



## Cardiovascular disease (CVD) and women

### Clearinghouse Connector – February 2016

---

Links to online resources available from the Women's Health Victoria Clearinghouse collection.

**To access these resources** follow the title hyperlink. The display includes a link to the external website where the full text is available.

We value your feedback. Please tell us what you think of this resource.

[Click here to take a brief online survey](#)

Need information on a different topic? Search all [WHV publications](#).

---

### Introduction

CVD is the leading cause of premature death in Australian women.<sup>1</sup> The *National Heart Foundation* reports that while men suffer twice as many heart attacks as women, women are more likely to die from them.<sup>2</sup> Women are also more likely to die of stroke than men.<sup>3</sup> In recognition of this, a substantial amount of new research is being published which takes a gendered approach to CVD.

Australian and international studies have found that as women's symptoms are less likely to be recognised by women themselves and by health professionals, women are less likely to be told they are at-risk<sup>4</sup> and be given appropriate medical treatment<sup>5 6 7 8 9</sup>, which may contribute to women's high mortality rates.

The *Australian Longitudinal Study on Women's Health* has found that lack of physical activity is the largest risk factor for women over 30.<sup>10</sup> Menopause compounds other traditional risk factors for developing CVD through changes in body fat distribution, insulin resistance and lower oestrogen levels.<sup>11</sup> Pregnancy and menopause also complicate the treatment of hypertension, itself a major contributor to CVD.<sup>11</sup>

Risk factors for women are also compounded by disadvantage, environmental and socioeconomic factors:

- Women from the most disadvantaged areas of Australia have CVD death rates 29% higher than those women from the least disadvantaged areas.<sup>12 13</sup>
- Aboriginal and Torres Strait Islander women commonly have more risk factors for CVD than non-Aboriginal and Torres Strait Islander women including higher rates of smoking, diabetes and obesity.<sup>14</sup>

Under-representation of women in cardiovascular trials and research<sup>15</sup> has also resulted in a gender-blind approach to treatment. As a result, prevention strategies and treatment have not been tailored towards women and key opportunities to reduce the incidence of chronic disease have been missed, compounding unequal outcomes for women. However public awareness campaigns,<sup>16</sup> professional training for medical staff and greater investment in research that takes account of sex differences in the prevention, diagnosis

and treatment of cardiovascular disease in women are expected to improve health outcomes for women in the coming years.

---

WHV thanks the National Heart Foundation of Australia for providing feedback for this Connector.

---

## Women's and heart disease overview

[Heart disease: not just a man's problem](#) ABC Online. Health and Wellbeing, 2014

[Getting to the heart of the matter: women and heart disease](#) National Heart Foundation of Australia, 2015

[Gender gap rife in treatment of heart disease](#) The Age, 2015

---

## Statistics

[Australian heart disease statistics 2014](#) National Heart Foundation of Australia, 2014

[Australian heart disease statistics: overweight, obesity and cardiovascular disease: past, present and future](#) National Heart Foundation of Australia, 2015

[Women and heart disease: cardiovascular profile of women in Australia](#) Australian Institute of Health and Welfare, 2010

---

## Risk and gender

[Atrial fibrillation as risk factor for cardiovascular disease and death in women compared with men: systematic review and meta-analysis of cohort studies](#) BMJ, 2016

[Young women less likely to be informed of heart disease risk by providers](#) Science Daily, 2015

[Lack of exercise 'highest risk' for women over 30](#) NHS Choices, 2014

[Women have a higher risk of stroke \[Infographic\]](#) American Heart Association, American Stroke Association, 2014

---

## Hypertension / High blood pressure

[Sex-specific differences in cardiovascular risk factors and blood pressure control in hypertensive patients](#) Journal of Clinical Hypertension, 2014

[Considerations in women with hypertension](#) Southern Medical Journal, 2013

---

## Heart attack / Myocardial infarction

[Women less likely to survive a heart attack than men](#) National Heart Foundation of Australia, 2014

[Association of age and sex with myocardial infarction symptom presentation and in-hospital mortality](#) Journal of the American Medical Association, 2012

[Acute myocardial infarction in women: a Scientific Statement from the American Heart Association](#) Circulation, 2016

[Population-level differences in revascularization treatment and outcomes among various United States subpopulations](#) World Journal of Cardiology, 2015

[Symptom recognition and healthcare experiences of young women with acute myocardial infarction](#) Circulation: Cardiovascular Quality and Outcomes, 2015

[The association of tobacco use and gender to cardiac rehabilitation outcomes: a preliminary investigation](#) Journal of Substance Use, 2014

---

## Preventive medicine

[Hormone therapy for preventing cardiovascular disease in post-menopausal women](#) Cochrane Database of Systematic Reviews, 2015

[Guidelines for the prevention of stroke in women](#) Stroke, 2014

[Aspirin for primary prevention of cardiovascular events: meta-analysis of randomized controlled trials and subgroup analysis by sex and diabetes status](#) PLoS One, 2014

---

## Health promotion / health behaviour

[\[Evaluation of the\] Engaging women strategy 2008-2012](#) National Heart Foundation of Australia, 2015

[Cardiovascular disease in women: implications for improving health outcomes](#) Collegian (Royal College of Nursing Australia), 2012

[For All Hearts: promoting heart health to culturally diverse communities](#) Multicultural Centre for Women's Health, 2012

[Effectiveness of tailored lifestyle interventions, using web-based and print-mail, for reducing blood pressure among rural women with prehypertension](#) International Journal of Behavioral Nutrition and Physical Activity, 2014

[Fifteen-year trends in awareness of heart disease in women: results of a 2012 American Heart Association National Survey](#) Circulation, 2013

[Caring for others but not themselves: implications for health care interventions in women with cardiovascular disease](#) Nursing Research and Practice, 2011

---

---

## Australian policy development

[Victorian public health and wellbeing plan 2015–2019](#) Victoria. Department of Health and Human Services, 2015

[Women and non-communicable diseases \(chronic conditions\): position paper](#) Australian Women's Health Network, 2014

[Women and Heart Disease Forum report](#) National Heart Foundation of Australia, 2011

[Australian Government response to the Review of cardiovascular disease programs](#) Australia. Department of Health, 2011 [*women-specific content – page 18*]

[Secondary prevention of cardiovascular disease: a call to action to improve the health of Australians](#) National Heart Foundation of Australia, 2010

---

## International policy development

[Taking a giant step toward women's heart health: finding policy solutions to unanswered research questions](#) Women's Health Issues, 2015

[Improving women's cardiovascular health: a Position Statement From the International Council on Women's Health Issues](#) Health Care for Women International, 2012

---

## Related websites

[National Heart Foundation of Australia](#) Women and heart disease

[National Heart Foundation of Australia](#) Cardiac rehabilitation guidelines and tools

[Jean Hailes](#) Cardiovascular health

---

---

## Footnotes

1. AIHW (2010). [Women and heart disease: cardiovascular profile of women in Australia](#). Australian Institute of Health and Welfare, Canberra. Accessed on 01/02/2016. ↵
2. National Heart Foundation of Australia (2014). [Women less likely to survive a heart attack than men](#) Heart Foundation, Sydney. Accessed on 01/02/2016. ↵
3. ABS (2012). [Stroke In: 4429.0 Profiles of Disability Australia, 2009](#). Australian Bureau of Statistics, Canberra. Accessed on 01/02/2016. ↵
4. American College of Cardiology (2015). [Young women less likely to be informed of heart disease risk by providers](#). Science Daily, Oct 26. Accessed on 01/02/2016. ↵
5. Canto JG, et al. (2012). [Association of age and sex with myocardial infarction symptom presentation and in-hospital mortality](#). Journal of the American Medical Association, 307(8): 813-822. Accessed on 01/02/2016. ↵
6. Turnbull F, et al. (2011). Gender disparities in the assessment and management of cardiovascular risk in primary care: the AusHEART study. European Journal of Preventive Cardiology, 18(3): 498-503. ↵
7. Khera S, et al. (2015). Temporal trends and sex differences in revascularization and outcomes of ST-Segment elevation myocardial infarction in younger adults in the United States. Journal of the American College of Cardiology, 66(18): 1961-1972. ↵
8. Leifheit-Limson EC, et al. (2015). Sex differences in cardiac risk factors, perceived risk, and health care provider discussion of risk and risk modification among young patients with acute myocardial infarction. Journal of the American College of Cardiology, 66(18): 1949-1957. ↵
9. National Heart Foundation of Australia (2014). [Australian heart disease statistics 2014](#). Heart Foundation, Sydney. Accessed on 01/02/2016. ↵
10. Brown W, Pavey T, Bauman A (2015). Comparing population attributable risks for heart disease across the adult lifespan in women. British Journal of Sports Medicine, 49:1069-1076 . ↵
11. Geraci TS, Geraci SA (2013). [Considerations in women with hypertension](#). Southern Medical Journal, 106(7): 434-438. Accessed on 01/02/2016. ↵
12. AIHW (2006). [Socioeconomic inequalities in cardiovascular disease in Australia](#). Australian Institute of Health and Welfare, Canberra. Accessed on 01/02/2016. ↵
13. National Heart Foundation of Australia (2011). [Women and Heart Disease Forum report](#). Heart Foundation, Sydney. p.6. Accessed on 01/02/2016. ↵
14. AIHW (2008). [Cardiovascular disease and its associated risk factors in Aboriginal and Torres Strait Islander peoples 2004-05](#). Australian Institute of Health and Welfare, Canberra. Accessed on 01/02/2016. ↵
15. Hung J (2006). Aspirin for primary prevention of cardiovascular disease in women: does sex matter? Medical Journal of Australia, 184(6): 260-261. ↵
16. National Heart Foundation (2015). [Engaging Women Strategy 2008-2012](#). Heart Foundation, Sydney. Accessed on 10/02/2016. ↵

---

## How our Clearinghouse can help you

Women's Health Victoria's Clearinghouse has a wealth of information on gender in health in various forms. Our experienced health and information professionals can assist you to access this information.

---

## Feedback and subscription

We value your feedback. Please tell us what you think of this resource. [Click here to take a brief online survey](#)

Please [Contact Us](#) with any feedback including suggestions for future Clearinghouse Connector topics.

Has a colleague forwarded this e-bulletin to you?

For your own subscription, complete an online [Subscribe Request](#).

© 2016 Women's Health Victoria

GPO Box 1160 Melbourne, Victoria 3001 - Phone: +61 3 9664 9300

Email: [clearinghouse@whv.org.au](mailto:clearinghouse@whv.org.au) - Website: [www.whv.org.au](http://www.whv.org.au)

Women's Health Victoria acknowledges the support of the [Victorian Government](#)

For problems accessing this site email [webmanager@whv.org.au](mailto:webmanager@whv.org.au)