# 13 Australian public health expenditure data 1998–99

In 1998–99, public health expenditure was \$889m and represented 1.9% of total recurrent health expenditure.

Table 13.1: Public health expenditure by Commonwealth, State and Territory Governments, and as a percentage of total health expenditure for 1998–99

|                                                                                   | Amount           |
|-----------------------------------------------------------------------------------|------------------|
| Total core public health expenditure (including overheads and program-wide costs) | \$879,739,320    |
| Recurrent health expenditure                                                      | \$47,080,000,000 |
| Public health as a proportion of total health expenditure                         | 1.9%             |

Source: AIHW Health Expenditure Database.

Selected health promotion activities was the major area of total public health expenditure in 1998–99 (21%). This category included spending on population health programs aimed at promoting healthy lifestyles, for instance programs promoting good nutrition or safe alcohol use, or programs aimed at preventing suicides. Spending in this category was \$187m. The next largest areas of expenditure on public health were Immunisation (\$178m or 20%) and Communicable disease control (\$145m or 16%), which included HIV/AIDS, hepatitis C and sexually transmitted infections programs, and Needle and syringe programs. Spending on Breast cancer screening came to \$91m or 10% and Cervical screening amounted to \$81m or 9%. The category of Environmental health included such programs as mosquito and rat control, Legionella control and hazardous materials management, and activities such as water quality testing and sampling. Reported spending here came to \$72m or 8%. Expenditure on Food standards and hygiene amounted to \$22m or 3%. The category of All other core public health included spending on such diverse things as alcohol and drug control measures, regulation of poisons, quarantine, and pharmaceuticals and therapeutic goods, and amounted to \$85m or 10% of total public health expenditure.

The 1998–99 data collection represents expenditure by the various health departments throughout Australia. This is not a complete representation of total core public health expenditure since non-health departments and local governments also have public health responsibilities.

# 13.1 Expenditure and funding by the Commonwealth, States and Territories

Total spending by the States and Territories on core public health was \$613m (Table 13.3). This expenditure was funded by the Commonwealth in the form of grants worth \$192m and by \$421m from State and Territory Government sources (Table 13.2).

Table 13.2: National public health expenditure (including overheads and program-wide expenditure) by source of funds

|                                                                                  | Amount (\$) | Funding of public health as a proportion of total public health expenditure (%) |
|----------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------|
| Direct and overhead expenditure by the Commonwealth                              | 266,713,095 | 30                                                                              |
| Payments to States and Territories by the Commonwealth                           | 192,449,825 | 22                                                                              |
| Total Commonwealth funding                                                       | 459,162,920 | 52                                                                              |
| Funding by States and Territories                                                | 420,576,400 | 48                                                                              |
| Total core public health expenditure including overheads and program-wide costs. | 879,739,320 | 100                                                                             |

Table 13.3: National expenditure by Commonwealth, States and Territories on core public health categories including overheads and program-wide expenditure (\$)

|                                               | Commonwealth                                                                                                       | States and Territories                                                                                                                | Total expenditure through States, Territories & Commonwealth |  |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--|
| Category                                      | Total direct and overhead<br>expenditure by the<br>Commonwealth (excluding<br>grants to States and<br>Territories) | Total direct and overhead<br>expenditure by States and<br>Territories (including<br>Commonwealth grants to<br>States and Territories) |                                                              |  |
| Communicable disease control                  | 24,193,170                                                                                                         | 120,953,126                                                                                                                           | 145,146,296                                                  |  |
| Selected health promotion activities          | 40,128,117                                                                                                         | 147,116,876                                                                                                                           | 187,244,993                                                  |  |
| Immunisation                                  | 72,493,136                                                                                                         | 105,943,194                                                                                                                           | 178,436,330                                                  |  |
| Environmental health                          | 31,670,639                                                                                                         | 39,988,676                                                                                                                            | 71,659,314                                                   |  |
| Food standards & hygiene                      | 9,006,112                                                                                                          | 13,350,594                                                                                                                            | 22,356,706                                                   |  |
| Breast cancer screening                       | 5,133,327                                                                                                          | 85,679,611                                                                                                                            | 90,812,938                                                   |  |
| Cervical screening                            | 59,652,592                                                                                                         | 21,271,644                                                                                                                            | 80,924,235                                                   |  |
| Research (Commonwealth only)                  | 16,993,750                                                                                                         | 0                                                                                                                                     | 16,993,750                                                   |  |
| All other core public health                  | 6,602,095                                                                                                          | 78,722,505                                                                                                                            | 85,324,600                                                   |  |
| PHOFAs and other general public health grants | 840,156                                                                                                            | ••                                                                                                                                    |                                                              |  |
| Total expenditure                             | 266,713,095                                                                                                        | 613,026,225                                                                                                                           | 879,739,320                                                  |  |
| Percentage of total                           | 30%                                                                                                                | 70%                                                                                                                                   | 100%                                                         |  |

<sup>(</sup>a) This figure represents the overheads associated with administering the grants to States and Territories by the Commonwealth Department of Health and Aged Care. It is made up of \$498,300 in population health running costs, and \$341,856 in non-grant program costs. The grants to States and Territories of \$192m help to fund the expenditure of the States and Territories of \$618m.

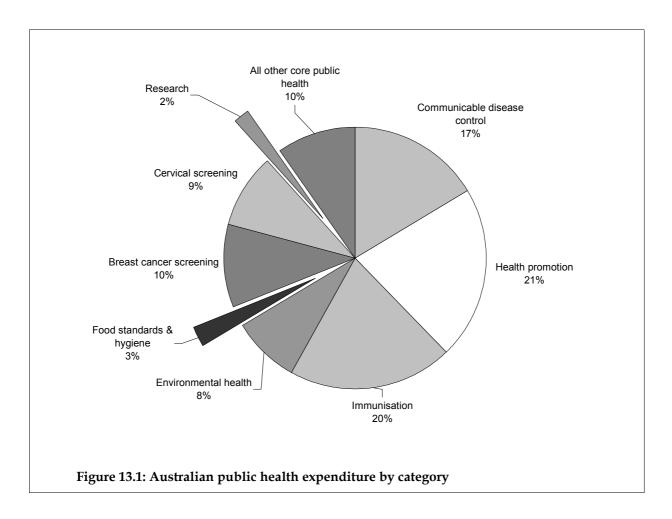
<sup>..</sup> not applicable

Table 13.4: National public health expenditure as a proportion of total core public health, including overheads and program-wide expenses

| Category                                                                          | Direct expenditure | Overheads & program-wide expenditure | Total core public health expenditure | % of expenditure |
|-----------------------------------------------------------------------------------|--------------------|--------------------------------------|--------------------------------------|------------------|
| Communicable disease control                                                      | 128,619,556        | 16,526,741                           | 145,146,296                          | 16.5             |
| Selected health promotion activities                                              | 166,127,180        | 21,117,813                           | 187,244,993                          | 21.3             |
| Immunisation                                                                      | 165,584,090        | 12,852,240                           | 178,436,330                          | 20.3             |
| Environmental health                                                              | 54,925,674         | 16,733,640                           | 71,659,314                           | 8.1              |
| Food standards & hygiene                                                          | 20,466,701         | 1,890,005                            | 22,356,706                           | 2.5              |
| Breast cancer screening                                                           | 80,592,362         | 10,220,576                           | 90,812,938                           | 10.3             |
| Cervical screening                                                                | 76,904,5234        | 4,019,712                            | 80,924,235                           | 9.2              |
| Research (Commonwealth only)                                                      | 15,740,162         | 1,253,588                            | 16,993,750                           | 1.9              |
| All other core public health                                                      | 78,935,035         | 6,389,565                            | 85,324,600                           | 9.7              |
| Grants to States and<br>Territories                                               |                    | 840,156                              | 840,156                              |                  |
| Total core public health                                                          | 792,419,983        | 91,844,036                           | 884,264,020                          | 100.0            |
| General public health<br>grants to States and<br>Territories from<br>Commonwealth |                    |                                      | <sup>(a)</sup> 192,005,325           |                  |

<sup>(</sup>a) General public health grants from the Commonwealth to the States and Territories of \$192m contribute to the funding of State and Territory public health expenditure, but it is not possible to say what portion of each public health category is funded by these grants.

<sup>..</sup> Not applicable



The Commonwealth spent \$267m on public health activities which it either undertook itself or paid NGOs to do. Total funding by the Commonwealth was \$459m (\$267m plus \$192m funding to the States). This was 52% of public health expenditure.

Public health grants to the States and Territories were provided mainly through the PHOFAs (see Section 4.2 for details). Almost all funding provided under the PHOFAs is used for activities that fall within the core public health activities defined by the project; but there is a small portion of these grants to the States and Territories that may not be captured by these categories. All funding provided under the PHOFAs has been included in Tables 13.2 and 13.3, with the recognition that a small proportion may be funding activities outside core public health expenditure as defined by this project.

Commonwealth, State and Territory expenditure includes \$92m in overheads and program-wide expenses needed to support the provision of these public health services by governments.

# 13.2 Summary of expenditure through States and Territories

Tables 13.5 and 13.6 provide a summary of the public health expenditure figures by States and Territories for each of the core public health categories for 1998–99. They should not be used for comparative purposes, due to the number of data deficiencies and differences that

were outlined in Chapter 3. Some of these data deficiencies and differences amongst jurisdictions relate to the:

- use of cash and accrual accounting methods;
- different scope of collection in jurisdictions—for example, community health is excluded from some jurisdictions;
- lack of a consistent boundary around the *All other core public health* category;
- inclusion/exclusion of corporate and central office costs;
- different methodologies used to collect expenditure figures; and
- interpretation of public health expenditure definitions.

Table 13.5 summarises total public health expenditure for each of the eight core categories by all States and Territories. The first row lists millions of dollars of expenditure. The second row is in the form of an index number, where the average per person expenditure for that category is set equal to 1, and the per person expenditures for each jurisdiction are ratios of the national average. Thus for *Communicable disease control* the index for New South Wales is 1.13, as expenditure per person in this area is 13% higher in New South Wales than the national per person expenditure on *Communicable disease control*.

The data in Tables 13.5 and 13.6 must be interpreted cautiously as this is the first time this method of data collection has been used. The differences between the States and Territories in per person expenditures are due to various factors. Firstly, expenditure data have been classified and collected differently across jurisdictions (see Chapter 3).

Secondly, costs of providing public health services differ from one jurisdiction to the next. Jurisdictions like the Northern Territory, the Australian Capital Territory and Tasmania face higher costs due to diseconomies of scale. States with more remote areas have higher costs in delivering services. Other States have higher costs due to higher wage or other input costs. Some States have developed efficiencies in delivering services.

Thirdly, there are differences in the need for public health services. The proportion of at-risk populations varies from State to State. In the Northern Territory, for example, the 28% of the population who are Aboriginal experience a significantly higher burden of disease on average than the Australian population as a whole with 70% also living in remote communities. Different proportions of people who are from a non-English-speaking background or who are Aboriginal or Torres Strait Islander can affect the cost of communicating a message in culturally appropriate ways. The age and sex structure of a State's population affects the relative need for services such as breast cancer screening.

Fourthly, some State health authorities have responsibilities in the areas of food regulation and environmental health regulation, which in other jurisdictions are covered almost entirely by local government authorities.

Finally, States' expenditures vary because they make different policy judgments about the appropriate amount to allocate to different areas of public health services.

The following table does not include expenditure on the *All other core public health* category as the types of expenditure included within it vary significantly from State to State.

Table 13.5: Public health expenditure by States and Territories for each of the core categories

| SUMMARY TABL                | .E*              | NSW   | Vic  | Qld  | WA   | SA   | Tas   | ACT  | NT    | Total |
|-----------------------------|------------------|-------|------|------|------|------|-------|------|-------|-------|
| Communicable                | \$m              | 46.2  | 22.2 | 19.2 | 11.8 | 10.2 | 1.1   | 1.7  | 8.6   | 121.0 |
| disease control             | Per person index | 1.13  | 0.74 | 0.86 | 1.00 | 1.07 | 0.36  | 0.87 | 6.96  | 1.00  |
| Selected health             | \$m              | 43.6  | 26.5 | 24.1 | 18.7 | 17.8 | 1.5   | 2.5  | 12.5  | 147.1 |
| promotion                   | Per person index | 0.88  | 0.73 | 0.89 | 1.30 | 1.53 | 0.41  | 1.02 | 8.33  | 1.00  |
| Immunisation                | \$m              | 37.9  | 26.2 | 14.2 | 8.7  | 8.5  | 2.1   | 1.2  | 7.2   | 105.9 |
|                             | Per person index | 1.06  | 1.00 | 0.72 | 0.84 | 1.01 | 0.78  | 0.68 | 6.65  | 1.00  |
| Environmental               | \$m              | 10.5  | 5.5  | 6.6  | 6.8  | 4.8  | 1.7   | 0.6  | 3.4   | 40.0  |
| health                      | Per person index | 0.78  | 0.55 | 0.89 | 1.75 | 1.53 | 1.74  | 0.93 | 8.43  | 1.00  |
| Food standards              | \$m              | 4.2   | 2.7  | 2.1  | 1.7  | 1.1  | 0.2   | 0.4  | 1.0   | 13.4  |
| and hygiene                 | Per person index | 0.92  | 0.82 | 0.84 | 1.33 | 1.00 | 0.64  | 1.73 | 7.61  | 1.00  |
| Breast cancer               | \$m              | 31.9  | 18.9 | 15.4 | 7.7  | 6.3  | 3.0   | 1.5  | 1.1   | 85.7  |
| screening                   | Per person index | 1.10  | 0.89 | 0.97 | 0.91 | 0.92 | 1.40  | 1.04 | 1.26  | 1.00  |
| Cervical                    | \$m              | 5.0   | 7.0  | 2.7  | 1.1  | 1.8  | 0.576 | 0.46 | 2.6   | 21.3  |
| screening                   | Per person index | 0.70  | 1.32 | 0.69 | 0.52 | 1.08 | 1.07  | 1.33 | 12.20 | 1.00  |
| Total for the               | \$m              | 179.4 | 109  | 84.2 | 56.6 | 50.4 | 10.2  | 8.3  | 36.4  | 534.3 |
| first seven core categories | Per person index | 0.99  | 0.82 | 0.85 | 1.08 | 1.19 | 0.76  | 0.95 | 6.70  | 1.00  |

<sup>\*</sup> Note: Due to data deficiencies and differences outlined in Chapter 3, these data should not be used for comparative purposes.

Table 13.6 shows the percentage of expenditure by States and Territories on each of the core public health categories. The three categories with the largest expenditure in 1998–99 were *Selected health promotion activities, Communicable disease control* and *Immunisation*.

Table 13.6: Public health expenditure by States and Territories for each of the core categories as a percentage of total public health expenditure for each State and Territory (per cent)

|                                           | NSW   | Vic   | Qld   | WA    | SA    | Tas   | ACT   | NT    | All<br>States |
|-------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
|                                           | NOW   | VIC   | Qiu   | WA    | 3A    | 145   | ACI   | IN I  | States        |
| Communicable disease control              | 25.8  | 20.4  | 22.8  | 20.8  | 20.2  | 10.6  | 20.9  | 23.5  | 22.6          |
| Selected health promotion                 | 24.3  | 24.4  | 28.6  | 33.1  | 35.3  | 14.8  | 29.8  | 34.2  | 27.5          |
| Immunisation                              | 21.1  | 24.1  | 16.9  | 15.4  | 16.8  | 20.4  | 14.2  | 19.7  | 19.8          |
| Environmental health                      | 5.9   | 5.0   | 7.8   | 12.1  | 9.6   | 17.1  | 7.4   | 9.4   | 7.5           |
| Food standards and hygiene                | 2.3   | 2.5   | 2.5   | 3.1   | 2.1   | 2.1   | 4.6   | 2.8   | 2.5           |
| Breast cancer screening                   | 17.8  | 17.3  | 18.3  | 13.6  | 12.4  | 29.4  | 17.6  | 3.0   | 16.0          |
| Cervical screening                        | 2.8   | 6.4   | 3.2   | 1.9   | 3.6   | 5.6   | 5.6   | 7.2   | 4.0           |
| Total for the first seven core categories | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0         |

## 14 Discussion and future direction

The collection of 1998–99 expenditure information across eight distinct public health expenditure categories marks the first collection of this type in the public health or population health arena in Australia. This report presents the information gathered in the 1998–99 collection and focuses on expenditure provided for public health by the various Commonwealth and State health departments.

### 14.1 Key findings

- Current data indicate that public health expenditure in Australia is approximately 2% of total recurrent health expenditure.
- \$266m of public health services were provided by the Commonwealth Department of Health and Aged Care in 1998–99. This was 30% of total public health services expenditure. Commonwealth grants to the States and Territories comprised \$192m or 22% of total public health services expenditure. In total, therefore, the Commonwealth in 1998–99 funded \$459m or 52% of total public health expenditure provided by Commonwealth, State and Territory Governments.
- Total State and Territory expenditure on public health was \$618m. Public health expenditure funded by States and Territories (excluding that portion funded by the Commonwealth) totalled \$425m or 48% of government public health expenditure.
- The combined expenditure of Commonwealth and State Governments on core public health activities in 1998–99 was \$884m.

#### 14.2 Data deficiencies and differences

Although this report provides the most up-to-date information on public health expenditure in Australia, there are still a number of issues that need to be addressed in the collection of the data. Some of the deficiencies with the data in this report are:

- Some jurisdictions have provided expenditure based on accrual accounting concepts
  while others have provided cash data. This should be minimised by Stage 3 of the project
  when the Northern Territory will be the only jurisdiction to use cash data. New South
  Wales estimated that depreciation was 3% of their total public health expenditure and it
  is expected that most other jurisdictions using accrual accounting will have similar
  results.
- Technical Advisory Group members agreed to include in this report public health
  activities that were carried out by services other than public health services; for example,
  community based health centres. Jurisdictions will vary on the expenditure reported in
  this category as not all jurisdictions have included expenditure by community based
  health centres and those jurisdictions which have reported this expenditure have not
  necessarily included only the programs that have a population-wide focus.
- Boundaries were not set around the *All other core public health* category. Jurisdictions were advised to include in this category expenditure on public health activities that was not included in the preceding seven core categories and were given a list of some of the possible inclusions.

- Tasmania, the Australian Capital Territory and the Northern Territory are the only jurisdictions that have reported expenditure on centralised corporate and executive overheads in this report.
- Jurisdictions varied in the methodology used to collect the public health expenditure information. While most jurisdictions were able to identify the cost centres that relate to public health on a centralised accounting system, there were still differences found in whether the reporting system was administratively focused or activity focused. There were also differences due to the manual component of the collection. For example, South Australia, which did not have a completely centralised accounting system, had to do a partially manual collection from 97 agencies and seven regional health services. South Australia received responses from 88% of agencies and regional health services.
- Public health expenditure information from local governments was not collected in this
  report as this was not available due to the changing of the ABS Government Finance
  Statistics from cash to accrual.
- Public health expenditure information was not collected from non-health government departments or from those NGOs that had non-government funded public health expenditure.

### 14.3 Interpretation of results

The data must be interpreted cautiously as this information is being presented for the first time using this methodology. Although the definitions used are the same, the scope of the 1998–99 collection differs between jurisdictions. For example, some State health authorities have responsibilities in the areas of food regulation and environment health regulation, which in other jurisdictions are covered almost entirely by local government authorities. There are also differences between jurisdictions in the method that was used to collect the data and the interpretation that each jurisdiction had of the inclusions and exclusions under the public health expenditure categories. Thus it is not valid to compare the expenditure information contained in the State and Territory chapters.

It is also inappropriate to compare these data with the previous report on 1997–98 public health expenditure as the sources and methodology of collection of the two sets of data are different.

However, public health expenditure for the seven core categories (i.e. excluding 'all other core public health expenditure') as a proportion of total health expenditure *can* be measured validly for each jurisdiction using data from this report (see Table 13.6). Further reports on public health expenditure using the core public health definitions will enable comparative analysis to be made.

#### 14.4 Future directions

The National Public Health Expenditure Project (NPHEP) aims to develop a complete picture of expenditure on public health activities in Australia by developing clear, comprehensive public health definitions to be used in the collection of expenditure information in an automated, routine and consistent fashion. It aims to develop a common agreed process for collecting public health expenditure data in Australia.

#### Refinement of categories for the 1999–00 report

The public health expenditure definitions for the 1999–00 collection of public health expenditure information have been revised to include two new categories, *Hazardous and harmful drug use* and *Research*. To enable more accurate representations amongst jurisdictions, the loosely defined *All other core public health* category has not been included for the 1999–00 collection. Expenditure from this category will now be included under the *Hazardous and harmful drug use* category, the *Environmental health* category or the *Public health related activities* category.

#### The 1999-00 core public health categories are:

- 1. Communicable disease control
- 2. Selected health promotion
- 3. Organised immunisation
- 4. Environmental health
- 5. Food standards and hygiene
- 6. Breast cancer screening
- 7. Cervical screening
- 8. Hazardous and harmful drug use
- 9. Research.

There will also be a category called *Public health related activities*. This category will allow jurisdictions to include expenditure on those activities that are related to public health and which are important to the public health strategy of each jurisdiction. The expenditure in this category will be kept separate and will not be included in the aggregate public health expenditure figures.

The NPHEP aims at expanding the Stage 3 collection of 1999–00 expenditure information to include local government and large NGOs that engage in public health activities covered under one of the NPHEP categories. The collection of such information in Australia will enable a more complete picture of public health expenditure to be obtained.

#### Usefulness of public health expenditure information

The NPHEP also aims to promote the link between public health inputs and outputs, so that constructive cost-effective analyses may be undertaken on public health interventions.

An evaluation of the effectiveness of a program requires collection of information on inputs, outputs and outcomes. For example, it is expected the BreastScreen program will produce a significant drop in mortality rates from breast cancer through early detection of breast cancers. In order to evaluate the effectiveness and efficiency of this measure, the cost of screening must be identified (cost of inputs), the number of screens done must be measured (outputs) and the change in breast cancer mortality rates due to the screening must also be measured (outcomes). If any of these pieces of information are missing then a full evaluation is not possible. The NPHEP is collecting data on the cost of inputs (expenditure), with the objective of collecting it in such a way that it can be related to outputs and outcomes.

Information on public health expenditure is useful for a number of reasons:

- 1. It allows for the monitoring of government expenditure and assists in making governments more accountable for their decisions.
- 2. It assists in the measurement of the cost-effectiveness of public health related programs.
- 3. It provides essential data for setting benchmarks that can be used to improve and monitor performance.

- 4. It provides a more reliable basis for making comparisons between investment in public health and investments in the rest of the health sector.
- 5. It enables international comparisons of public health expenditure.

The usefulness of these data will increase over time, as changes in public health expenditure can be monitored.

Defining public health expenditure offers an opportunity to explore and focus on costs of public health activities within an Australian setting. This information will be valuable in planning future public health policy and programs.