multiple ethnicity fields.
  
- **For 73% of hospice patients, Level 4 ethnicity codes were supplied.**
  
- This will be improving: from July 2015 (i.e. FY2016 data), 19 of 29 hospices, (61% of hospice patients), have been collecting to the full HISO standards of six fields and Level 4 codes.



## Quality of Ethnicity Data Supplied FY2015



All hospices were able to submit at least one ethnicity field.

**For 72.9% of hospice patients, Level 4 ethnicity was supplied.** Level 3 was 6.6%, Level 1 was 17.8% and only 2.6% was at Level 1. From FY2016, expect 61% to be fully compliant with HISO standard.



Level 0 Ethnicity	Level 1 Ethnicity	Level 4 Ethnicity	Other	European	European nfd New Zealand European Australian British nec British nfd English Irish Scottish Welsh Dutch German Greek Italian Afrikaner American Canadian Danish European nec Romanian South African nec Swedish Ukrainian Polish
Māori	Māori	Māori			
Pacific	Pacific Peoples	Cook Islands Māori nfd Rarotongan Fijian Niuean Kiribati Pacific Peoples nec Papua New Guinean Pacific Peoples nfd Samoan Tokelauan Tongan			
Asian	Asian	Asian nfd Chinese nec Chinese nfd Singaporean Chinese Taiwanese Anglo Indian Fijian Indian Indian nec Indian nfd Korean Asian nec Cambodian Filipino Indonesian Laotian Southeast Asian nec Thai Southeast Asian nfd Vietnamese	<h2 style="color: #800000;">Ethnicity of Hospice Patients and Families 2015</h2>		
 <div style="background-color: #800000; color: #FFD700; padding: 10px; border-radius: 15px; text-align: center; margin-top: 20px;"> <p>61 different ethnicity groups</p> </div>			MELAA	African nfd Latin American nfd Iranian/Persian Middle Eastern nfd Syrian	
			Other Ethnicity	New Zealander Other Ethnicity nec	
			Residual Categories	Not Stated	

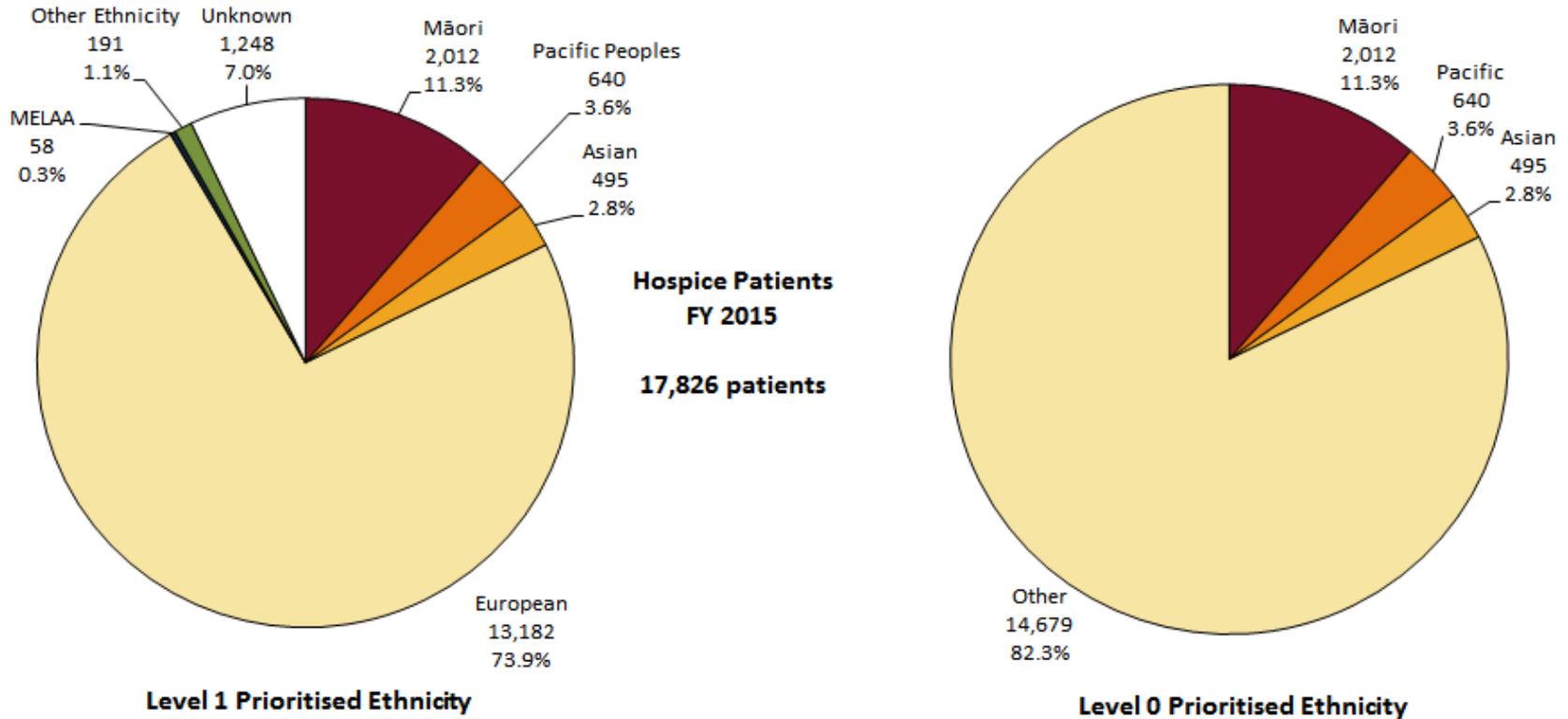
## Ethnicity of Total Patients FY2015

Total Patients in FY 2015									
Level 0	Level 1	Level 3	Proportion						
<b>Māori</b>	<b>Māori</b>	Māori	11.3%	11.3%	11.3%				
<b>Pacific</b>	<b>Pacific Peoples</b>	Cook Islands Māori	0.5%	3.6%	3.6%				
		Fijian	0.3%						
		Niuean	0.2%						
		Other Pacific Peoples	0.1%						
		Pacific Peoples nfd	0.2%						
		Samoan	1.5%						
		Tokelauan	0.1%						
		Tongan	0.7%						
		<b>Asian</b>	<b>Asian</b>			Asian nfd	0.2%	2.8%	2.8%
Chinese	1.2%								
Indian	0.7%								
Japanese	0.0%								
Korean	0.0%								
Other Asian	0.3%								
Cambodian	0.0%								
Filipino	0.0%								
Other Southeast Asian	0.1%								
Southeast Asian nfd	0.0%								
Vietnamese	0.0%								
<b>Other</b>	<b>European</b>			European nfd	8.2%	73.9%	82.3%		
				New Zealand European	59.4%				
		Australian	0.1%						
		British and Irish	0.9%						
		Dutch	0.1%						
		German	0.0%						
		Greek	0.0%						
		Italian	0.0%						
		Other European	5.2%						
		Polish	0.0%						
	<b>MELAA</b>	African	0.1%	0.3%					
		Latin American	0.0%						
		Middle Eastern	0.1%						
	<b>Other Ethnicity</b>	Other Ethnicity	1.1%	1.1%					
		<b>Residual Categories</b>	Don't Know	0.1%	7.0%				
	Not Stated		6.9%						
<b>Total</b>			<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>				

**Data Source:** Combined FY 2015 data;  
 28 of 29 hospices giving 99% coverage.



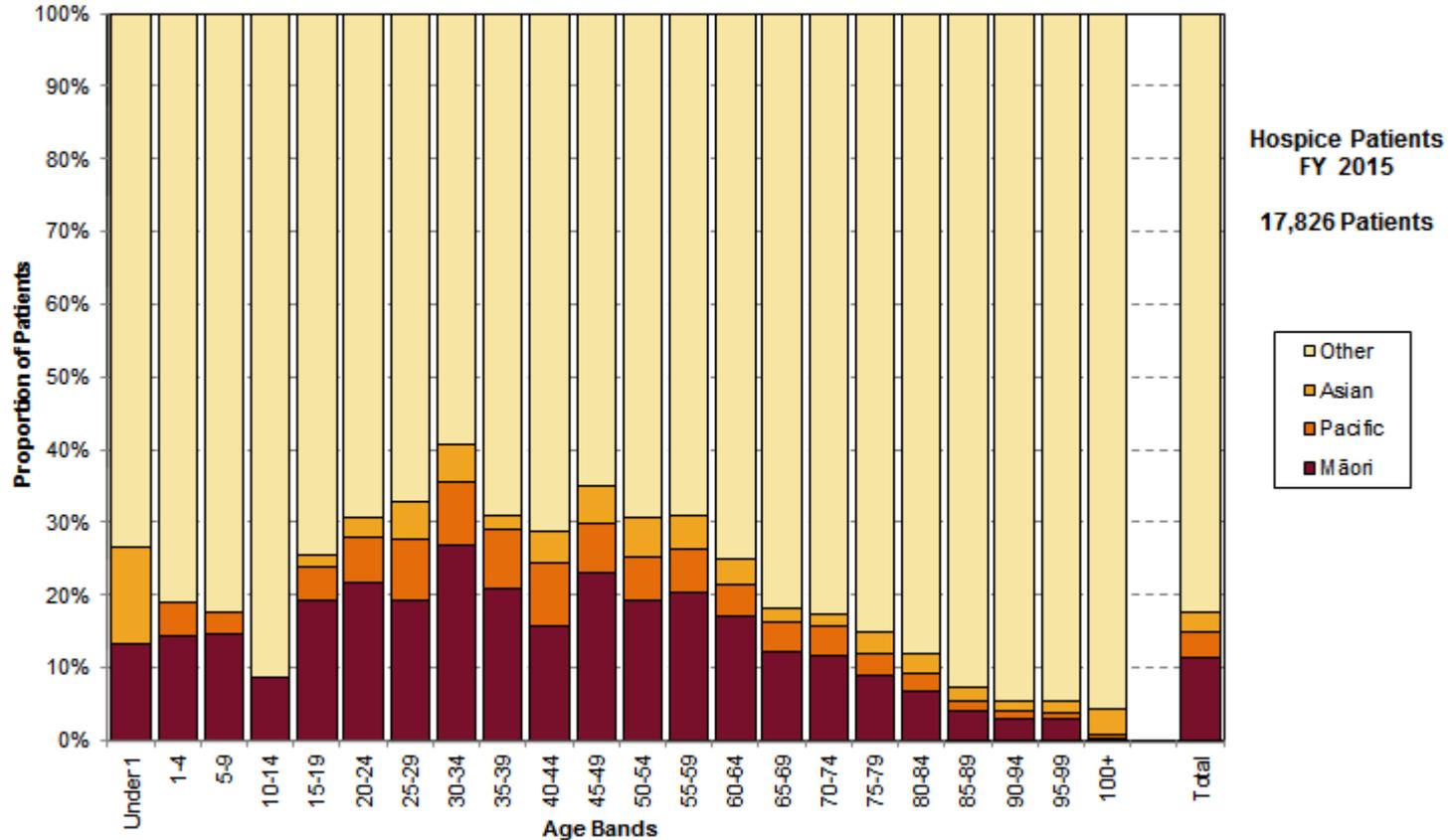
## Ethnicity of Total Patients FY 2015



Prioritised in the order Māori, Pacific, Asian, Other (or European) in order to compare with Statistics NZ projections for the Ministry of Health.



## Ethnicity by Age Bands of Total Patients FY 2015

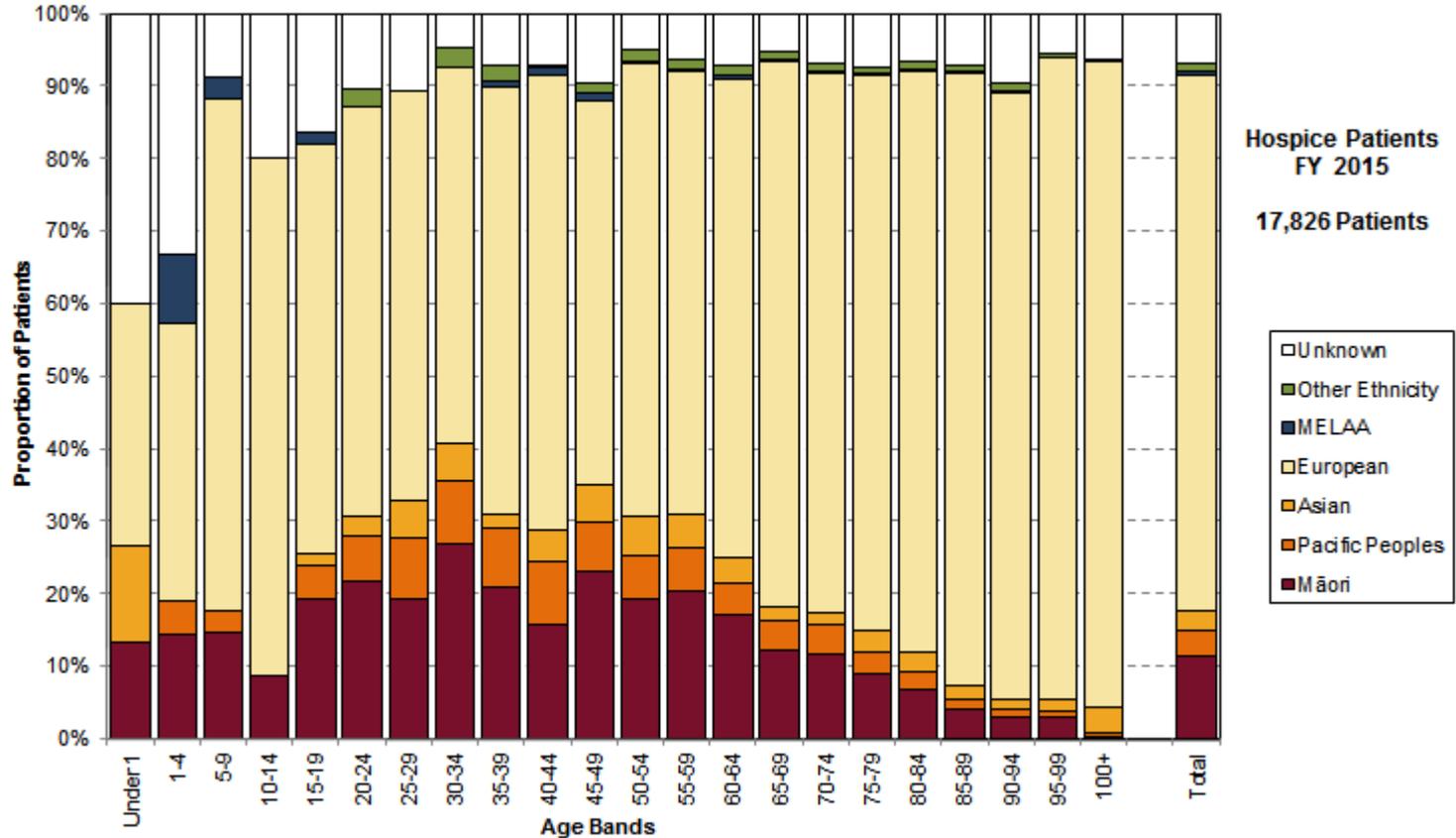


At Level 0 Ethnicity, it seems as if the proportion of Māori, Pacific and Asian is lower at the youngest ages. Although there are very few patients at these ages, this pattern is counter-intuitive.



Data Source: Combined FY 2015 data; 28 of 29 hospices giving 99% coverage.

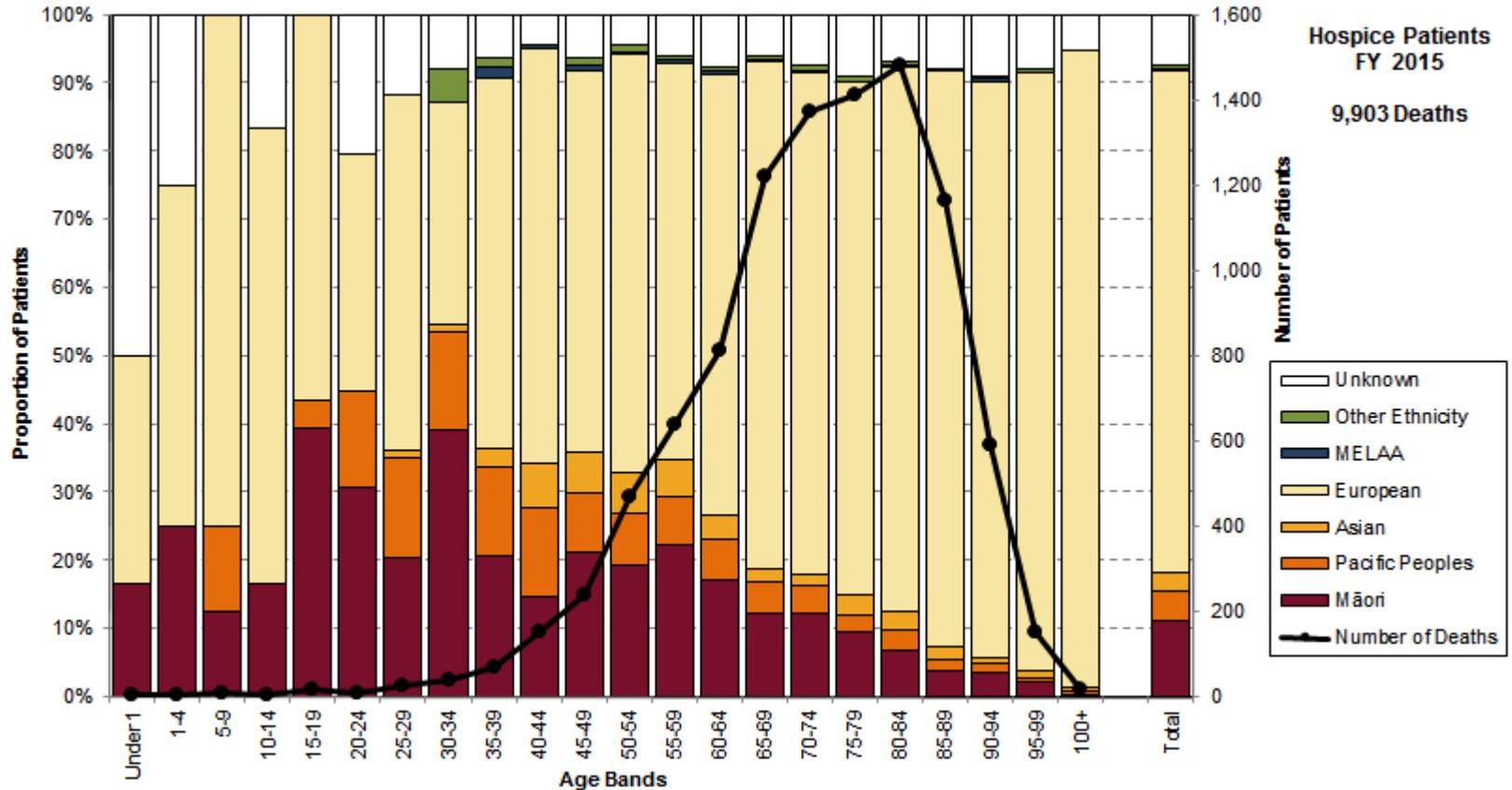
## Ethnicity by Age Bands of Total Patients FY 2015



At Level 1 Ethnicity, we can see the huge impact of the unknown (Don't Know, Not Stated) ethnicity at the youngest ages. Need to capture ethnicity more completely before drawing conclusions at the younger ages.



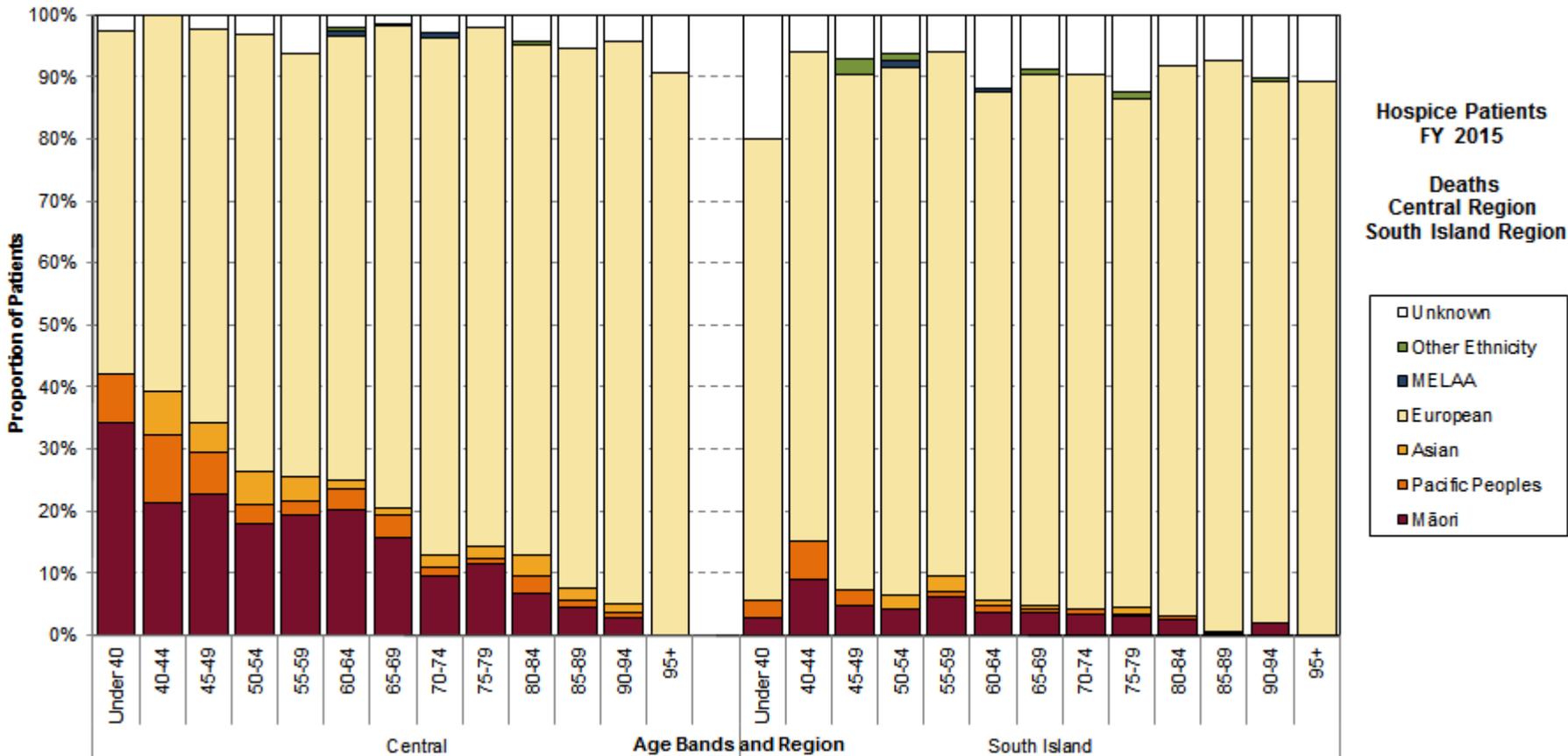
## Ethnicity by Age Bands of Deaths FY 2015



Some differences between ethnicity of patients and deaths. Generally, somewhat higher proportions of Māori, Pacific Peoples and Asian lives. The number of deaths is shown in each age band.



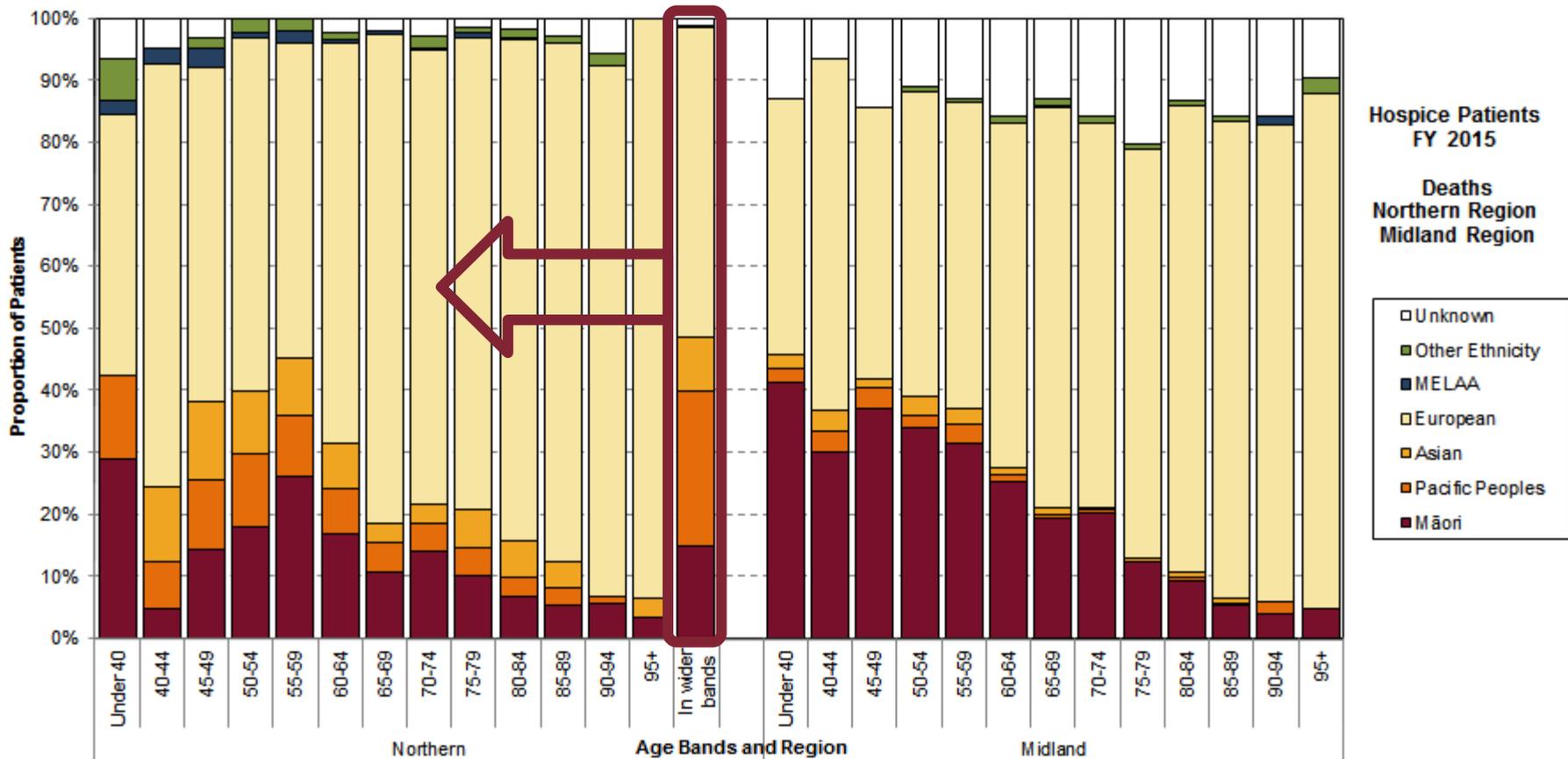
## Deaths in FY2015: Northern and Midland Regions



Central Region has the lowest proportion of Unknown ethnicity. South Island Region has low proportions Māori, Pacific Peoples and Asian deaths, as expected.



## Deaths in FY2015: Northern and Midland Regions



Note the huge impact one large hospice has for the Northern Region figures. Midland Region has the highest proportion of ethnicity not supplied.



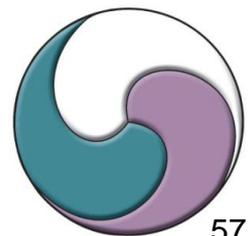
# Ethnicity

Why does collecting matter?



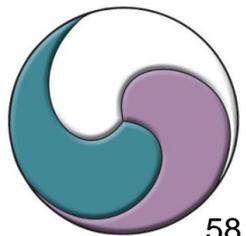
# Major Uses of Ethnicity Data

- to monitor and report changes and **disparities in outcomes** among ethnic groups over time
- ....
- to assist in the delivery of services in a **culturally appropriate** way
- to **plan social services** which meet the special needs of ethnic groups, and
- to identify significant communities of interest for **liaison** and development purposes.

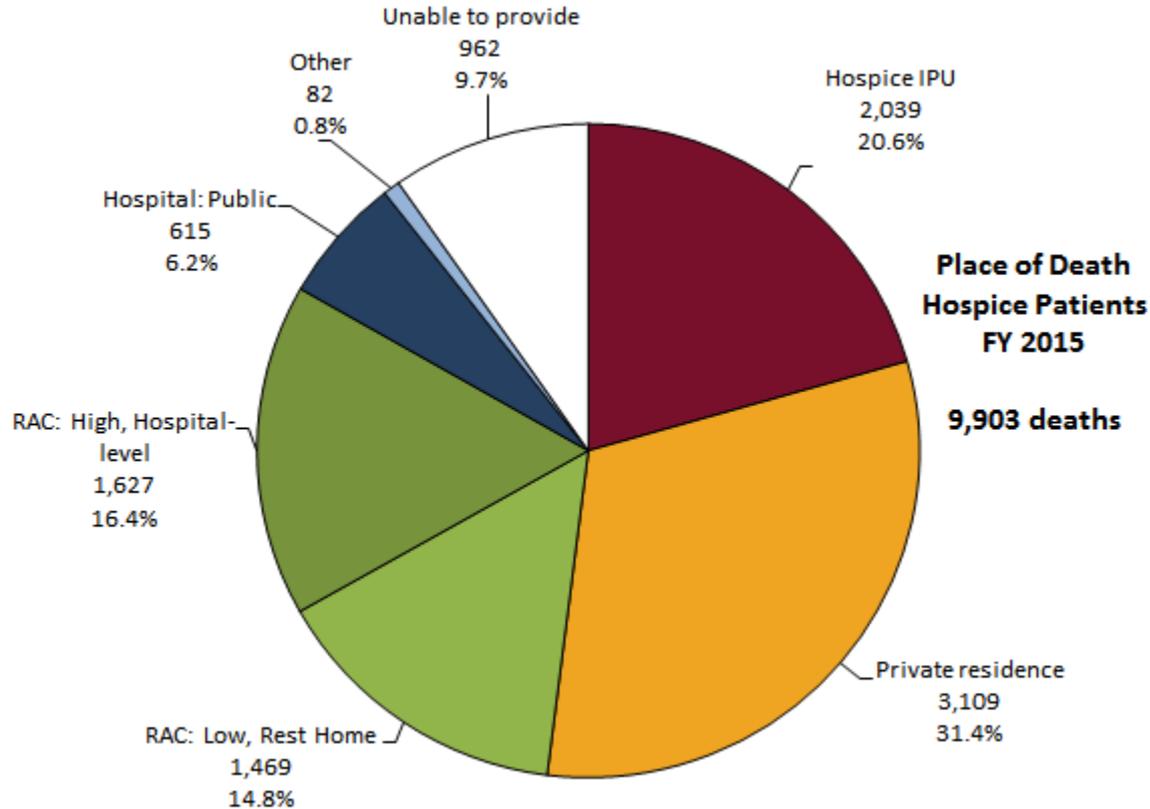


# Self-Identified Ethnicity in Primary Care

- A challenging new paper on ethnicity in primary care
- Reid, Jennifer, Cormack, Donna, & Crowe, Marie (2016). **The significance of socially-assigned ethnicity for self-identified Maori accessing and engaging with primary healthcare in New Zealand.** *Health (London)*, 20(2), 143-160.
- “Skin colour that was ‘white’ or was perceived to identify Māori as belonging to the ‘dominant’ New Zealand European ethnic group was reported as broadly advantageous and protective. In contrast, social-assignment as Māori was seen to be associated with risk of exposure to differential and discriminatory healthcare.”



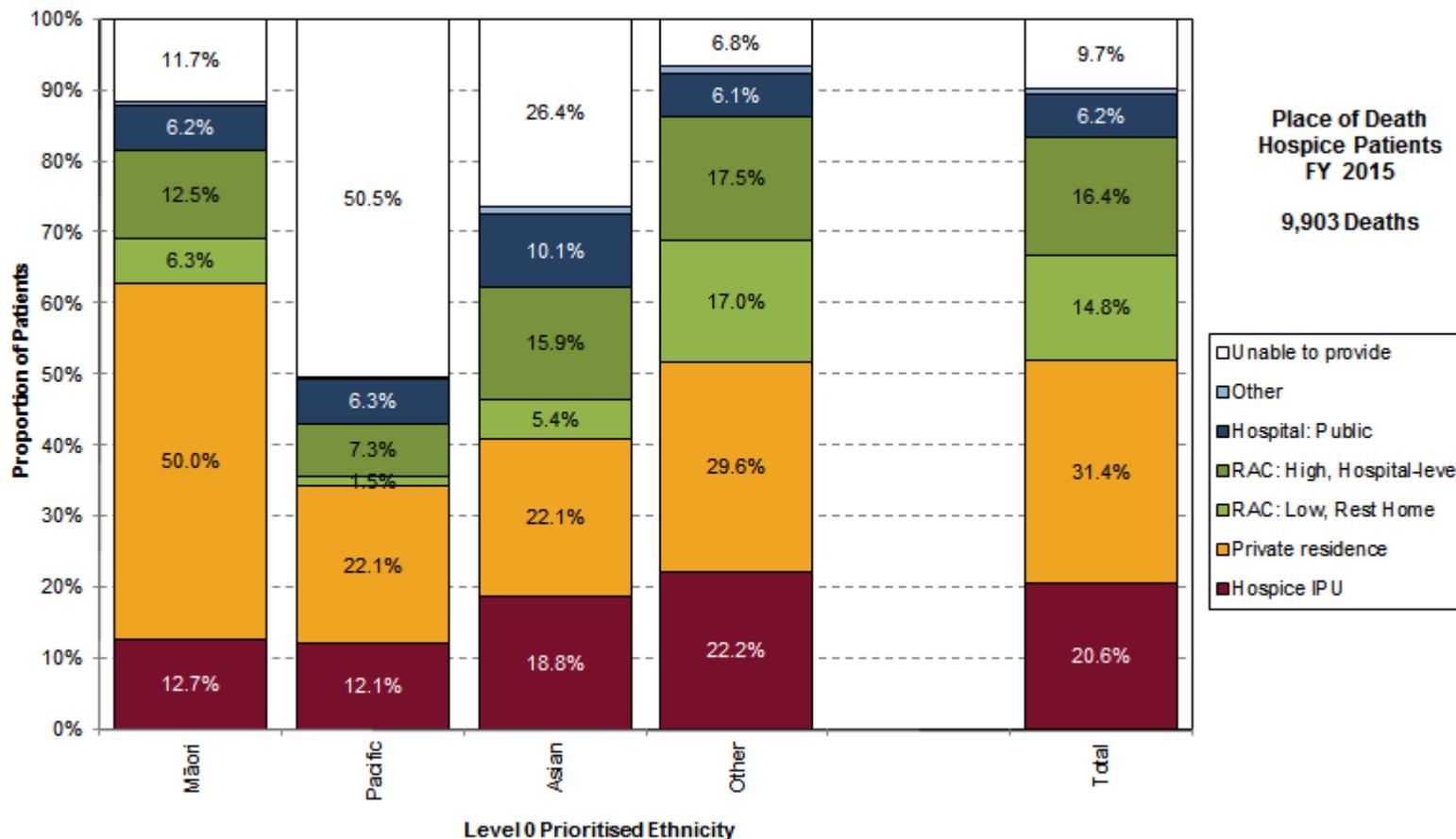
## Place of Death FY2015 Submitted



Two hospices did not supply place of death, representing nearly 10% of all deaths. The analysis includes some reallocation of pre-HISO “private hospital” to RAC hospital-level care. Definitions for collection are improving since the pilot study (FY2014).



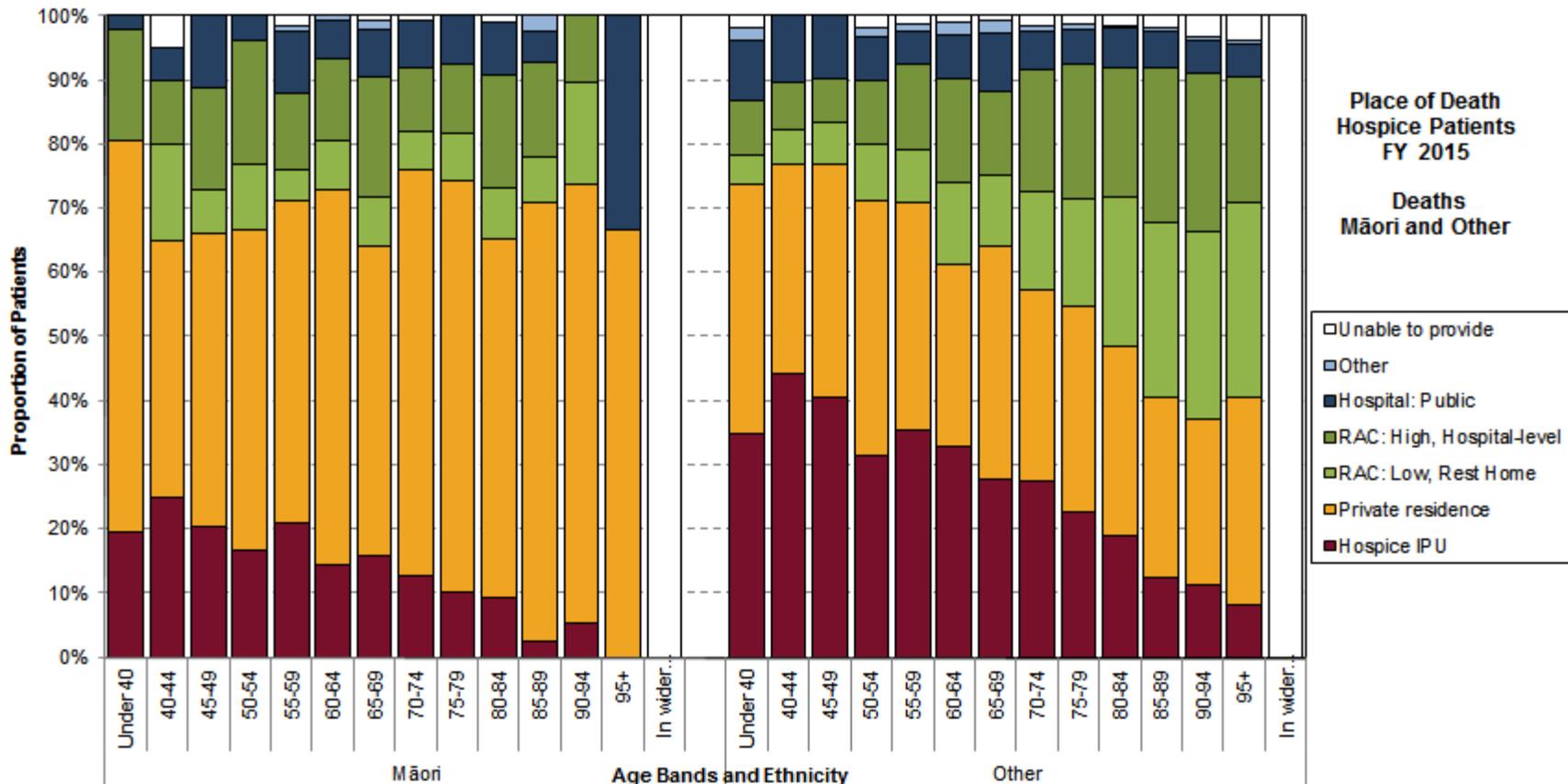
## Place of Death FY2015 by Ethnicity



We do not have place of death for 50% of Pacific deaths and 26% of Asian deaths. Impossible to draw conclusions for these two ethnicity groups.



## Place of Death FY2015 by Age and Ethnicity



Despite the missing data, a clear pattern by age with proportionally more Māori deaths in private residences and fewer in Hospice IPU or residential aged care.



# “Self-Identification” at Birth and Death

- It is not always possible to use self-identification in the collection of birth, death and sickness data.
- Proxy responses are collected in the case of **birth** data from parents. “In making their decision, parents may consider factors such as ancestry, how the child will be brought up, and what degree of cultural competency the child will attain. In making this assessment, standards are often set relative to the parents’ or grandparents’ strength of ethnic affiliation” (Statistics NZ, 2005, p. 4).
- The collection of ethnicity at **death** is typically supplied by the next-of-kin. “This is commonly a child, grandchild, spouse, sibling, parent or grandparent. While the same criteria may be applied for assessing ethnicity, a grandchild's judgement on the strength of ethnic affiliation, for example, is unlikely to match the criteria a grandparent would use” (Statistics NZ, 2005, p. 4).



# **Ethnicity**

**While you have the  
opportunity, ask.**





**Body, Mind, Soul  
Planet**

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