## 4 Use of medicines for cardiovascular disease

The National Health Survey collected self-reported information on medicines used for any circulatory condition in the two weeks preceding the survey interview. Details of the survey are given in the Appendix.
Information about medical conditions in the survey is 'as reported' by participants-it was not medically verified and was not necessarily based on diagnosis by a doctor. Some people with multiple conditions who reported using multiple medicines did not know which medicine they were taking for each particular condition, so some medicines may have been incorrectly reported as used for a particular condition, or not reported at all because the respondent understood it was for a condition not covered in the survey. Therefore, we should be cautious when interpreting these results.
Note that in the National Health Survey aspirin was included in the category 'analgesics' that is, pain killers - which is one of its effects. However, in the context of cardiovascular disease, aspirin is more likely to be taken for its antithrombotic effect and elsewhere in this report aspirin is included in the category 'antithrombotic agents'.
Overall, $65.2 \%$ of people who reported a cardiovascular condition also reported using medicine for it in the previous two weeks - coronary heart disease $67 \%$, cerebrovascular diseases $59.3 \%$, and hypertension $88.2 \%$ (Table 4).
The most commonly reported medicines for coronary heart disease were vasodilators used in cardiac disease ( $37.6 \%$ ) (that is, cardiac therapy medicines), analgesics ( $26.4 \%$ ), and betablockers ( $25.6 \%$ ), but a relatively low proportion of people reported taking serum-lipidreducing agents ( $12.7 \%$ ).
For cerebrovascular diseases such as stroke, the survey generally does not provide much useful information on medicines owing to the small number of people with these conditions, except in the case of analgesics (probably aspirin) reported by $45.3 \%$ of people.
Among those who reported diseases of arteries, arterioles and capillaries, $37.3 \%$ reported using analgesics, $23.3 \%$ serum-lipid-reducing agents and $18.9 \%$ beta-blockers.
For hypertension, the medicines reported most often were agents acting on the reninangiotensin system - plain ACE inhibitors (37.3\%) and angiotensin II antagonists (31.8\%); and calcium-channel blockers (23.0\%).
Additionally, $12.9 \%$ of people with a cardiovascular condition reported taking vitamins, minerals and herbal treatments for it. For coronary heart disease, the proportion was $16.7 \%$ and for hypertension $9.8 \%$.
A person may take more than one medicine simultaneously. People with coronary heart disease on average reported taking 1.5 cardiovascular medicines for their condition. But the overall average for all medicines taken by this group for any health condition surveyed was 1.8 , including vitamins, minerals and herbal medicines. For people with cerebrovascular disease, the average number of cardiovascular medicines reported for this condition was 1.4 and the overall average number of medicines reported for any condition surveyed was 1.6. Those with hypertension reported an average of 1.4 cardiovascular medicines used for this condition and an average of 1.5 medicines overall for any condition surveyed. Note that the

National Health Survey collected information on medicines taken for selected conditions only, therefore the overall average number of medicines people reported taking may be an underestimate of their total consumption.

According to a different survey run in South Australia in 2004, which asked about all prescription medicines taken for any condition, $7.4 \%$ of participants aged 15 years and over used four or five medicines, and $5.7 \%$ used six or more (Goldney et al. 2005). The use of multiple medicines increased with age, so that among people aged 65 years and over, $25.4 \%$ used four or five medicines, and $17.7 \%$ used six or more.

Table 4: Medicines used for cardiovascular conditions, 2004-05 ${ }^{\text {(a) }}$

|  | Coronary heart disease | Cerebrovascular diseases | Diseases of arteries, arterioles and capillaries | Hypertension | cardiovascular conditions |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total persons with cardiovascular condition | 337,000 | 90,800 | 203,600 | 2,100,700 | 3,536,600 |
| Using medicine (\%) | 67.0 | 59.3 | 47.6 | 88.2 | 65.2 |
| Not using medicine (\%) ${ }^{(b)}$ | 33.0 | 40.7 | 52.3 | 11.6 | 34.8 |
| Total persons using medicine for cardiovascular condition | 225,900 | 53,800 | 96,900 | 1,853,300 | 2,306,900 |
| Type of medicine used ${ }^{(c)}$ | Per cent of people using medicine |  |  |  |  |
| Vasodilators used in cardiac diseases | 37.6 | np | *4.8 | 0.9 | 5.1 |
| Low-ceiling diuretics | **0.8 | np | np | 8.6 | 8.2 |
| High-ceiling diuretics | *2.2 | np | np | *0.5 | 4.6 |
| Beta-blocking agents | 25.6 | *12.2 | 18.9 | 19.2 | 23.0 |
| Calcium-channel blockers | 13.3 | **5.3 | *6.5 | 23.0 | 21.4 |
| ACE inhibitors, plain | 15.3 | *14.3 | *9.4 | 37.3 | 33.6 |
| Angiotensin II antagonists | *3.9 | **5.5 | *5.1 | 31.8 | 27.1 |
| Serum-lipid-reducing agents | 12.7 | **6.1 | 23.3 | 2.8 | 5.0 |
| Other medicines for heart and vascular conditions | 20.8 | 49.4 | 35.7 | 7.2 | 15.0 |
| Analgesics ${ }^{(d)}$ | 26.4 | 45.3 | 37.3 | 5.8 | 12.0 |
| All other pharmaceutical medicine ${ }^{(\mathrm{e})}$ | 9.0 | *12.3 | **2.6 | 2.4 | 5.4 |
| Vitamins, minerals and herbal treatments | 16.7 | *7.7 | *14.2 | 9.8 | 12.9 |

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[^0]:    (a) Medicines used for cardiovascular conditions in the 2 weeks before the survey interview, based on self-reports.
    (b) Includes persons for whom use of medicine for cardiovascular conditions was not stated.
    (c) The ABS uses for the National health survey a classification of medicines that is, based on the ATC classification, but differs from it in some cases. For instance, in the NHS aspirin is classified as an analgesic instead of an antithrombotic agent.
    (d) Includes aspirin.
    (e) Includes medicine reported by respondents as taken for cardiovascular conditions, but are in fact indicated for other conditions.

    Notes

    1. Persons may report more than one type of medicine.
    2. Estimates marked with * have a relative standard error (RSE) of between $25 \%$ and $50 \%$ and should be interpreted with caution.
    3. Estimates marked with ** have a relative standard error (RSE) of more than $50 \%$ and are considered to be too unreliable for general use.
    4. $n p=$ not available for publication, but included in totals where applicable.

    Source: ABS 2006.

