



Respiratory disease in New Zealand: an overview

2017 New Zealand Respiratory Conference

Lucy Telfar Barnard

He Kainga Oranga/Housing and Health Research Programme

University of Otago, Wellington

www.healthyhousing.org.nz



H E K A I N G A O R A N G A

The impact of respiratory disease in New Zealand: 2016 update

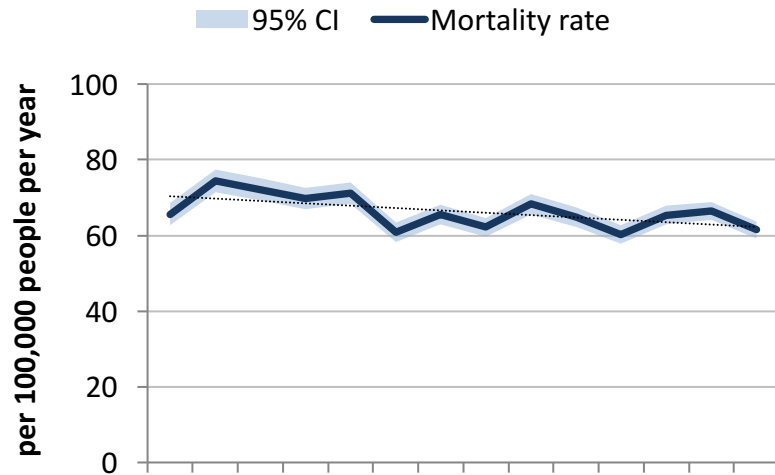
Dr Lucy Telfar Barnard
Jane Zhang

“By far the most relentless and disturbing pattern was the high degree of inequality, across both the socio-economic spectrum and different ethnic groups”

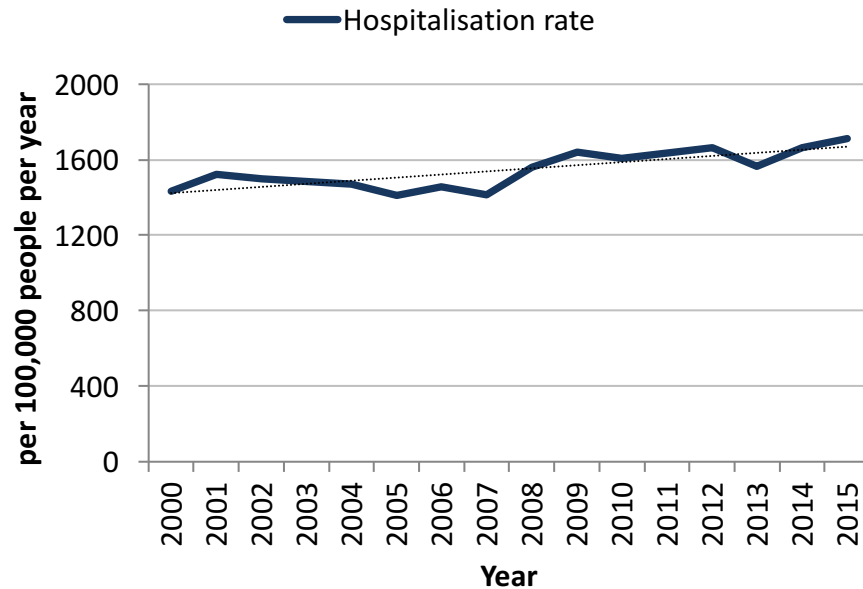
Respiratory disease known costs (\$million)

	Asthma <15 yrs	Adult Asthma	Total Asthma	Total respiratory	TOTAL
Work days lost	\$4.0	\$7.3	\$11.3		<i>\$11.3</i>
Doctors' visits	\$5.4	\$17.5	\$22.9	\$45.1	\$45.1
Prescriptions	\$4.1	\$31.0	\$35.0	\$74.3	\$74.3
ED/OP visits			\$53.2		<i>\$53.2</i>
Hospitalisations	\$7.0	\$9.9	\$16.9	\$362.8	\$362.8
YLDs*			\$482.3	\$1,248.3	\$1,248.3
Mortality	\$37.8	\$198.7	\$236.4	\$4,431.2	\$4,431.2
TOTAL	\$58.3	\$264.3	\$858.2	\$6,161.7	\$6,226.2

Total respiratory disease trends

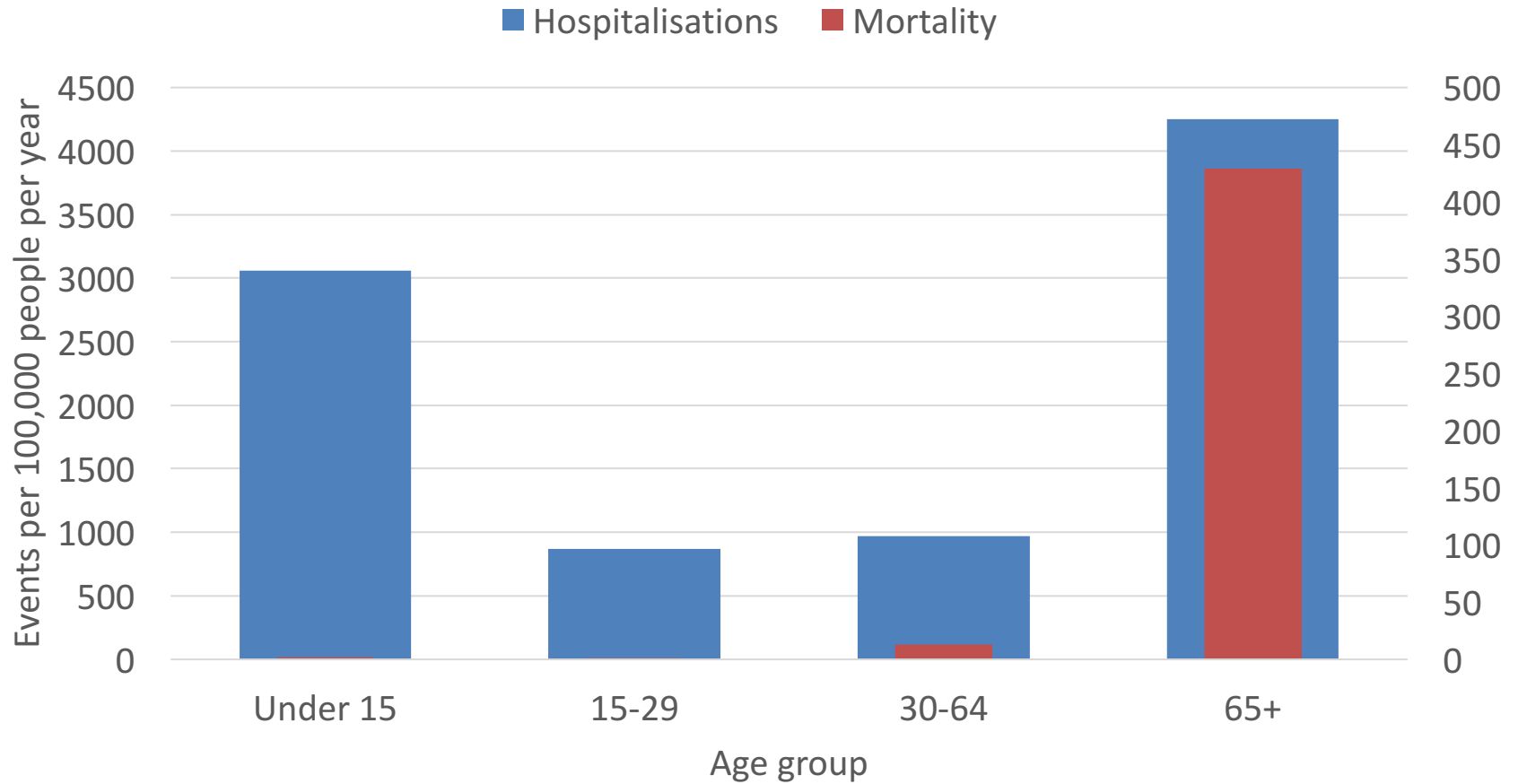


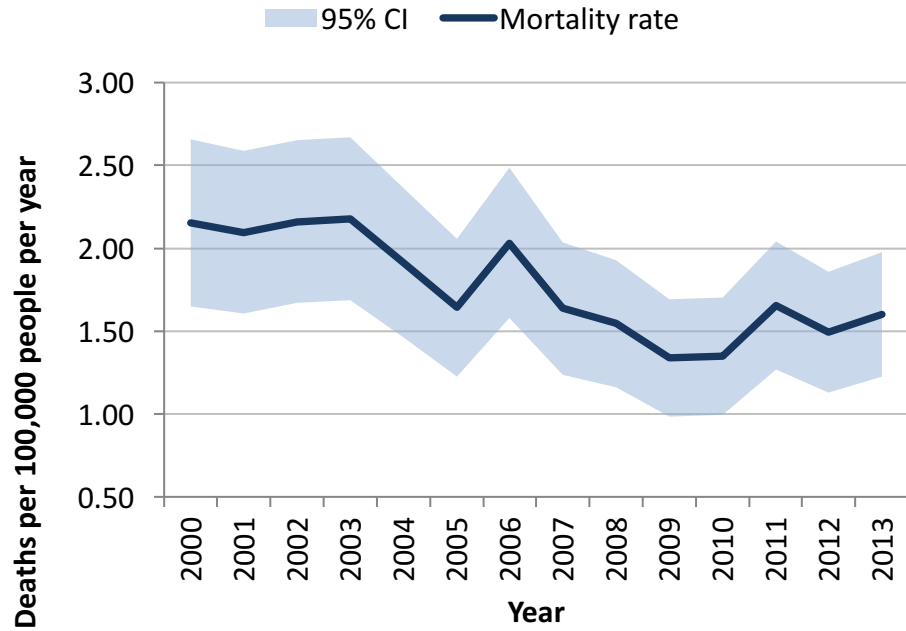
Mortality:
12% decrease 2000 -2013



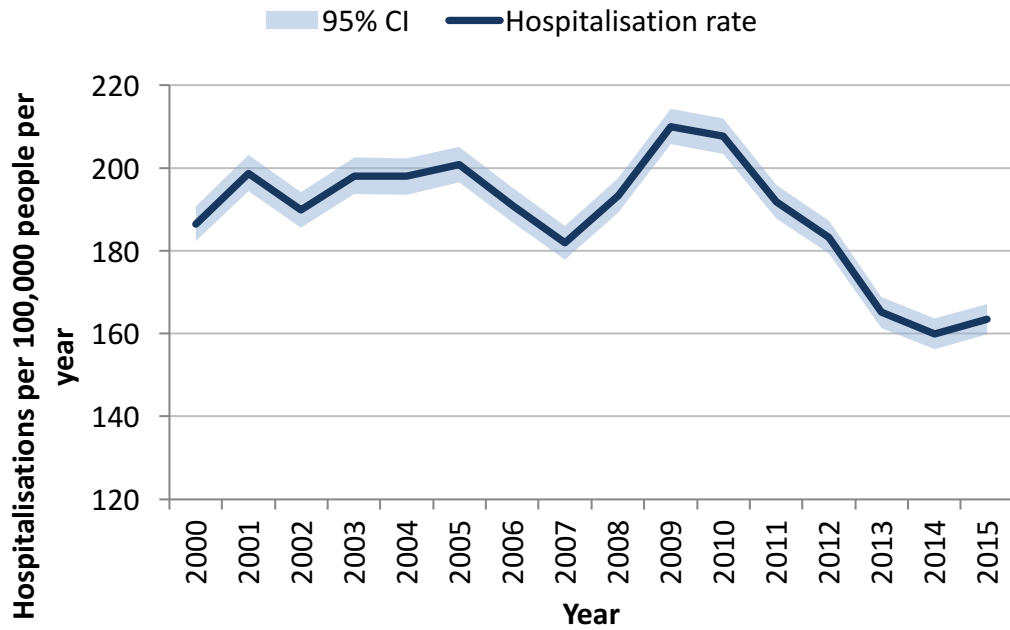
Hospitalisation:
17% increase 2000 -2015.

Total respiratory events by age group



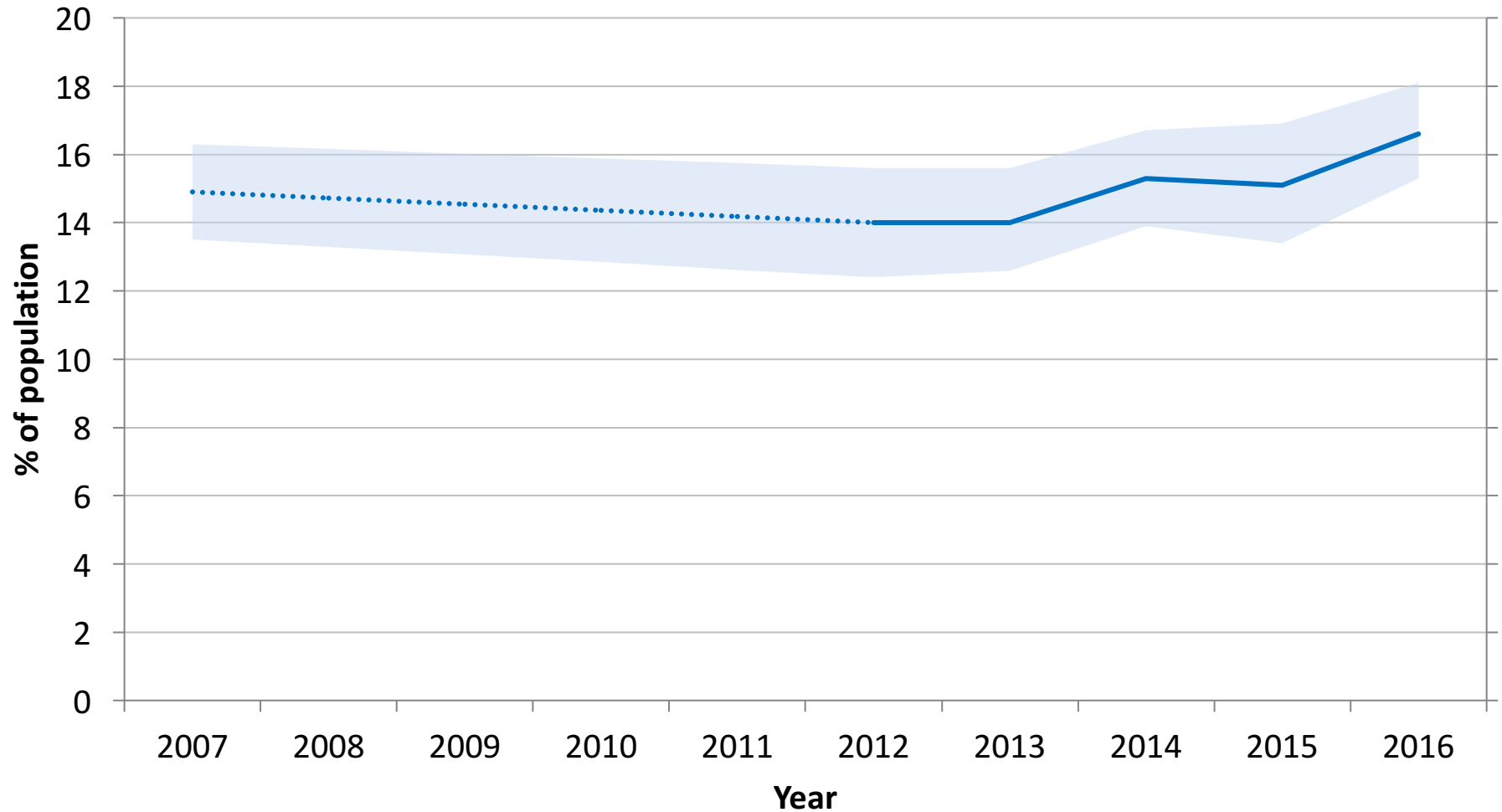


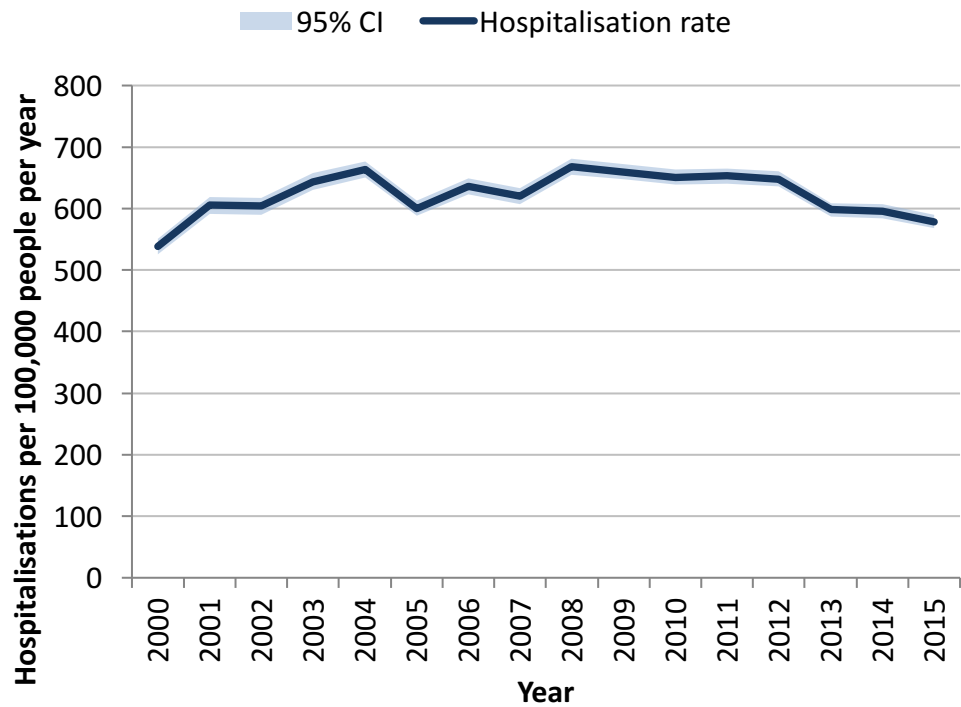
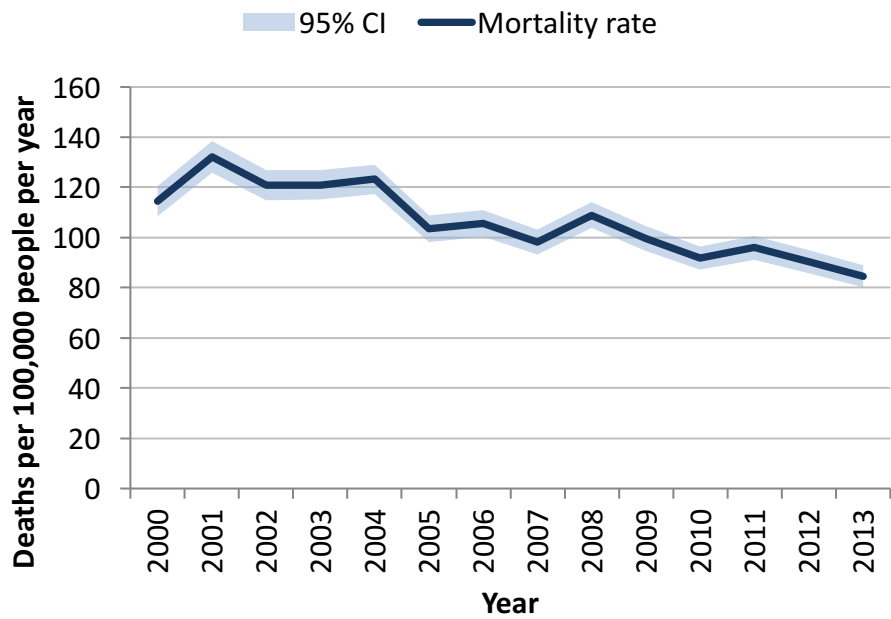
Asthma



Medicated asthma prevalence <15 years

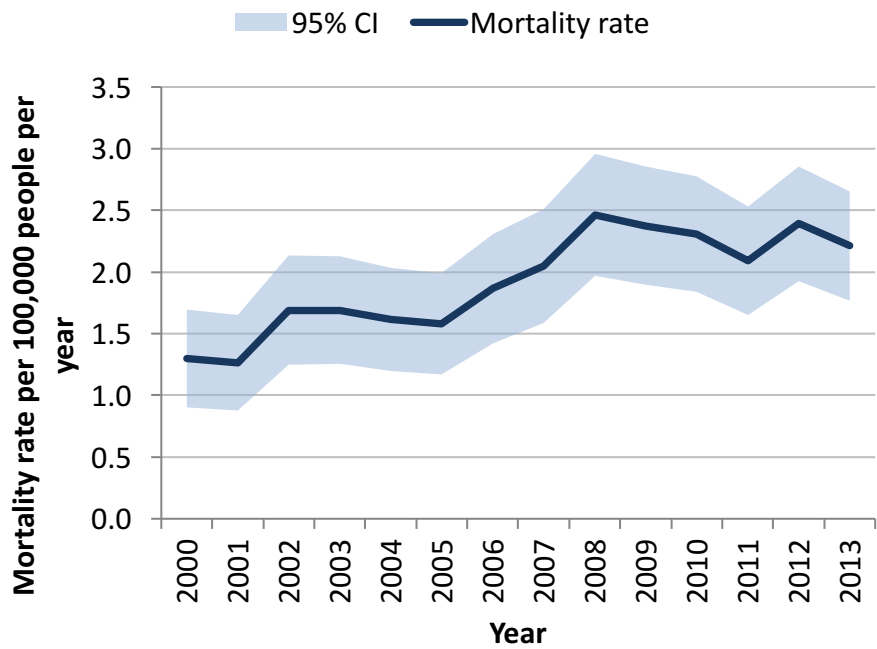
95%CI Medicated asthma prevalence



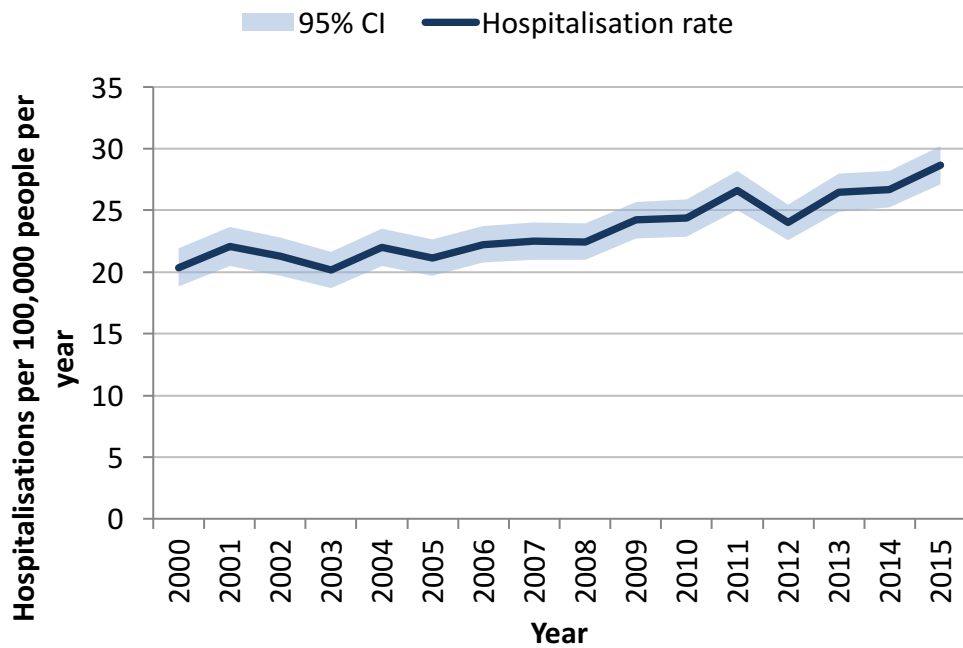


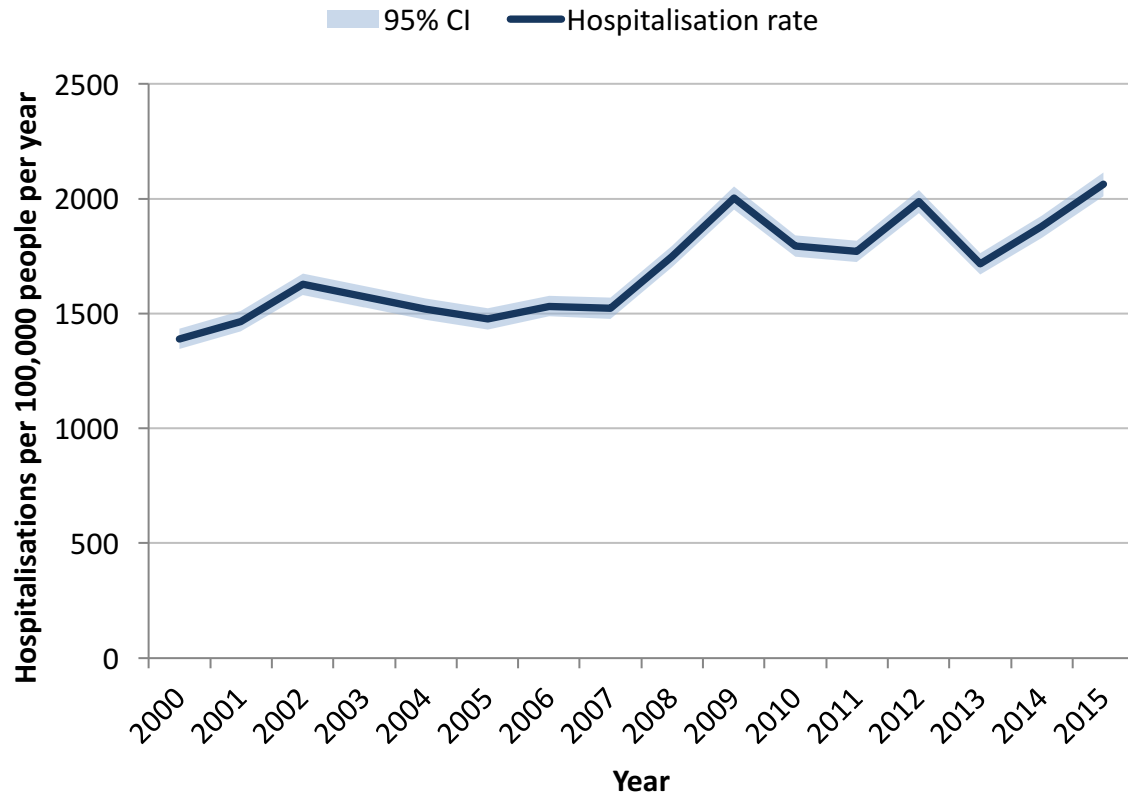
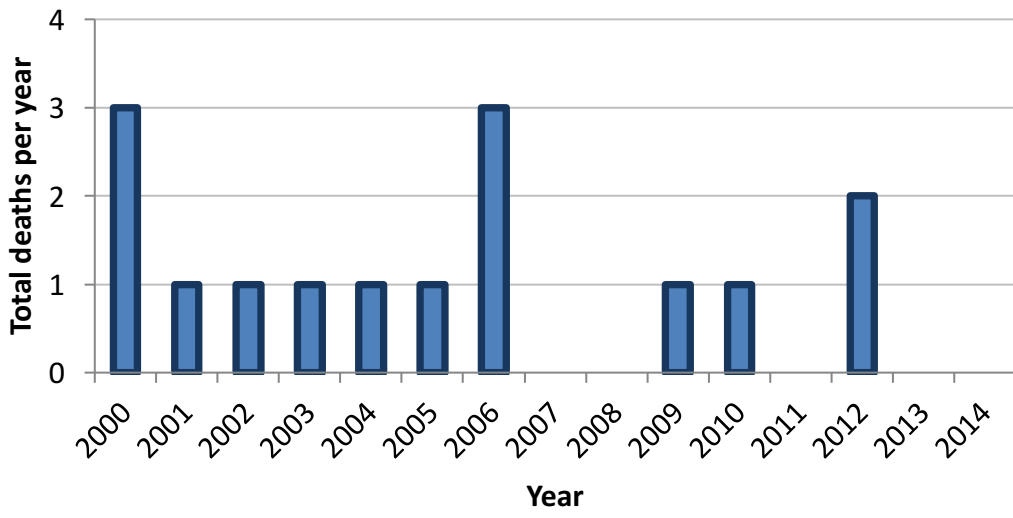
COPD

45+ years

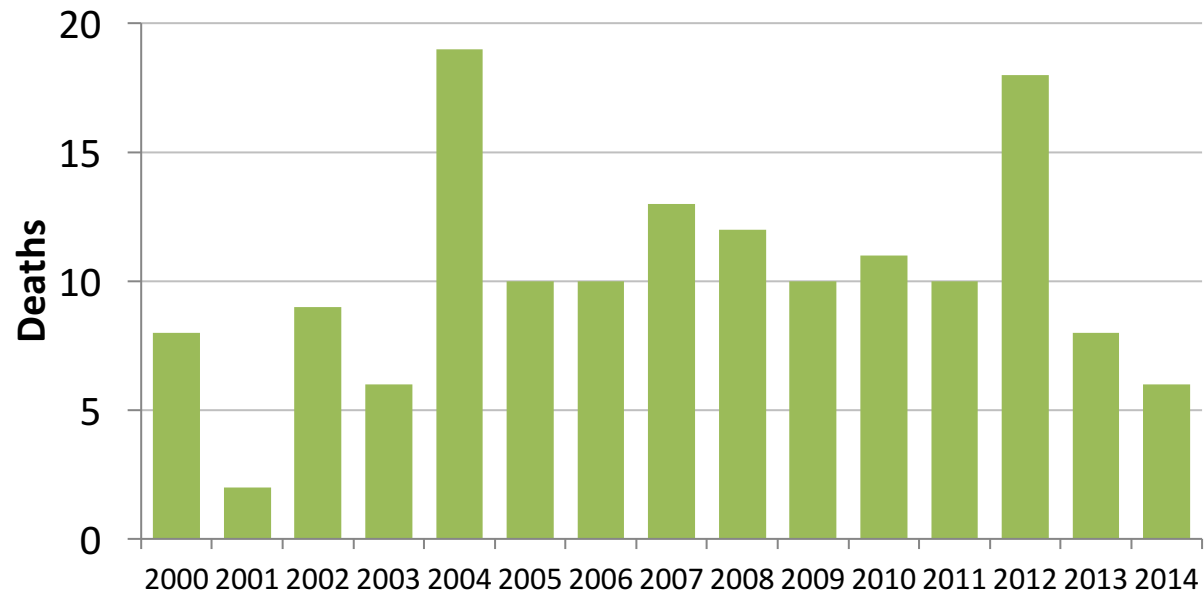


Bronchiectasis

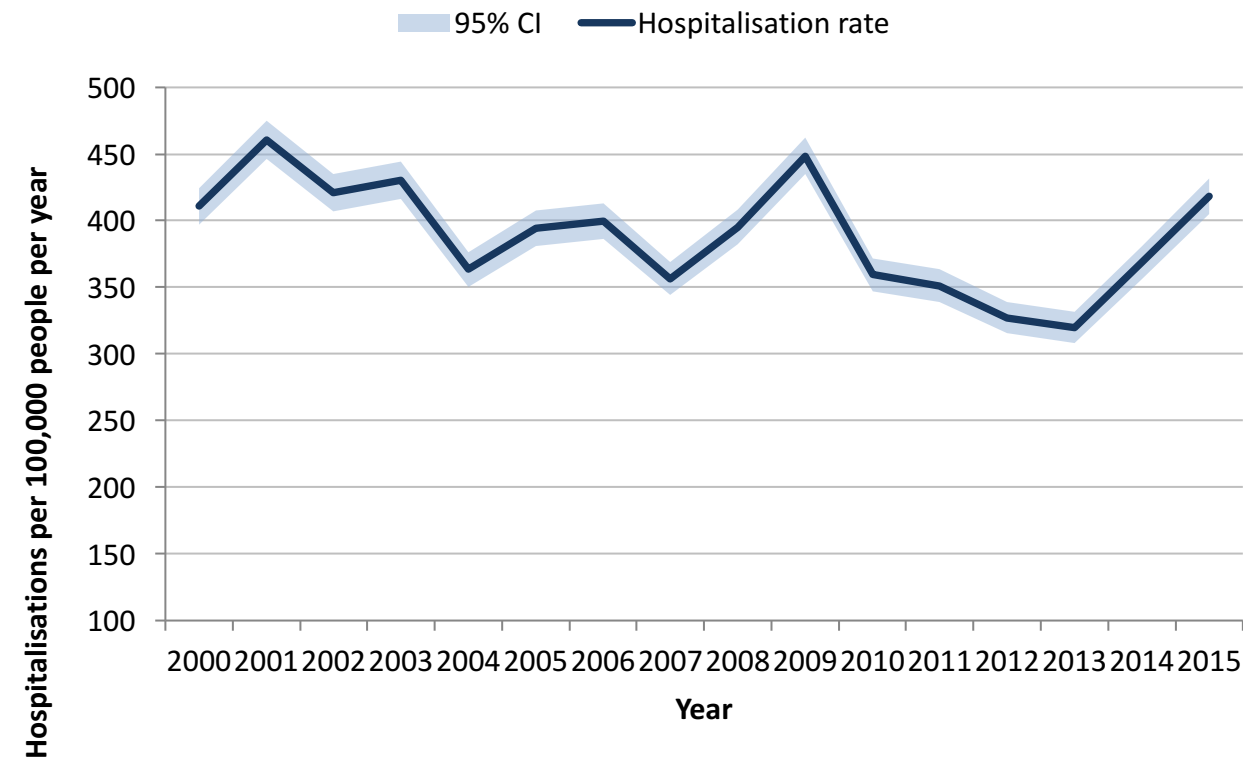




Bronchiolitis <5 years

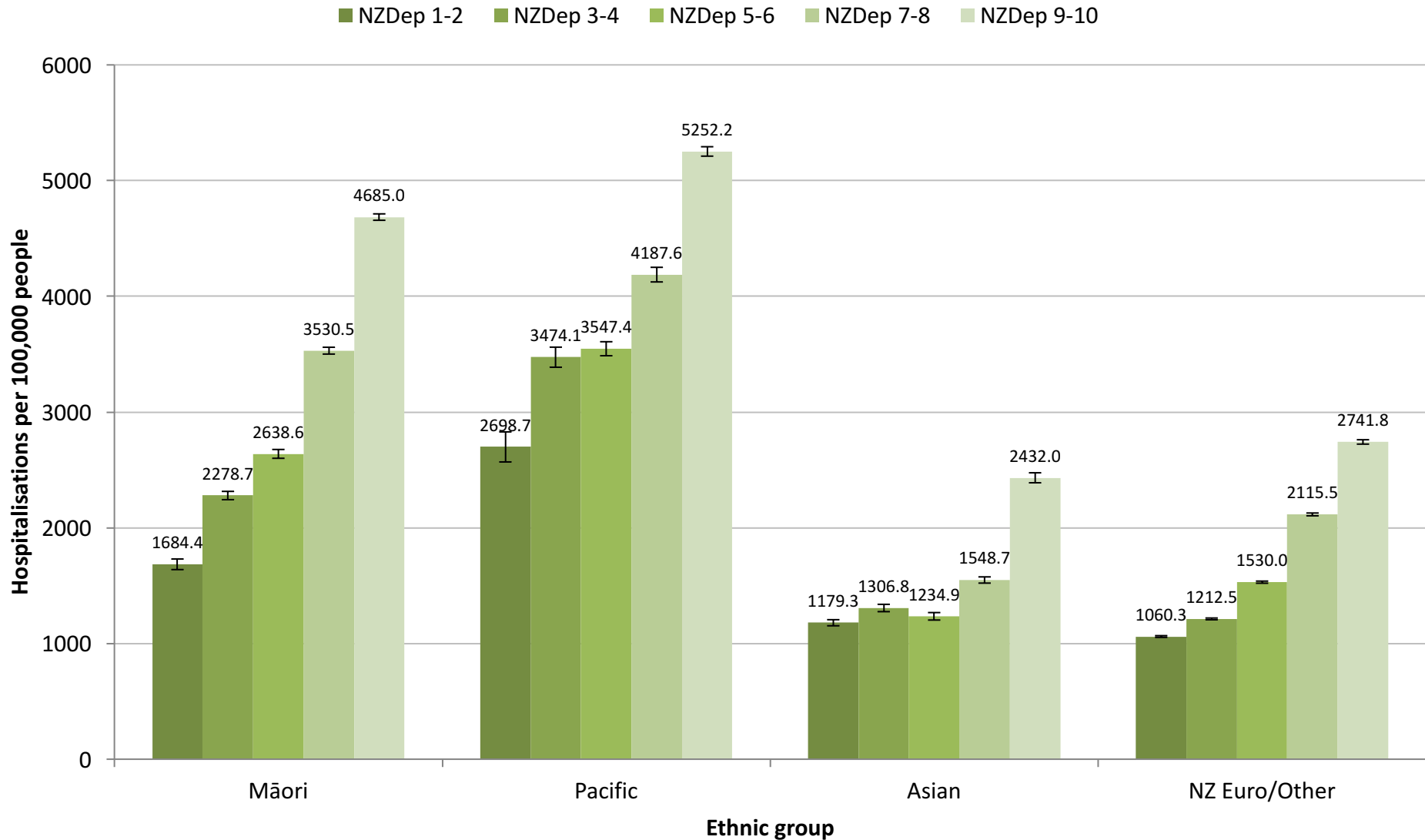


Emma-Lita Bourne
10 May 2012 – 8 August 2014

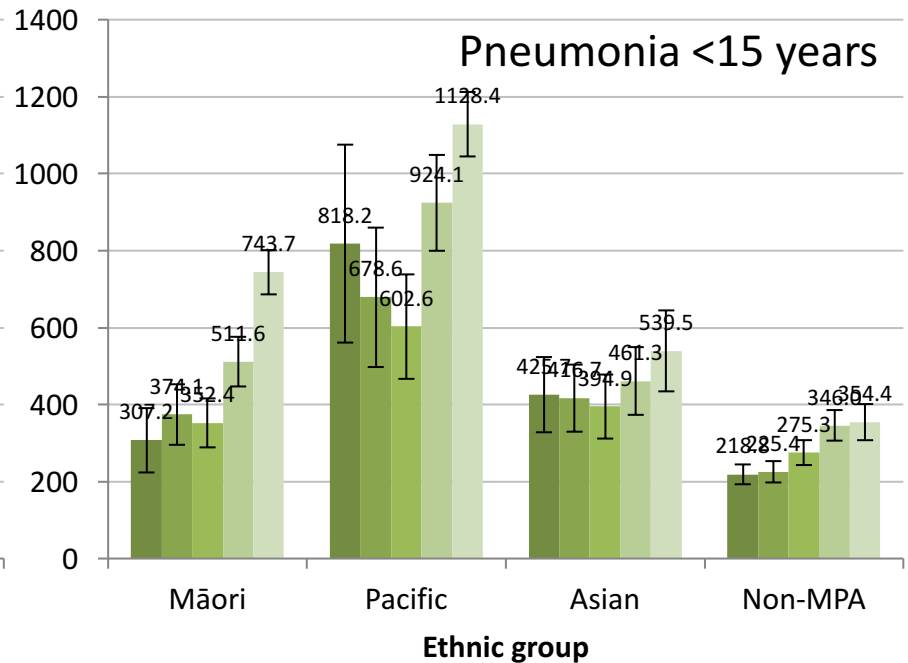
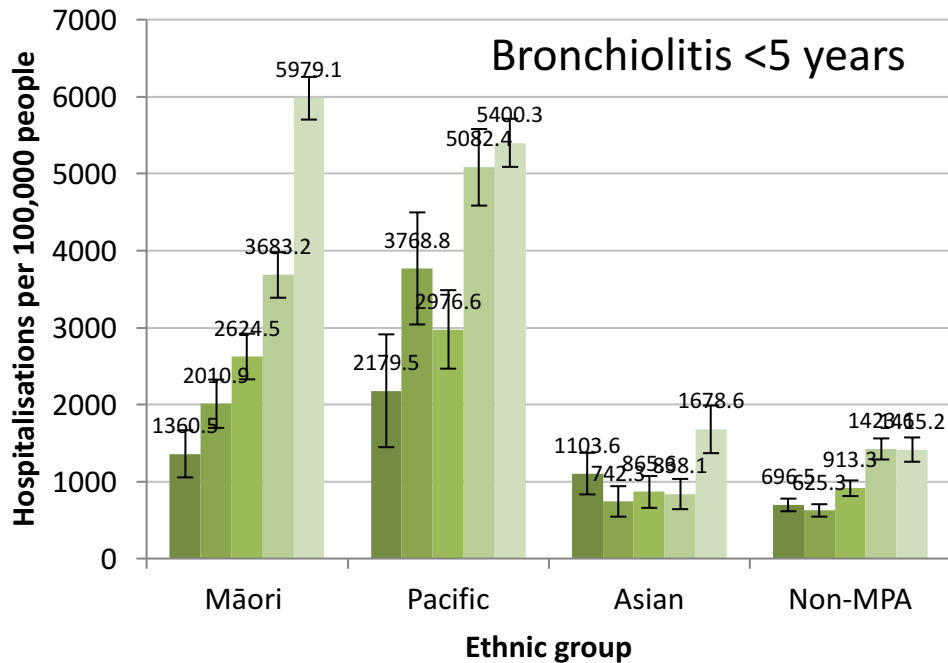
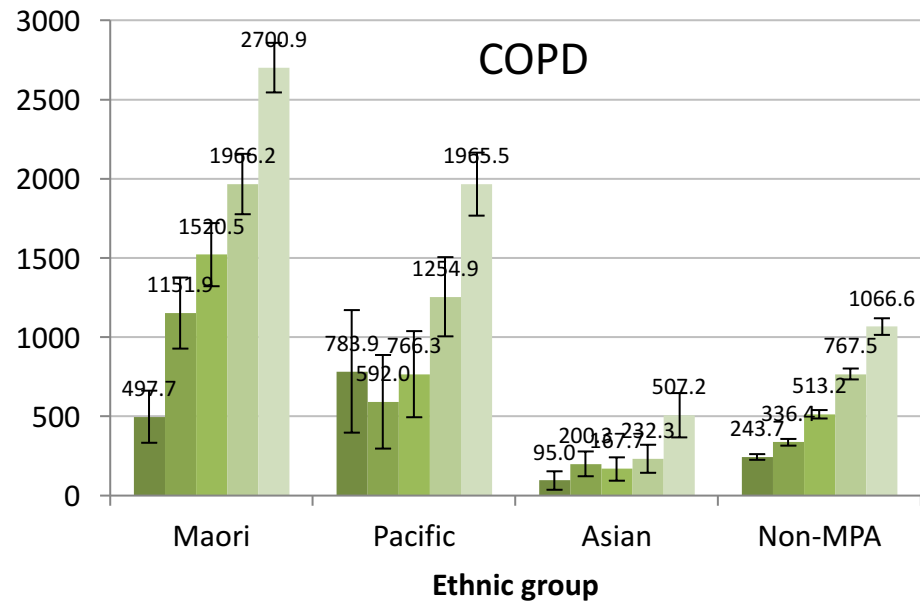
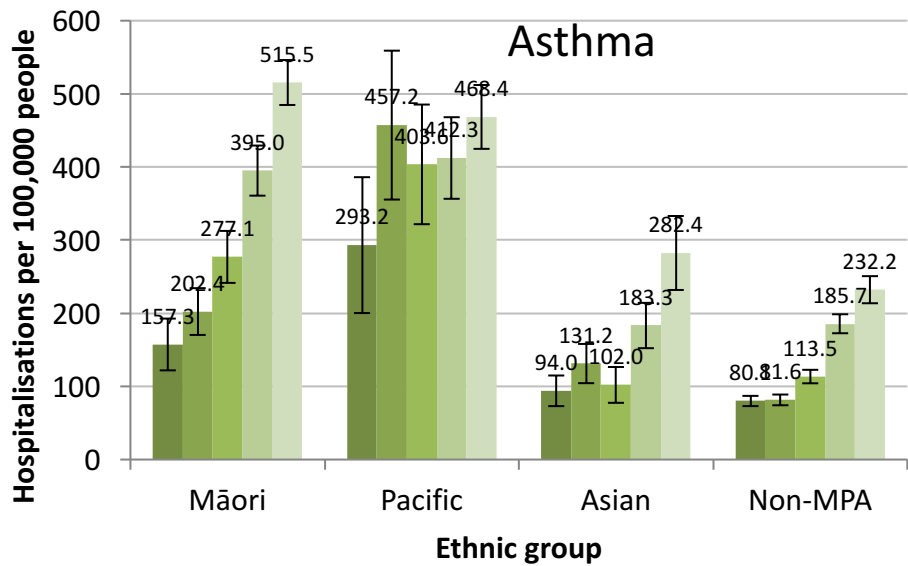


Pneumonia
<15 years

Inequalities in total respiratory disease



■ NZDep 1-2 ■ NZDep 3-4 ■ NZDep 5-6 ■ NZDep 7-8 ■ NZDep 9-10

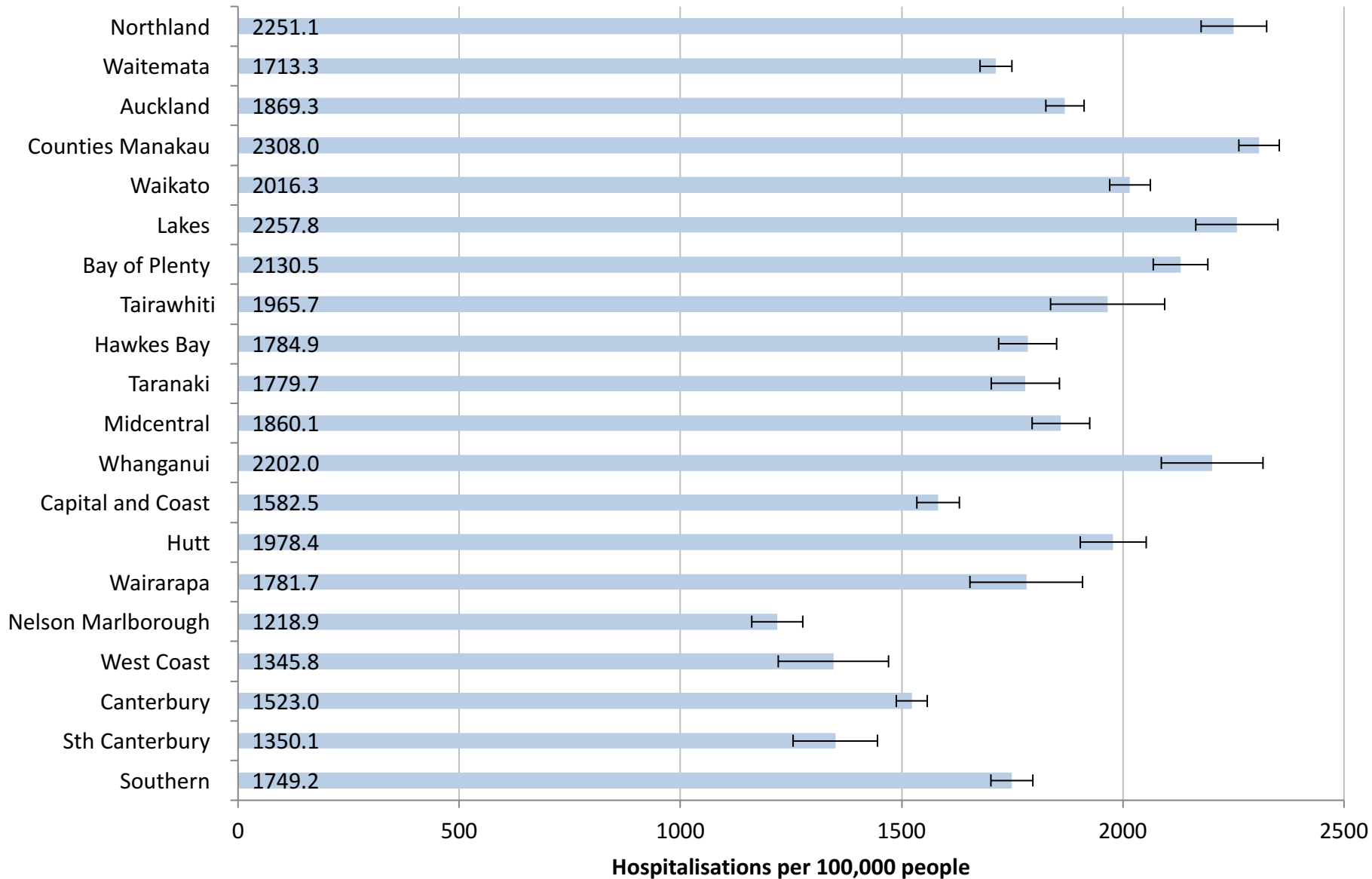


Bronchiolitis <5 years deaths 2004-2013

Nine deaths:

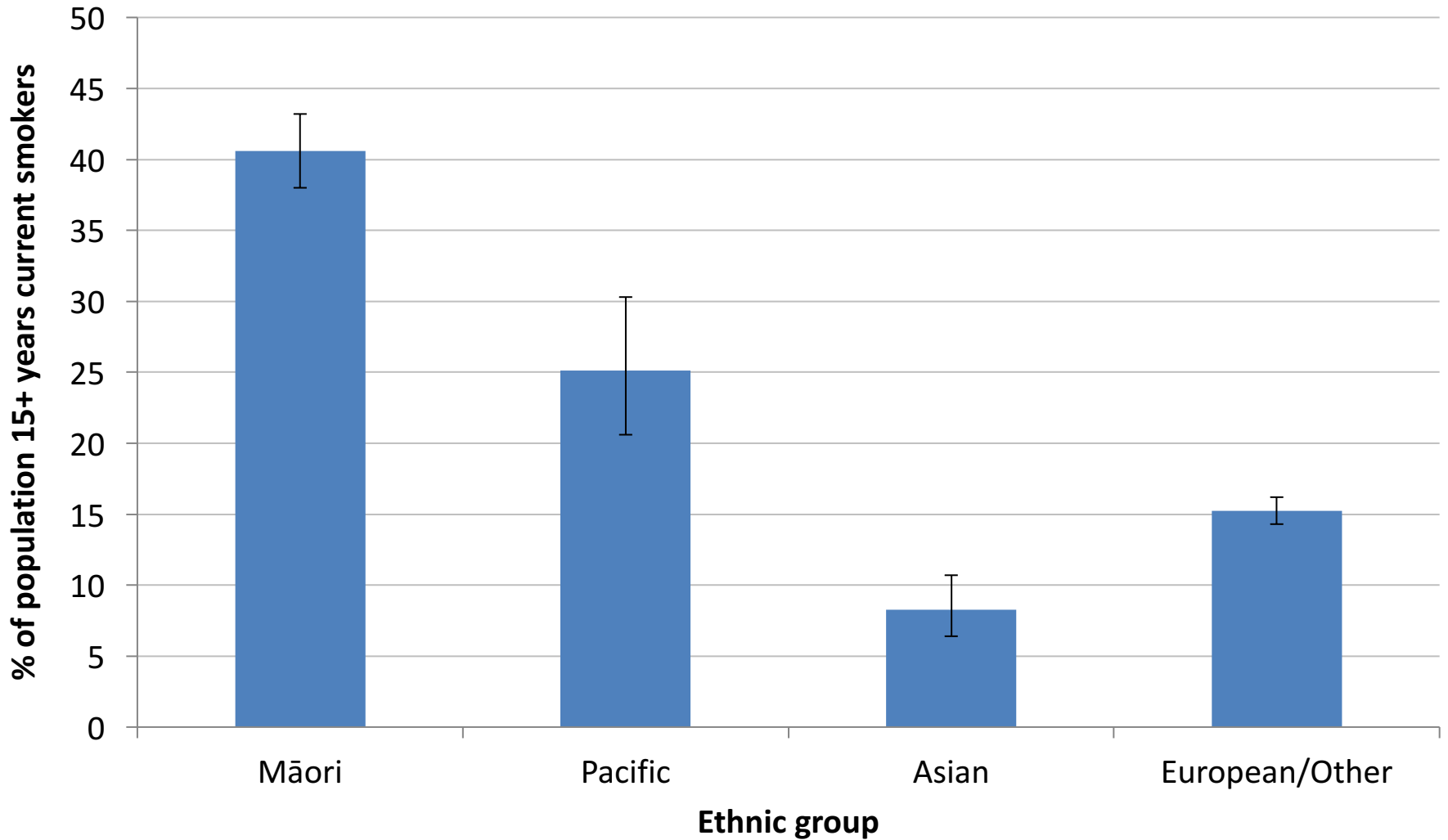
- 4 boys, 5 girls
- 4 Māori, 5 Pacific, 1 NZ Euro/other (total ethnicity)
- Māori 9 times higher than NZ Euro/other
- Pacific 20 times higher.
- 7 in NZDep 9-10
- 1 in NZDep 7-8, 1 in NZDep 5-6.
- No deaths in NZDep 1-4.

Regional variation



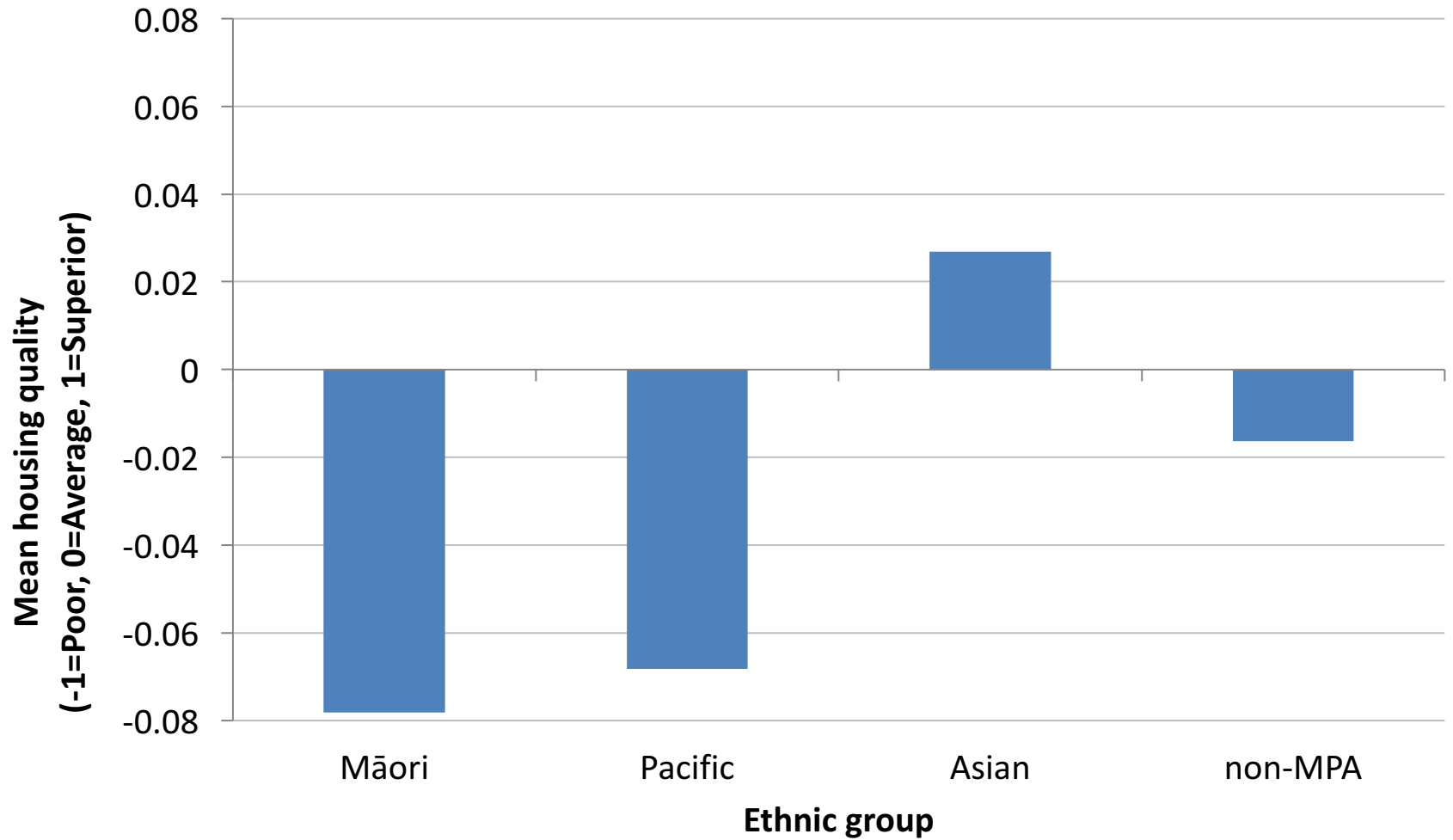
Tobacco

(2013/14)



Housing

(adjusted for age group and NZDep)



To reduce respiratory disease...

...focus on reducing smoking

...focus on improving housing

...pay particular attention to children's health

FIN

“I am of the view the condition of the house at the time being cold and damp during the winter months was a contributing factor to Emma-Lita's health status.”

Coroner Brandt Shortland



Emma-Lita Bourne
10 May 2012 – 8 August 2014

- Emma-Lita's home, let to the family by Housing New Zealand, was described as "very cold and not getting much sunshine"
- "Due to the dampness and cold of the house, Housing New Zealand made available to the family a heater. Unfortunately the heater required a lot of electricity which generated extremely high power bills and in the end the family could not afford to run the heater despite their need.
- When it rained there was a leak in the hallway ceiling which required the use of a bucket to catch the drips."

- In my view the house unfortunately was unhealthy for this family. The older children suffered illnesses as well. One of the children was taking medication for rheumatic fever.”
- Formal findings: “Whether the cold living conditions of the house became a contributing factor to the circumstances of Emma-Lita’s death cannot be excluded.”