

Cancer in farmers, non-farm rural and urban residents in the NSW '45 and Up' Study cohort

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Find out if there are any differences for major cancers between farmers, other rural residents and urban residents in:

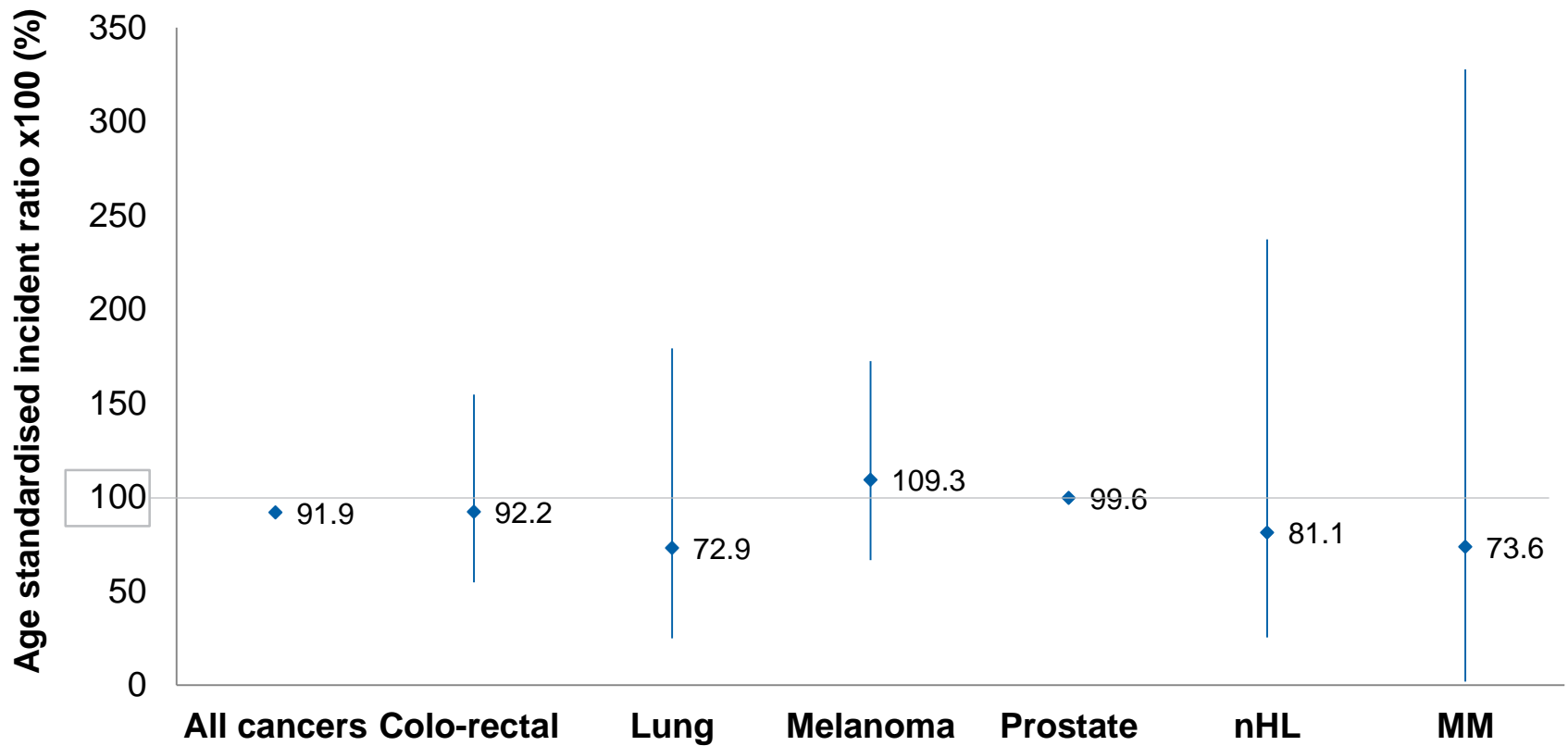
- › incidence (new cases)
- › mortality (deaths)
- › screening rates
- › stages of presentation
- › risk factors



- › NSW '45 and Up' Study on health & risk factors (2005-2009)
- › 267,120 people surveyed. Over half were from rural areas.
- › Farmers distinguished from other rural people by 'living in a house on a farm.' (9,583 farm men & 10,861 farm women)
- '45 and Up' Study records matched with NSW Cancer Registry, Medical Benefits Scheme, ABS Deaths etc.

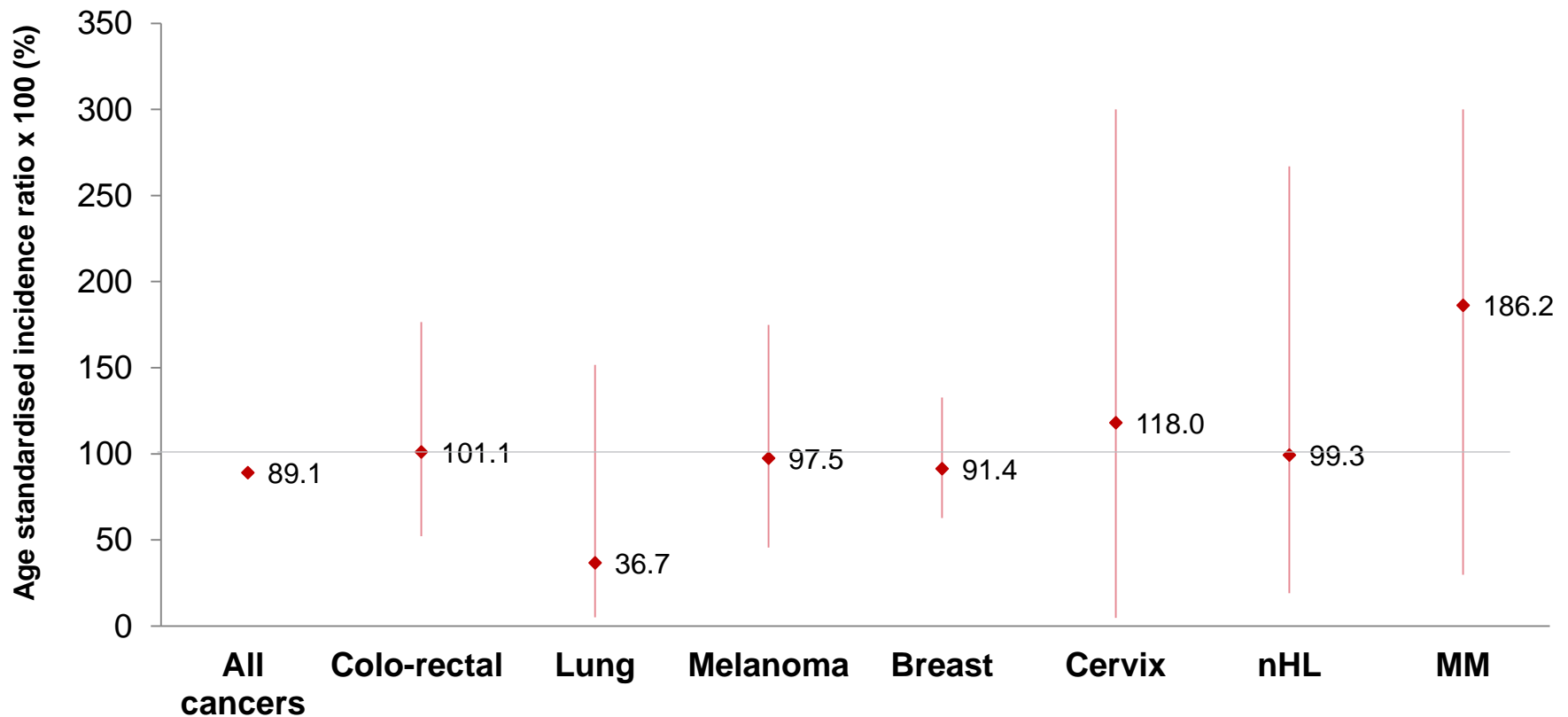


Cancer incidence ratios for farm men, 2006-2009*



* Age-standardised to '45 and Up Study' cohort (indirect methods)

Cancer incidence ratios for farm women 2006-2009*



* Age-standardised to '45 and Up Study' cohort (indirect methods)

Men:

- › **Prostate:** Mean (all) 68.5yrs, farm mean 2.1 yrs younger*
- › **Melanoma:** Mean (all) 69.2yrs, farm mean 3.7 yrs younger*
- › **Other cancers:** Farm men younger for colo-rectal, lung, nHL & MM, but not significant.

Women:

- › **Breast:** Mean (all) 62.1yrs, farm mean 3.2 yrs younger*
 - › **Colorectal:** Mean (all) 69.3 yrs, farm mean 5.5 yrs younger*
 - › **Other cancers:** Farm women younger for lung, melanoma, nHL & MM, but not significant
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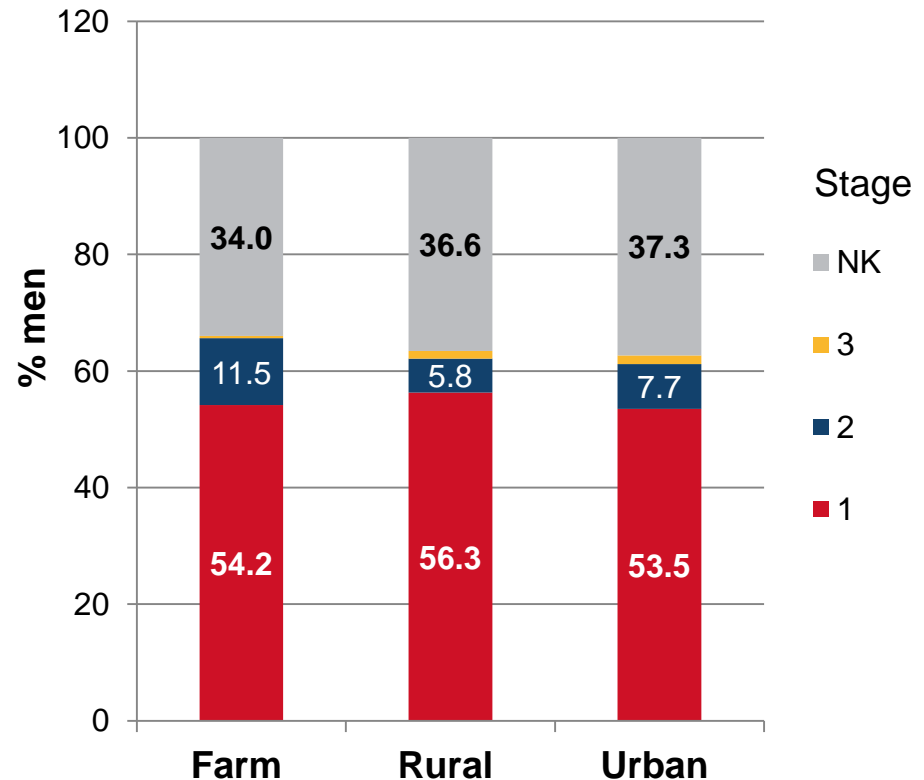
› Prostate cancer:

Sig higher % of farm men diagnosed at Stage 2 or higher ($p < .05$), but many had an 'unrecorded' stage

› **No significant differences** between farm, rural or urban residents, in stage of diagnosis or tumour thickness of:

- Breast cancer
- Colorectal cancer
- Melanoma

Stage of diagnosis of prostate cancer (n=3,648)



- › **Extreme Caution: Only 3 years data** (324 men, 158 women).
- › The small number of cases mean no statistically significant differences exist in rates below

Farm men

- Lowest 'all cancer' lung, colo-rectal cancer & nHL mortality
- No deaths from prostate cancer
- Highest Multiple Myeloma mortality
- When excl. 75yrs+, farm men have highest melanoma, nHL, Multiple Myeloma

Farm women

- Highest 'all cancer'* , colo-rectal cancer & nHL mortality
- Lowest lung cancer mortality & no deaths from breast cancer, melanoma, cervical cancer or Multiple Myeloma
- When excl. 75yrs+ farm women lowest 'all cancer' and no longer highest colorectal or nHL

Self reported PSA screening

- › **PSA 'ever'**: Farm 71.8%, rural 73.6% urban 71.2%*
- › **Past 2 years** (of these): Farm 78.3%, rural 79.0%, urban 78.6%*

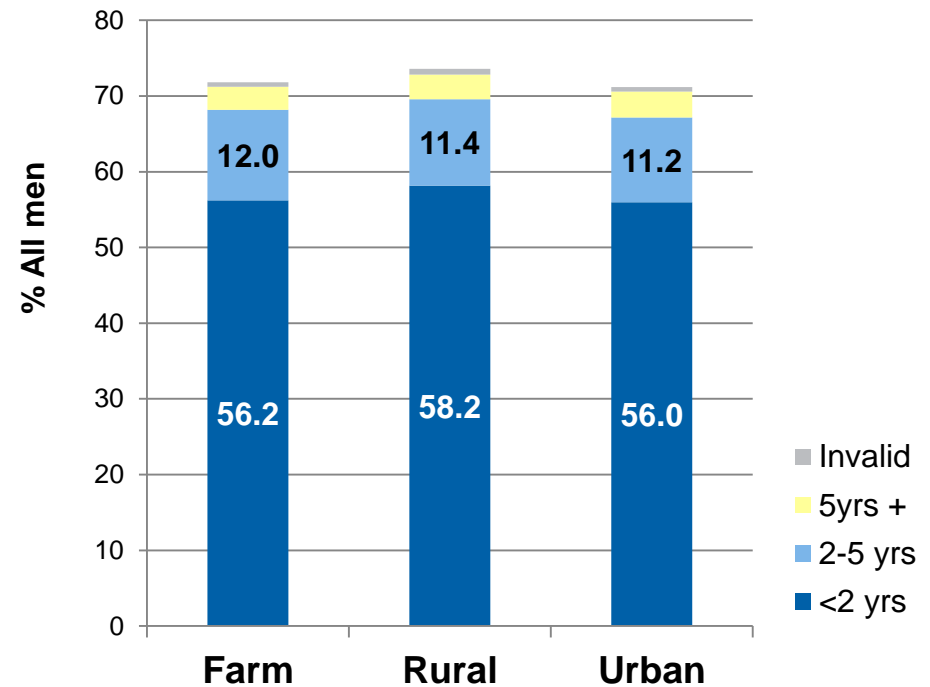
MBS item PSA screening 2004-2011

- › **PSA 'ever'**: Farm 73.5%, rural 72.3%, urban 70.9%*

Bowel cancer screening

- › **Ever**: farm 54.3%, rural 55.4%, urban 51.8%*
- › **Past 2 yrs**: farm 53.4%, rural 48.8%, urban 43.6%*

Self reported PSA screening 'ever' by 'yrs ago last PSA screen'



Just over half of all men had a PSA test in past 2 yrs

Self reported breast cancer screening

- › **Mammogram 'ever'**: Farm 89.0%, rural 89.7% urban 89.4%*
- › **Past 2 years** (of these): Farm 60.9%, rural 57.0%, urban 55.9%*

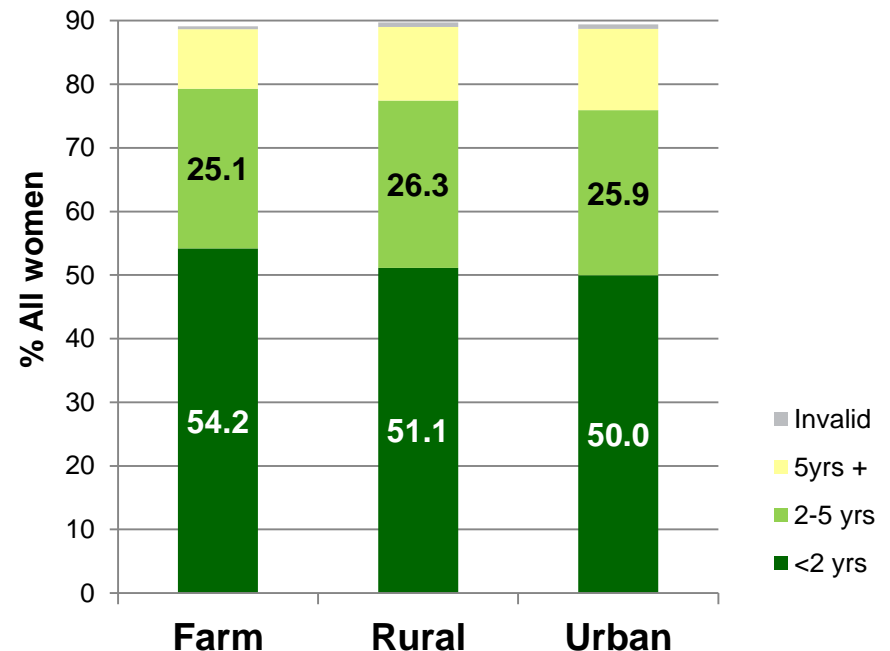
MBS mammograms 2004-2011

- › **'Ever'**: Very similar % between grps (23-25%), but MBS doesn't capture all screening

Bowel cancer screening

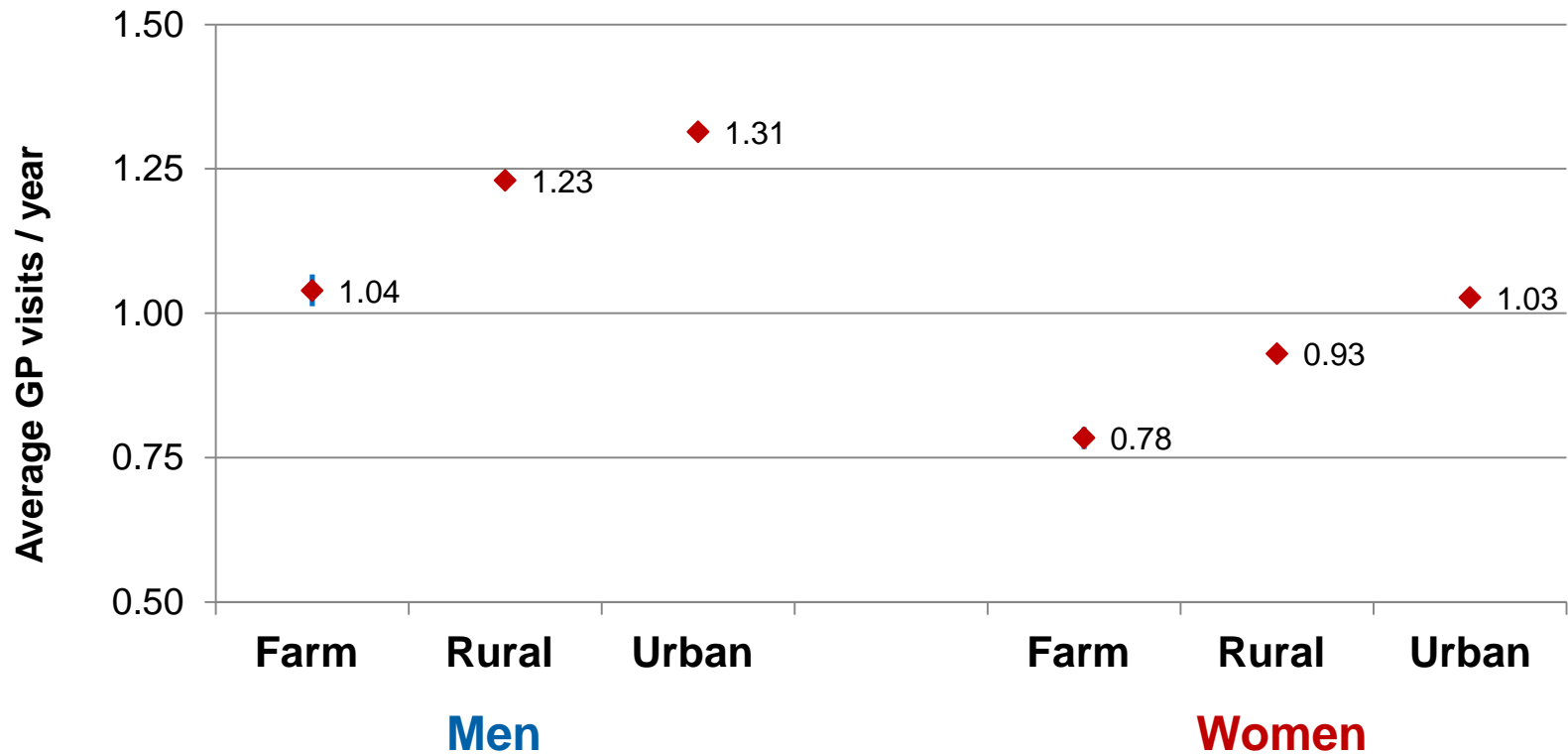
- › **Ever**: farm 46.8%, rural 48.7%, urban 46.3%*
- › **Past 2 yrs**: farm 49.5%, rural 49.6%, urban 47.7% *

Self reported breast cancer screening 'Ever' by years ago last mammogram



Just over half of all women had a mammogram in past 2 yrs

Average GP visits / year (MBS items 2004-2011)*



- › Farm residents more likely to visit 1-2 times/yr, but less likely to make >2 visits

Cancer type	Incidence (ISIR)	Av. age diagnosis	% Stage 2+ at diagnosis	Mortality (ISMR)	Screening frequency	Freq. GP visits
Men						
All cancers	lower*	-	-	lower	-	less(but sim)*
Prostate	lower*	younger**	higher S2+ *	none	similar*	-
Colorectal	lower	younger	higher S2+	lower	similar*	-
Melanoma	higher / lower*	younger**	lower S2+	higher	-	-
Women						
All cancers	lower**	-	-	higher	-	less(but sim)*
Breast	lower*	younger**	same S2+	none	similar*	-
Colorectal	higher	younger*	lower S2+	higher	similar*	-
Melanoma	lower / sim	younger*	higher S2+	none	-	-

* Sig CCR data ; * Sig self report / or MBS data

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