



Australian Government

Australian Institute of
Health and Welfare

Cardiovascular disease fact sheet: Prevalence of heart failure in Western Australia

Heart failure in Western Australia

Heart failure is a potentially life-threatening condition, where the heart is unable to maintain a strong enough blood flow to meet the body's needs. Although it can occur suddenly, it usually develops slowly over many years as the heart becomes gradually weaker and works less effectively.

Heart failure can result from various conditions that impair or overload the heart, including heart attack, rheumatic heart disease, non-rheumatic valvular disease, hypertensive heart disease, congenital heart disease, damaged heart valve, or primary heart muscle weakness. As individuals can have multiple related diseases at the same time, diagnosis of heart failure can be difficult (AIHW 2014b).

What is in this fact sheet?

This fact sheet presents the prevalence of heart failure due to coronary heart disease (referred to as CHD-related heart failure) in Western Australia in 2010—that is, the number of people who had at least 1 hospital admission for CHD-related heart failure in the previous 10 years and were still alive on 30 June 2010.

Linked hospitalisation and mortality data from Western Australia were used to calculate the prevalence of heart failure. Use of this linked data allows individuals to be followed over time, giving a more accurate estimate of prevalence, as individuals with multiple hospitalisations are only counted once and people who have died are excluded. This measure of prevalence has the advantage of being based on clinical diagnoses rather than self-reported information, but it may miss less severe cases that do not result in hospitalisation.

While the data presented here for Western Australia only may not be nationally representative, it may inform how CHD-related heart failure could be monitored in other jurisdictions using linked data.

See <<http://www.aihw.gov.au/publication-detail/?id=60129552813>> for data relating to heart failure caused by other diseases.

Who has CHD-related heart failure?

Between 2000 and 2010, an estimated 10,200 people had CHD-related heart failure in Western Australia and were still alive in 2010.

Fast facts

10,200 people in Western Australia had CHD-related heart failure between 2000 and 2010 and were still alive in 2010 (0.4% of the population).

Almost 2 in 3 cases of CHD-related heart failure occurred in those aged **75 and over**.



56% of cases of CHD-related heart failure occurred in **males**.



Mostly older people

The majority (61%) of those who had CHD-related heart failure were aged 75 and over, including over one-quarter (27%) aged 85 and over.

The CHD-related heart failure prevalence rates were highest in people aged 85 and over (8%)—2.1 times as high as for those aged 75–84 (4%) (Table 1).

Mostly men except in the very old

There were more males (5,700) living with CHD-related heart failure than females (4,500). But for those aged 85 and over, this was reversed, with 1,700 women living with heart failure compared with 1,100 men, reflecting the longer life span of women.

Overall, prevalence rates were slightly higher in males compared with females (1.2 times as high), with the gap reducing from twice as high among men in the 65–74 age group to 1.2 times as high in the 85 and over age group (Figure 1).

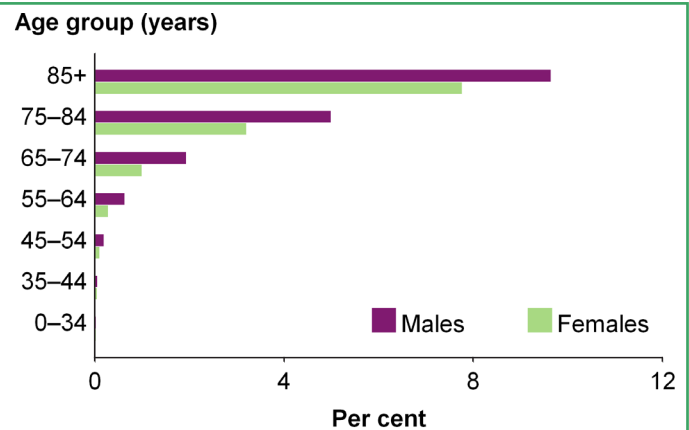


Figure 1: Prevalence of heart failure due to coronary heart disease, by age and sex, Western Australia, 30 June 2010

Table 1: Prevalence of heart failure due to coronary heart disease, by age and sex, Western Australia, 30 June 2010

Age group (years)	Men		Women		Persons	
	Number	Per cent	Number	Per cent	Number	Per cent
0–29	9	0.0	6	0.0	15	0.0
30–34	16	0.0	6	0.0	22	0.0
35–39	25	0.0	16	0.0	41	0.0
40–44	48	0.1	36	0.0	84	0.1
45–49	96	0.1	43	0.1	139	0.1
50–54	188	0.2	92	0.1	280	0.2
55–59	311	0.5	140	0.2	451	0.3
60–64	480	0.8	202	0.3	682	0.6
65–69	650	1.5	285	0.7	935	1.1
70–74	817	2.5	475	1.4	1,292	1.9
75–79	919	4.0	633	2.3	1,552	3.1
80–84	1,052	6.4	929	4.3	1,981	5.2
85+	1,081	9.6	1,681	7.7	2,762	8.4
Total	5,692		4,544		10,236	

Notes

1. Prevalence is defined as the number of people who had at least 1 hospital admission for CHD-related heart failure in the previous 10 years and were still alive on 30 June 2010.
2. Prevalence of CHD-related heart failure is estimated using linked hospitalisation and mortality data (International Classification of Diseases 10th Revision—ICD-10 and ICD-10-AM codes heart failure I50; CHD I20–I25) from Western Australia. Refer to AIHW 2014a for a detailed explanation on the method used to link the data.
3. This measure of prevalence might miss less severe cases of CHD-related heart failure that did not result in hospitalisation.

Source: AIHW analysis of Western Australia linked hospitalisation and deaths data sets.

How many people die from CHD-related heart failure?

Between 2008 and 2010, in Western Australia, heart failure was recorded as an underlying cause for 591 deaths. Of these people, 233 (39%) had a previous hospitalisation for CHD in Western Australia (120 males and 113 females).

Most of those who died from CHD-related heart failure were aged 75 and over (86%). Males accounted for 52% of CHD-related heart failure deaths. Table 2 presents data on heart failure deaths and associated diseases.

Table 2: Number of deaths with heart failure as an underlying cause between 2008 and 2010, by previous hospitalisation and sex, Western Australia

Previous hospitalisation ^(a)	Males	Females	Persons
Coronary heart disease	120	113	233
Heart failure	195	256	451
Cardiomyopathy	17	12	29
Inflammatory heart disease	5	6	11
Rheumatic heart disease	17	33	50
Non-rheumatic valvular disease	42	39	81
Congenital heart disease	n.p.	n.p.	8
Hypertensive heart disease	n.p.	n.p.	n.p.
Other cardiovascular disease	212	296	508
Other (not cardiovascular disease)	102	160	262
Total^(b)	234	357	591

n.p. not published.

a) ICD-10-AM codes used to define the previous hospitalisation are: coronary heart disease I20–I25; heart failure I50; cardiomyopathy I42–I43; inflammatory heart disease I30–I33, I40–I41; rheumatic heart disease I01–I09; non-rheumatic valvular disease I34–I39; congenital heart disease Q20–Q28; hypertensive heart disease I11; Other cardiovascular disease any other I code; Other (not cardiovascular disease)—none of the above codes.

b) Cells in the rows may not add up to the total row as people can have previous hospitalisations for multiple diseases.

Source: AIHW analysis of Western Australia linked hospitalisation and deaths data sets.

References

AIHW 2014a. Acute coronary syndrome: validation of the method used to monitor incidence in Australia. Cat. no. CVD 68. Canberra: AIHW.

AIHW 2014b. Cardiovascular disease, diabetes and chronic kidney disease: Australian facts: prevalence and incidence. Cardiovascular, diabetes and chronic kidney disease series no. 2. Cat. no. CDK 2. Canberra: AIHW.

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Where can I find out more?

For more information, go to: <www.aihw.gov.au/cardiovascular-disease/>.

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