10 Expenditure by the Northern Territory Department of Health and Community Services

10.1 Introduction

The Northern Territory (NT) covers approximately 17% of the nation, but has a small, widely dispersed population which is only 1% of the total national figure. Within the NT, most public health programs are provided by the Health Services Division of the NT Department of Health and Community Services (NT DHCS). The NT DHCS also provides some public health services to people who live in adjoining areas of Western Australia and South Australia.

Public health programs are delivered through 95 service outlets, which include the widely dispersed community health centres as well as the five public hospitals in Darwin, Nhulunbuy, Katherine, Alice Springs and Tennant Creek. Within this distinctive NT work environment, public health programs are often delivered by generalist health centre workers including district medical officers, community health nurses and Aboriginal health workers. A key role for specialised public health workers is to support the generalist health centre teams.

An important feature of health expenditure is the combined influence of remoteness and the comparatively poor health of the Aboriginal population on the average costs of providing health goods and services (AIHW 2005). Indigenous people comprise 28.8% of the Territory's population, compared with 2.4% of the total Australian population, and 70% live in remote or very remote localities.

10.2 Overview of results

Total NT DHCS expenditure on public health activities for 2003–04 was estimated at $44.5 million, an increase from $37.3 million in 2002–03 and $38.3 million in 2001–02 (Table 10.1).

Overall, expenditure on public health in 2003–04, in current prices, was up $7.2 million or 19.3% on the previous financial year. There was an increase in expenditure across all public health activities with expenditure on *Communicable disease control* (up $2.1 million) and *Prevention of hazardous and harmful drug use* (up $2.0 million) being the largest in absolute terms.

Approximately 84% of the expenditure in 2003–04 was directed towards four public health activities. These were:

- *Communicable disease control* (35.7%)
- *Organised immunisation* (18.2%)
- *Prevention of hazardous and harmful drug use* (18.2%)

- *Environmental health* (11.9%).

Table 10.1: Territory government expenditure on public health activities, current prices, Northern Territory, 1999–00 to 2003–04

Activity	1999–00	2000–01	2001–02	2002–03	2003–04
			Expenditure ($ million)		
Communicable disease control	8.6	9.1	9.0	13.8	15.9
Selected health promotion	9.9	9.6	9.0	1.9	2.4
Organised immunisation	6.2	7.2	8.6	7.2	8.1
Environmental health	3.6	3.6	3.6	4.4	5.3
Food standards and hygiene	1.0	1.0	0.8	0.7	0.8
Breast cancer screening	1.1	0.9	0.9	0.9	1.1
Cervical screening	2.2	2.0	2.1	1.8	2.2
Prevention of hazardous and harmful drug use	6.5	3.6	3.7	6.1	8.1
Public health research	0.4	0.6	0.6	0.5	0.6
Total public health	**39.5**	**37.6**	**38.3**	**37.3**	**44.5**
			Proportion of public health expenditure[(a)] (%)		
Communicable disease control	21.8	24.2	23.5	37.0	35.7
Selected health promotion	25.1	25.5	23.5	5.1	5.4
Organised immunisation	15.7	19.1	22.5	19.3	18.2
Environmental health	9.1	9.6	9.4	11.8	11.9
Food standards and hygiene	2.5	2.7	2.1	1.9	1.8
Breast cancer screening	2.8	2.4	2.3	2.4	2.5
Cervical screening	5.6	5.3	5.5	4.8	4.9
Prevention of hazardous and harmful drug use	16.5	9.6	9.7	16.4	18.2
Public health research	1.0	1.6	1.6	1.3	1.3
Total public health	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Estimates are based on expenditure data expressed in $ million and rounded to one decimal place.

Note: Components may not add to totals due to rounding.

10.3 Expenditure on public health activities

This section of the report looks at the level of spending on each of the public health activities. The section also provides some detail of the programs within each of the health activities and their related expenditure.

Communicable disease control

Total NT DHCS expenditure for *Communicable disease control* in 2003–04 was $15.9 million, compared with $13.8 million in 2002–03 and $9.0 million 2001–02 (Table 10.1). The 2003–04 *Communicable disease control* expenditure accounted for 35.7% of total public health expenditure and was the most significant area of public health expenditure by NT DHCS.

The total for *Communicable disease control* included $3.2 million on HIV/AIDS, hepatitis C and sexually transmitted infections programs, $0.2 million on the needle and syringe programs and $12.6 million on other communicable disease control (Table 10.2). Overall, expenditure was up $2.1 million or 15.2% on that incurred in 2002–03 due to the increased expenditure on other communicable disease control.

Some of the major expenditures relate to:

- policy development
- surveillance activities for selected communicable diseases
- outbreak investigations and appropriate control measures
- development, coordination, promotion and monitoring of preventive programs
- involvement in research, education and health promotion activities
- provision of screening and clinical services for tuberculosis. leprosy, sexually transmitted infections including HIV and hepatitis, and Australian bat lyssavirus immunisation.

Table 10.2: Territory government expenditure on *Communicable disease control*, current prices, Northern Territory, 2001–02 to 2003–04 ($ million)

Category	2001–02	2002–03	2003–04
HIV/AIDS, hepatitis C and sexually transmitted infections	2.9	3.3	3.2
Needle and syringe programs	0.1	0.3	0.2
Other communicable disease control	6.0	10.2	12.6
Total	**9.0**	**13.8**	**15.9**

Note: Components may not add to totals due to rounding.

Selected health promotion

Total NT DHCS expenditure for *Selected health promotion* in 2003–04 was $2.4 million, compared to $1.9 million in 2002–03 and $9.0 million in 2001–02. This was 5.4% of total public health expenditure (Table 10.1).

The expenditure reported for 2002–03 and 2003–04 is lower than that recorded for previous financial years. This change was a result of a change in the way health promotion was organised and delivered in the NT—no longer a separate health program but integrated into the core business of all programs. A small team has been established to work with the key focus areas of mental health, alcohol and other drugs, child and maternal health, and preventable chronic disease to ensure health promotion action is evidence-based, measurable and coordinated to maximise effectiveness and reduce duplication.

Organised immunisation

Total NT DHCS expenditure for *Organised immunisation* in 2003–04 was $8.1 million, compared with $7.2 million for 2002–03 and $8.6 million for 2001–02 (Table 10.1). The 2003–04 expenditure was 18.2% of the total public health expenditure and was the second most significant area of expenditure. It comprised $1.9 million on organised childhood

immunisation, $1.1 million on organised pneumococcal and influenza immunisation and $5.1 million on all other organised immunisation (Table 10.3).

The National Meningococcal C Vaccination Program was introduced in the NT in March 2003 as part of the National Immunisation Program. The meningococcal C vaccine is now on the NT Childhood Vaccination Schedule for children turning 12 months of age. In addition, all children aged 1–5 years in 2003 and senior high school students aged 15–19 years were also offered the vaccine. Details of the various organised immunisation programs are available from NT DHCS.

Table 10.3: Territory government expenditure on *Organised immunisation*, current prices, Northern Territory, 2001–02 to 2003–04 ($ million)

Category	2001–02	2002–03	2003–04
Organised childhood immunisation	1.1	0.9	1.9
Organised pneumococcal and influenza immunisation	1.8	1.3	1.1
All other organised immunisation	5.7	5.0	5.1
Total	**8.6**	**7.2**	**8.1**

Environmental health

Total NT DHCS expenditure for *Environmental health* in 2003–04 was $5.3 million, compared with $4.4 million in 2002–03 and $3.6 million in 2001–02. The expenditure incurred in
2003–04 was 11.9% of total expenditure on public health activities in that year. It was up $0.9 million or 20.5% on that incurred in 2002–03 (Table 10.1).

Some of the major activities covered by spending in this area were education; statutory surveillance and monitoring; complaint resolution relating to physical, chemical, biological and radiological agents in the environment; managing environmental health standards; environmental planning; and food safety.

Food standards and hygiene

Total NT DHCS expenditure on *Food standards and hygiene* in 2003–04 was $0.8 million, compared with $0.7 million in 2002–03 and $0.8 million the previous year (Table 10.1). The 2003–04 expenditure constituted 1.8% of the total expenditure on public health activities in that year.

The NT DHCS Environmental Health program has a policy unit that is responsible for food safety legislation, policy development and regulatory activities, which include food sampling, food recalls and food safety activities.

Breast cancer screening

Total NT DHCS expenditure for *Breast cancer screening* in 2003–04 was $1.1 million, up $0.2 million on that incurred in 2002–03 and 2001–02. This constituted 2.5% of total expenditure on public health activities during 2003–04 (Table 10.1).

The Women's Cancer Prevention Program consists of three public health screening programs, the NT Cervical Cancer Screening Program, BreastScreen NT and the Remote

Area Well Women Screening (RAWWS) Program. BreastScreen NT is part of a national program funded jointly with the Australian Government. It provides breast screening and assessment services for women aged 40 years or over with no symptoms of breast cancer. It particularly focuses on women aged 50 to 69 years. The RAWWS Program provides holistic screening for women in the rural and remote communities who do not have access to BreastScreen services.

Cervical screening

Total NT DHCS expenditure for *Cervical screening* in 2003–04 was $2.2 million, compared with $1.8 million in 2002–03 and $2.1 million in 2001–02. The expenditure incurred in 2003–04 constituted 4.9% of total expenditure on public health activities(Table 10.1).

The Women's Cancer Prevention Program provides public health cervical screening services, through the NT Cervical Cancer Screening Program. This program is part of the National Cervical Cancer Screening Program and is also funded under a joint arrangement with the Australian Government.

It should be noted that the majority of cervical screening in the Northern Territory is undertaken by GPs and funded through Medicare. This expenditure is recorded by the Australian Government and included in the national and the Australian Government estimates of expenditure on *Cervical screening*.

Prevention of hazardous and harmful drug use

Total NT DHCS expenditure for the *Prevention of hazardous and harmful drug use* in 2003–04 was $8.1 million, compared with $6.1 million for 2002–03 and $3.7 million for 2001–02 (Table 10.1).

The 2003–04 expenditure constituted 18.2% of total public health expenditure and was the third most significant area of expenditure incurred by NT DHCS during 2003–04. It comprised $2.0 million on alcohol and Tobacco programs, $1.6 million on illicit and other drug dependence programs and $4.4 million on mixed programs (that is, those that could not be classified to the previous categories). Overall, expenditure was up $2.0 million on 2002–03 and $4.4 million on the previous financial year (Table 10.4).

The Alcohol and Other Drugs Program (AODP) funds a range of education, community development, treatment and care services for people with substance misuse problems. These services are mainly funded through non-government service providers.

Table 10.4: Territory government expenditure on *Prevention of hazardous and harmful drug use*, current prices, Northern Territory, 2001–02 to 2003–04 ($ million)

Category	2001–01	2002–03	2003–04
Alcohol	1.3	1.4	1.4
Tobacco	0.6	0.7	0.6
Illicit and other drugs of dependence	0.6	1.0	1.6
Mixed	1.2	2.9	4.4
Total	**3.7**	**6.1**	**8.1**

Note: components may not add to totals due to rounding.

Public health research

NT DHCS expenditure for *Public health research* in the NT during 2003–04 was estimated at $0.6 million, compared with $0.5 million in 2002–03 and $0.6 million in 2001–02 (Table 10.1). The 2003–04 expenditure constituted 1.3% of total public health expenditure incurred in that year.

In addition, NT DHCS provided funding to the Menzies School of Health Research and in-kind support to the Cooperative Research Centre for Aboriginal and Tropical Health. The public health-related components of these expenditures are not included in this report.

10.4 Growth in expenditure on public health activities

In constant price terms, total public health expenditure increased from $37.3 million in 2002–03 to $42.7 million in 2003–04. This represented an increase of 14.5% (Table 10.5). Expenditure on *Prevention of hazardous and harmful drug use* and *Selected health promotion* recorded the highest real growth rates (27.9% and 21.1% respectively).

From 1999–00 to 2003–04, expenditure on public health activities decreased, in real terms, by 2.5%, at an average rate of –0.6% per annum (Table 10.5).

Table 10.5: Territory government expenditure on public health activities, constant (2002–03) prices[a][b], Northern Territory, 1999–00 to 2003–04

	Expenditure ($ million)					
Activity	**1999–00**	**2000–01**	**2001–02**	**2002–03**	**2003–04**	**5-year average**
Communicable disease control	9.5	9.7	9.4	13.8	15.3	11.5
Selected health promotion	11.0	10.3	9.4	1.9	2.3	7.0
Organised immunisation	6.9	7.7	8.9	7.2	7.8	7.7
Environmental health	4.0	3.8	3.8	4.4	5.1	4.2
Food standards and hygiene	1.1	1.1	0.9	0.7	0.7	0.9
Breast cancer screening	1.2	1.0	0.9	0.9	1.0	1.0
Cervical screening	2.4	2.2	2.2	1.8	2.1	2.1
Prevention of hazardous and harmful drug use	7.2	3.9	3.8	6.1	7.8	5.8
Public health research	0.5	0.6	0.6	0.5	0.6	0.6
Total public health	**43.8**	**40.3**	**39.9**	**37.3**	**42.7**	**40.8**
			Growth (%)			
	1999–00 to 2000–01	**2000–01 to 2001–02**	**2001–02 to 2002–03**	**2002–03 to 2003–04**	**1999–00 to 2003–04[c]**	
Communicable disease control	2.1	–3.1	46.8	10.9	12.7	
Selected health promotion	–6.4	–8.7	–79.8	21.1	–32.4	
Organised immunisation	11.6	15.6	–19.1	8.3	3.1	
Environmental health	–5.0	—	15.8	15.9	6.3	
Food standards and hygiene	—	–18.2	–22.2	—	–10.7	
Breast cancer screening	–16.7	–10.0	0.0	11.1	–4.5	
Cervical screening	–8.3	—	–18.2	16.7	–3.3	
Prevention of hazardous and harmful drug use	–45.8	–2.6	60.5	27.9	2.0	
Public health research	20.0	—	–16.7	20.0	4.7	
Total public health	**–8.0**	**–1.0**	**–6.5**	**14.5**	**–0.6**	

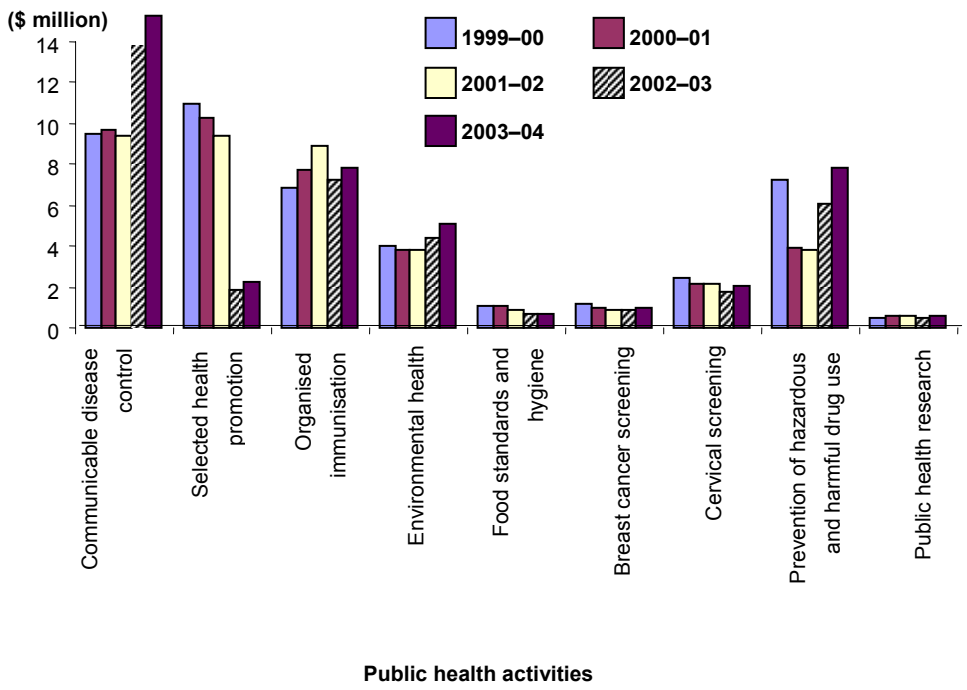
(a) Constant price expenditure has been expressed in 2002–03 prices (see Chapter 11, Section 11.1).

(b) Estimates are based on expenditure expressed in $ million and rounded to one decimal place.

(c) Average annual growth rate.

Note: Components may not add to totals due to rounding.

Over the period that the present public health expenditure series has been compiled, that is, from 1999–00 to 2003–04, the public health activities which recorded the highest average annual expenditure, in real terms, were *Communicable disease control* ($11.5 million) *Organised immunisation* ($7.7 million) and *Selected health promotion* ($7.0 million) (Table 10.5; Figure 10.1). The decline in real expenditure on *Selected health promotion* in 2002–03 and 2003–04 was largely the result of departmental restructuring in 2002–03.



Source: Table 10.5.

Figure 10.1: Territory government expenditure on public health activities, constant (2002–03) prices, Northern Territory

10.5 Expenditure on 'Public health-related activities'

Total expenditure on 'Public health-related activities' in 2003–04 was estimated at $11.0 million, compared with $10.7 million in 2002–03 and $12.2 million in 2001–02. Expenditures by NT DHCS cover a range of health-related activities such as:

- drug and alcohol activities treatment services
- services considered primarily of a welfare service nature (for example night shelters) or almost entirely providing accommodation and food services (for example halfway houses)
- other clinical services provided by the NT Communicable Disease program including the clinical management of leprosy and tuberculosis
- the public health component of the work of remote area health centre staff.

The AODP provides funding for community-based agencies to deliver treatment services throughout the Territory, including counselling, outpatient and residential treatments, and detoxification services. The AODP works with the government sector and community agencies to implement strategies and provide support through training, professional development, community education and research. The AODP is a key partner in the Community Harmony Strategy that aims to reduce the problems of itinerants in the

community. Similarly, specialised staff within the Communicable Disease program provide a more comprehensive service than what is covered within 'public health expenditure'.

11 Technical notes

11.1 Deflators

Because the real value of money is diminished over time by rises in prices (inflation), in order to measure real changes in expenditure on public health activities it is necessary to adjust the estimates of expenditure to remove the effects of inflation. In this report this is achieved by expressing the estimates of expenditure for all periods in terms of the purchasing power of money in 2002–03. This is referred to throughout the report as expenditure in constant prices. This has been achieved by deflating the current price expenditure estimates for all periods using chain price indexes derived by the Australian Bureau of Statistics (ABS).

The chain price indexes published in the ABS national accounts are annually reweighted Laspeyres chain price indexes and are calculated at such a detailed level that the ABS considers them analogous to measures of pure price change. For this publication, chain price indexes for governmental final consumption expenditure on 'Hospital and nursing home services' by state/territory and local governments have been used to revalue the expenditure estimates in 2002–03 prices and derive constant price estimates of public health expenditure. While these indexes are not ideal measures for deflating prices for public health activities, they are considered to be the most relevant of the deflators that are available for this particular purpose.

The index numbers used in deriving the constant price estimates of expenditure for each jurisdiction are set out in the table below.

Table 11.1: Government final consumption expenditure on 'Hospital and nursing home services' — chain price index referenced to 2002–03

State and local—hospitals and nursing homes	1999–00	2000–01	2001–02	2002–03	2003–04
New South Wales	90.6	93.5	96.6	100.0	103.9
Victoria	90.6	93.6	96.7	100.0	103.6
Queensland	91.0	94.0	96.8	100.0	103.6
Western Australia	90.8	93.9	96.5	100.0	103.5
South Australia	90.7	93.6	96.7	100.0	103.3
Tasmania	91.3	94.1	96.9	100.0	103.3
Australian Capital Territory	90.8	93.6	96.6	100.0	103.6
Northern Territory	90.3	93.3	96.2	100.0	103.8
Australia	90.6	93.6	96.6	100.0	103.7

Note: These are annually reweighted Laspeyres chain price indexes.

Source: Unpublished ABS data.

11.2 Jurisdictions' technical notes

Australian Government

Methodology used to estimate the Medicare component of cervical screening

Cervical screening expenditure, funded through Medicare, is provided for both screening and diagnostic purposes. These expenditures may be allocated to either 'Cervical screening' or 'Public health-related activities'. The method used is outlined below.

Cervical screening

The methodology used to estimate the Medicare component of *Cervical screening* is consistent with that used in the two previous reports and is derived using the following assumptions:

- of the three cervical cytology items listed in the Medicare Benefits Schedule (73053, 73055 and 73057), only item 73053 (women showing no symptoms, signs or recent history suggestive of cervical neoplasia) relates to public health expenditures
- benefits paid for 73055 and 73057 are related to 'Public health-related activities'
- where a consultation involved the taking of a Pap smear also involved one or more other medical procedures, the related benefits (under MBS item 73901) should be apportioned equally across all the procedures involved and only that proportion related to the taking of the smear should be allocated to the public health activity category.

The third assumption is based on information provided by the Bettering the Evaluation and Care of Health (BEACH) study. That study showed that there were often other issues that were dealt with during the course of a consultation where a Pap smear was taken. Consequently, a factor (0.69 in 2001–02, and 0.67 in 2002–03 and 2003–04) was applied to the total benefits paid relating to GP consultations where a Pap smear was performed. This factor was based on BEACH data relating to consultations where a Pap smear was the primary reason of encounter.

'Public health-related activities'

'Public health-related' expenditure on cervical pathology is made up of:

- the two excluded Medicare cervical cytology items (items 73055 and 73057)
- the full benefit paid for the GP consultations associated with the excluded items
- those parts of the GP consultations associated with item 73053 that were not included in the estimate of expenditure on the public health activity *Cervical screening*.

New South Wales health authorities

Data collection methods

Health services in New South Wales operate within specific geographic areas of the state. They each play major roles in:

- planning, delivering and coordinating local services
- managing resources
- setting and maintaining the balance between treatment and prevention services within their geographic area.

Consequently, the recording of expenditure is not centralised as each health service has a separate budget and its own information and accounting systems.

In 1999–00 the public health expenditure collection was incorporated in the New South Wales Program and Product Data Collection. This is a major collection that also includes the Hospital Cost Data Collection, the Unaudited Annual Return and the National Mental Health Survey.

Seventeen health services, the NSW Health and the Children's Hospital at Westmead reported data using a set of 24 public health subprograms. The data were then aggregated centrally and analysed at state level. The subprograms were later mapped to the health activities cover by the data collection. The public health expenditure included activity-specific, program-wide and agency-wide expenditures. These expenditures were distributed to individual health activities according to their levels of direct expenditure, except for a few activities that received no agency-wide expenditure.

Expenditure data financial years 1999–00 to 2003–04 have been reported on an accrual accounting basis.

Victorian health authorities

Data collection methods

As most of the public health outputs are delivered by agencies funded by the DHS, the collection of the health expenditure data was sourced from the DHS's centralised generalised ledger.

The steps involved in the data collection are summarised below:

- downloading of expenditure on health activities from the department's general ledger. The flexible structure of the ledger enabled data to be sorted by activities or outputs, which in turn facilitated further classification into nine public health activities and 'Public health-related activity'
- manual categorisation, sorting each activity against its description
- verification to ensure the integrity of data collected
- reconciliation to ensure that reliable data were included in this report. It was determined that only functions that were funded or provided directly by the Public Health Division would be included in the data collection.

Expenditure data for financial years 1999–00 to 2003–04 have been reported on an accrual accounting basis. The relevant share of the DHS's central corporate expenditure was apportioned across the ten health activities, based on the proportion of activity expenditure.

Queensland Health

Since the 1999–00 Budget, Queensland Health has been required to report financial information to Queensland Treasury under the Managing for Outcomes framework, which identified the total cost of outputs. In order to provide this information, all Queensland Health's cost centres were allocated by percentage across outputs. Queensland Health uses a state-wide decision support system to produce output operating reports that identify total public health expenditure for Queensland Health.

The Managing for Outcomes framework is a process that Queensland Health uses to report total public health expenditure. However, additional analysis using cost centre service types is required to allocate the total public health output expenditure to the National Public Health Expenditure Project (NPHEP) activities. Any services types classified as public health and which can't be matched to the specific NPHEP public health activities are included under 'Public health-related activities'.

During a review of the expenditure collected through the above process, minor adjustments needed to be made to the expenditure reported. The adjustments were required mainly because of inappropriate mapping to service types. A review of the service types will be conducted to avoid this in future collections.

Expenditure data for financial years 1999–00 to 2003–04 have been reported on an accrual accounting basis.

Western Australian health authorities

Data collection methods

The primary source of public health expenditure data is DOH's Oracle financial system. Oracle supports a hierarchical cost centre structure that allows the mapping of expenditure against each of the public health activities. For most of the state-wide public health programs each of the cost centres is matched to one of the public health activities. Where cost centres relate to more than one category the expenditure was allocated across the relevant categories on the basis of advice from the cost centre manager. Overhead expenses for the Public Health Division were apportioned across the public health activities, based on a model incorporating both staffing levels and expenditure.

A collection instrument was sent to each of the 32 metropolitan and rural health services for completion. The collection instrument consisted of a collection manual, based on the NPHEP Collection Manual, and a spreadsheet for completion by the health service. The completed spreadsheets were reviewed for consistency and the results used to compile the separate expenditure listings for public health units and for health services.

Public health expenditure data for the Office of Aboriginal Health was extracted from the Office's contract management system. Contract expenditure was allocated across the public health activities on the basis of the contracted service description.

The Western Australian expenditure estimates do not include:

- expenditure by LGAs (though payments to LGAs for public health activities from the Health portfolio are included)
- general pathology testing, dental health or Red Cross Blood Transfusion Service expenditure.

South Australian health authorities

Data collection methods

Data were collected using a combination of automated and manual processes.

Expenditure was extracted from the centralised DHS general ledger, the major source being the Public and Environmental Health cost centres. The DHS cost centres were mapped to the public health activities as defined for this project. This accounted for approximately 58% of the total public health expenditure collected from within the health sector.

The second part of the collection involved writing to external organisations (including public hospitals, community health centres and non-health state government departments that undertake public health activities), detailing the aims and expectations for the 2001–02 to 2003–04 data collections. A total of 45 metropolitan organisations and 7 regional health services were included in the collection.

A collection spreadsheet and instructions were then emailed to contact people from these external organisations. Meetings were arranged where necessary, usually with the larger organisations. This type of face-to-face contact often saved a significant amount of time and confusion.

Expenditure data for financial years 1999–00 to 2003–04 have been reported on an accrual accounting basis.

Tasmanian health authorities

Data collection methods

All expenditures by the DHHS that fit within the definitions of public health activities have been included. However, this report does not include expenditure by other state government agencies and LGAs that is attributable to public health.

While the DHHS's finance reporting system is centralised and this enables the smooth collection of expenditure data, the following should be noted:

- the 1999–00 to 2002–03 data supplied for Tasmania are from cash-based accounting systems, creating the possibility of carry-over expenditure between reporting periods; however, this is likely to be of minimal impact
- expenditures by LGAs are not included
- expenditure estimates are total expenditure, not net expenditure
- program-wide and agency-wide expenditures have been allocated proportionately across NPHEP categories using the proportion of expenditure by cost centre.

The DHHS's finance system cost centre structure is such that in most cases the public health activities are easily identified; however, some cost centres contained two or more categories, or only a proportion of the total expenditure was attributable to public and environmental health. In such cases, consultation with the cost centre managers was undertaken to obtain the portion of cost centre expenditure attributable to the public health activities.

Expenditure estimates by DHHS for financial years 1999–00 to 2002–03 were reported on a cash accounting basis and therefore includes any capital outlays in the reporting period. Data for 2003–04 has been reported on an accrual accounting basis.

Australian Capital Territory health authorities

Data collection methods

The ACT Health has a central accounting function that operates on a full accrual accounting basis.

The broad steps involved in collecting and processing the 2001–02 to 2003–04 data are:

- initially, those cost centres that were within the department's chart of accounts and showed expenditure on public health activities were identified
- managers of cost centres included in the collection were advised of the public health definitions and were asked to allocate their costs to each of the public health expenditure activities
- expenditure of the Healthpact statutory authority was then combined with the above.

Information technology expenditure was allocated on a cost centre basis under the public health activity. Agency-wide expenditure such as costs relating to finance and human resources was allocated across the nine public health activities on the basis of full-time equivalent staff numbers.

Expenditure data for financial years 1999–00 to 2003–04 have been reported on an accrual accounting basis.

Northern Territory Department of health and Community Services

Data collection methods

NT DHCS stores all available health information in a central repository. Annual expenditure data were converted into the statistical analytical software package SAS for analysis, comparison and storage.

Total expenditure by cost centre code for each public health program area was identified. Expenditure information for each cost centre code was provided to the relevant program directors according to the public health expenditure data collection methodology. Program directors advised any changes to allocations across the public health activities, made comments and carried out final validation of expenditure and program description information.

Expenditure estimates by NT DHCS for financial years 1999–00 to 2002–03 were reported on a cash accounting basis and therefore include any capital outlays in the reporting period. Data for 2003–04 has been reported on an accrual accounting basis.

Total government expenditure on public health by state and territory

In order to estimate total government expenditure on public health activities occurring in each state and territory, it is necessary to allocate the expenditure funded by the Australian Government's direct expenditure to each state and territory.

The Australian Government funds expenditure on public health activities through:

- its own direct expenditure in supporting public health programs: and
- the provision of SPPs to states and territories.

The Australian Government's SPPs can readily be allocated on a state and territory basis. As its direct expenditures are generally not available on a state and territory basis other indicators need to be used to allocate these expenditures. With exception of *Cervical screening*, the Australian Government's direct expenditure has been apportioned to each state and territory in line with the proportion of public health SPPs allocated to that state or territory (see Table 2.4), as follows:

$$NE_{jt} = E_{jt} + \left(\frac{S_{jt}}{S_t}\right) AG_t$$

where:

NE_{jt} = total government public health expenditure for state/territory j *in* year t

E_{jt} = state/territory government expenditure on public health activities by state/territory j in year t

S_{jt} = SPPs to state/territory j by the Australian Government in year t

S_t = total SPPs to states/territories by the Australian Government in year t

AG_t = Direct expenditure by the Australian Government in year t.

In the case of *Cervical screening*, direct expenditure by the Australian Government was apportioned across state and territories in line with the Medicare benefits paid each year under Medicare Benefits Schedule items 73053 and 73901 by state of location of the recipients.

Expenditure by state and territories on a 'per person index' basis

Expenditure estimates on a per person basis enables comparative assessments to be made across different-sized populations. In this report, expenditure data on the public health activities have also been compiled by state and territories on a 'per person index' basis. The index is based on the following formula:

$$A_{kj} = \frac{B_{kj}}{B_{kA}} \times 100$$

where:

A_{kj} = per person index for activity k in state/territory j

B_{kj} = per person expenditure for activity k in state/territory j

B_{kA} = per person expenditure for activity k in all states and territories.

The entire state/territory populations are used in deriving the per person index for each core activity, rather than any specific target group, and the 'total' per person index for each

activity is set to 100 (Table 1.8). Thus, they simply reflect the average expenditure per head of population for each state and territory. They do not reflect the average funding or expenditure incurred in respect of the group(s) within the population at whom the particular activities are targeted. For example, per person expenditure on C*ervical screening* and *Breast cancer screening* is estimated across the whole population (male and female, including children), whereas the targets for those particular programs and activities are clearly the adult female populations within particular age categories. Consequently, these estimates and comparisons across jurisdictions need to be interpreted with care.