13 Technical notes

13.1 Definitions used in the 1999–00 collection

Communicable disease control

This category includes all activities associated with the development and implementation of programs to prevent the spread of communicable diseases.

Expenditure on *Communicable disease control* is recorded using three sub-categories:

- *HIV/AIDS, hepatitis C and sexually transmitted infections*
- *Needle and syringe programs*
- *Other communicable disease control*.

The public health component of the HIV/AIDS, hepatitis C and STI strategies includes all activities associated with the development and implementation of prevention and education programs to prevent the spread of HIV/AIDS, hepatitis C and sexually transmitted infections.

Expenditure on treatment or diagnostic services is not included.

HIV/AIDS, hepatitis C and sexually transmitted infections

Inclusions

- Implementation of health promotion strategies aimed at increasing safe behaviour among at-risk populations including people living with HIV/AIDS (including through community sector agencies)
- provision of sexual health services to at-risk populations to reduce prevalence of sexually transmitted infections, including testing for sexually transmitted infections (including HIV and hepatitis C), pre-test counselling for all sexually transmitted infections (including HIV), broad-based screening programs and contact tracing
- sexually transmitted infections, including genital herpes, hepatitis B and C, human papilloma virus, chlamydia, gonorrhoea and syphilis
- reorientation of Indigenous health programs
- consultation with community sector agencies regarding program priorities and delivery
- promotion of access to culturally appropriate services
- minimisation of the risk of transmission through occupational and non-occupational exposure through prophylaxis
- support of targeted training to ensure provision of best practice sexual health services for at-risk populations
- surveillance
- development of and participation in relevant committees

- diagnostic services
- counselling and peer support programs immediately following diagnosis which promote safe sex practices and inform patients and carers about how to live with HIV/AIDS, hepatitis C and sexually transmitted infections
- provision of high-quality data to health professionals to improve service delivery
- participation in or initiation of research to establish data to inform service provision
- funding to NGOs (for example hepatitis councils, HIV/AIDS councils)
- support of volunteer programs through access to training.

Exclusions

- treatment for sexually transmitted infections
- pharmaceuticals
- HIV testing following diagnosis
- specialist GPs for primary management of HIV/AIDS
- access to HIV treatments and viral load testing
- outpatient and ambulatory services
- dental health services
- welfare and housing referral services
- admitted patient services
- mental health services including care for people with dementia
- community and home-based care services
- palliative and respite care services
- maternity services.

Needle and syringe programs

Needle and syringe programs aim to reduce and prevent the transmission and spread of infectious diseases to individuals and the broader community through the provision of sterile injecting and disposal equipment, education, consultation and referral processes.

Inclusions

- education and training of the labour force
- provision of safe injecting equipment, including the cost of equipment, transport and staff to deliver the service
- administration of the program, including identifying new sites, negotiating services costs, addressing public concerns and policy development
- negotiation with pharmacies to support initiatives
- consultation with community agencies operating needle and syringe program sites.

Other communicable disease control

This sub-category includes all other communicable disease control activities not assigned to the *HIV/AIDS, hepatitis C and sexually transmitted infections* or *Needle and syringe program* sub-categories as defined above.

Inclusions

- surveillance systems, screenings, recording, notification and reporting systems
- case response, contact tracing, investigation and disease outbreak planning and management
- policy and support services specifically related to communicable disease control programs (within programs)
- provision and administration of vaccines for the management of disease outbreaks
- provision of advice and education on all other communicable diseases
- initial counselling for people tested
- funding to NGOs for the provision of operating prevention programs
- human quarantine-related services.

Exclusions

- clinical and treatment services for communicable disease infections including sexually transmitted infections
- provision and administration of vaccines for immunisation programs as defined in the *Organised immunisation* category
- referral, treatment and associated counselling for communicable disease infections
- staff screening programs, staff immunisation and staff education
- infection control activities in hospitals
- funding to NGOs for the provision of treatment-based programs.

Selected health promotion

This category includes those activities fostering healthy lifestyle and a healthy social environment overall, and health promotion activities targeted at health risk factors which lead to injuries, skin cancer and cardiovascular disease (for example diet, inactivity) that are delivered on a population-wide basis. The underlying criterion for the inclusion of health promotion programs within this category was that they are population health programs promoting health and wellbeing.

The *Selected health promotion* programs are:

- healthy settings (for example municipal health planning)
- public health nutrition
- exercise and physical activity
- personal hygiene
- mental health awareness promotion
- sun exposure and protection
- injury prevention including suicide prevention and female genital mutilation.

Inclusions

- State government funding for health promotion councils or NGOs (for example skin cancer foundations)

- organised population programs, or programs with a population focus (for example Healthy Cities and Healthy Schools programs)
- development, administration, implementation and evaluation of policy, programs, guidelines and legislation
- development and maintenance of health promotion databases (including data collection), where they can be separated from 'non-public health' databases
- health sector input to cross-sector health education
- organised population health screening of heart disease risk factors.

Exclusions

- opportunistic screening activities for heart disease risk factors (stress, blood pressure, cholesterol)
- information programs on management of specific diseases post-diagnosis (for example asthma, diabetes)
- community nurse activity (for example ad hoc talking to schools about nutrition)
- individual counselling including health education on an ad hoc basis
- compliance with safety codes and maintenance of healthy environments
- treatment for stress or other mental health disorders (for example anxiety)
- school education ad hoc and school dental services
- well baby clinics, domiciliary care and home nursing services
- neighbourhood watch programs
- occupational health and safety education (included under 'Public health related activities')
- population health programs directed at domestic, family and general violence
- population health programs providing a safe sexual health message—these are included in the *Communicable disease control* category
- public health education campaigns and school health education programs funded outside the health sector
- health promotion activities that are associated with core public health categories—these are classified in the relevant categories (for example safe drinking programs should be classified in the *Prevention of hazardous and harmful drug use* category).

Organised immunisation

This category includes immunisation clinics, school immunisation programs, immunisation education, public awareness, immunisation databases and information systems.

Expenditure on *Organised immunisation* was recorded using three sub-categories:

- *Organised childhood immunisation* (as defined by the NHMRC Schedule/Australian Standard Vaccination Schedule)
- *Organised pneumococcal and influenza immunisation*—the target groups for pneumococcal immunisation are Indigenous people over 50 years and high-risk Indigenous younger people aged 15–49. Influenza vaccine is available free to all Australians 65 years of age

and over, Indigenous people over 50 years and high-risk Indigenous younger people aged 15–19.

- *All other organised immunisation* (for example tetanus)—as opposed to ad hoc or opportunistic immunisation.

Inclusions

- promotion, distribution, provision and administration of vaccines as listed
- immunisation clinics and school immunisation programs
- immunisation education and public awareness
- immunisation databases and information systems
- staff vaccination programs where part of *Organised immunisation* and
- NHMRC schedule for all tetanus immunisation.

Exclusions

- immunisation after possible infection or on detection of illness (for example rabies vaccine)—this expenditure should be included in the *Communicable disease control* expenditure category.

Environmental health

This category relates to health protection education (for example safe chemical storage, water pollutants), expert advice on specific issues, development of standards, risk management and public health aspects of environmental health protection. The costs of monitoring and regulating are to be included where costs are borne by a regulatory agency and principally have a public health focus (for example radiation safety, and pharmaceutical regulation and safety).

Environmental health includes the following characteristics:

- vector/rodent control
- chemical regulation and safety
- radiation safety and control
- public health aspects of water quality control and fluoridation
- *Legionella* control
- public health input to contaminated sites and unhealthy land
- public health aspects of water environment control
- public health input to hazardous materials management
- public health aspects of waste water and solid waste
- public health input to disaster management
- public health contribution to environmental sampling, health impact statements and risk assessment.

Inclusions

- development, review and administration of legislation, policy and/or regulations

- health protection education (for example safe chemical storage, water pollutants) and expert advice on specific issues
- response to health complaints and investigation of breaches of legislation and disease outbreaks
- surveillance, inspections and investigations to maintain standards (for example water quality testing, sampling)
- expert advice and provision of professional and technical support services on specific issues
- administration of relevant legislation, such as the licensing of operators or conducting pest control examinations
- maintenance of related databases (for example issuing radiation licenses, and national notification of agricultural, veterinary and industrial chemicals and pesticides)
- regulation and management of water fluoridation (includes addition of fluoride to water supplies)
- public health component of assessment, remediation and management of contaminated land
- public health input to land development applications
- public health input to emergency management and disaster response management, including planning and emergency response teams
- public health contribution to environmental sampling, health impact statements and risk assessment
- public health input to control activities for vectors/rodents (for example landfill, spraying, baiting, eradication)—to be included only if undertaken by regulatory agency
- poisons regulation
- pharmaceutical and therapeutic goods regulation
- human remains regulation
- public health input to air and noise pollution control
- training of environmental health workers.

Exclusions

- costs borne by private or government industry in complying with regulations and legislation such as public health and environmental health acts
- hospital infection control
- treatment for infections (for example Ross River fever or encephalitis treatment)
- workplace testing or monitoring
- installation and maintenance of systems (for example waste disposal, storm water pollution, air-conditioning units)
- management of land development applications
- compliance with regulation which protects water courses and national parks
- recycling programs
- infectious waste control (for example medical wastes and sharps) and disposal
- environmental health protection research (to be included under *Public health research*).

Food standards and hygiene

This category includes the development, review and implementation of food standards, regulations and legislation as well as the testing of food by the regulatory agency.

Inclusions

- development, review and implementation of food standards, regulations and legislation
- surveillance (including inspections), monitoring and enforcement of food standards (including food premises registers)
- testing of food by regulatory agency
- education such as food safety awareness campaigns for suppliers and/or consumers
- training and education for food handlers (including LGAs)
- education and advice on food standards/requirements (for example for food premises).

Exclusions

- compliance costs of industry associated with food regulations (for example labelling and safe food handling practices)
- testing of food by industry.

Breast cancer screening

This category relates to expenditure for *Breast cancer screening* and includes expenditure for the complete breast cancer screening pathway through organised programs, and mammography which has a screening purpose that is funded through Medicare.

Expenditure reported for each sub-category:

- *Breast cancer screening through organised programs*
- *Medicare breast cancer screening* (Commonwealth only).

The breast cancer screening pathway includes the following characteristics:

- recruitment
- screen taking
- screen reading
- assessment (this includes fine needle biopsy)
- core biopsy
- open biopsy
- service management
- program management.

Breast cancer screening through organised programs

Inclusions

- organised breast cancer screening programs (for example State BreastScreen programs, rural access programs), including coordination, provision of screens and assessment services

- development, review and implementation of breast screening policy, and program management
- management of breast cancer/screening registers
- State government funding to NGOs (for example cancer councils) for breast screening services
- education and risk awareness for women and target groups on benefits of screening
- counselling before diagnosis.

Exclusions

- follow-up counselling and/or treatment after diagnosis
- public health laboratory services (if not a result of breast cancer screening program)
- diagnosis costs if lump not detected as part of organised breast cancer screening programs
- workforce development and training if administered outside breast cancer screening programs
- breast cancer screening research (to be included under *Public health research*).

Medicare breast cancer screening

Inclusions

- patients referred for mammography by their doctor when there are no symptoms of breast cancer
- patients referred for mammography by their doctor when there is a family history of breast cancer.

Exclusions

- patients referred for mammography by their doctor showing symptoms of breast cancer
- patients referred for mammography by their doctor where there has been a past incidence of breast malignancy.

Cervical screening

This category relates to organised cervical screening programs.

Inclusions

- organised cervical screening programs (for example State cervical screening programs, rural access programs), including coordination, provision of screens and assessment services
- management of cervical/Pap smear registers (for example cervical cytology register)
- development, review and implementation of cervical screening policy, and program management (monitoring and evaluation)
- education and risk awareness for women and target groups on the benefits of screening
- initial counselling before Pap smear
- counselling and/or treatment for screen-detected abnormalities

- public health laboratory services (collection, cytology of smears and reporting)
- cervical screening financed by Medicare (this includes the GP consultation, the collection of the sample and the cytology of smears)—data to be provided by the Commonwealth.

Exclusions

- public health workforce education and training (if administered elsewhere)
- counselling and/or treatment for patients diagnosed with malignant carcinoma (the differences between abnormalities and malignant carcinomas are described in Appendix A of *Cervical Screening in Australia 1997–98,* AIHW 2000).

Prevention of hazardous and harmful drug use

This category includes activities targeted at the general population with the aim of reducing the overuse or abuse of alcohol, tobacco, illicit and other drugs of dependence, and mixed drugs. The Australian Standard Classification of Drugs of Concern includes analgesics, sedatives and hypnotics, stimulants and hallucinogens, anabolic agents and selected hormones, antidepressants and antipsychotics, and also miscellaneous drugs of concern.

Expenditure is to be reported for each sub-category as below, the aggregate of which will be total expenditure on *Prevention of hazardous and harmful drug use*.

- *Alcohol*
- *Tobacco*
- *Illicit and other drugs of dependence*
- *Mixed*.

Alcohol

Inclusions

- alcohol regulation, labelling, control and licensing (including policing the regulation of alcohol in communities)
- health promotion strategies to encourage appropriate use of alcohol
- counselling of individuals where public health advice is given rather than the treatment of an addiction.

Exclusions

- any anti-alcohol programs with treatment of individuals as the major focus
- activities designated as treatment services
- services considered primarily of a welfare services nature (for example 'night shelters')
- services considered to be almost entirely providing accommodation and food services (for example halfway houses).

Tobacco

Inclusions

- tobacco control in the workplace and enclosed places

- policies relating to smoke-free eating places and other public facilities
- labelling of warnings on cigarette packets, advertising bans
- quit smoking programs
- counselling of individuals where public health advice is given rather than the treatment of an addiction
- smoking prevention strategies for children and youth
- prevention of tobacco sales to children and youth.

Exclusions

- activities designated as treatment services.

Illicit and other drugs of dependence

Inclusions

- illicit drugs/substances control; harm minimisation; methadone treatment; public health input to prohibition, enforcement and legislation activities; control of misuse of prescription drugs and other drugs of dependence
- counselling of individuals with problems with illicit or other drugs of dependence such as prescription drugs or glue sniffing, where public health advice is given rather than the treatment of an addiction.

Exclusions

- any anti-drug and alcohol programs with treatment of individuals as the major focus
- activities designated as treatment services
- services considered primarily of a welfare services nature (for example night shelters)
- services considered to be almost entirely providing accommodation and food services (for example halfway houses).

Mixed

Inclusions

- counselling of individuals where public health advice is given rather than the treatment of an addiction
- health promotion strategies to improve behaviour and
- public health activities with regard to poly drug use.

Exclusions

- any anti-drug and alcohol programs with treatment of individuals as the major focus
- activities designated as treatment services
- services considered primarily of a welfare services nature (for example night shelters)
- services considered to be almost entirely providing accommodation and food services (for example halfway houses).

Public health research

Definition of research and development (Frascati):

> R and D is defined according to the OECD standard as comprising creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications.
>
> An R and D activity is characterised by originality. It has investigation as a primary objective, the outcome of which is new knowledge, with or without a specific application, or new or improved materials, product, devices, processes or services. R and D ends when work is no longer primarily investigative. (Australian Standard Research Classification, 1998, page 4)

Inclusions

- *Communicable disease control* research
- *Selected health promotion* research
- *Organised immunisation* research
- *Environmental health* research
- *Food standards and hygiene* research
- *Breast cancer screening* research
- *Cervical screening* research
- *Prevention of hazardous and harmful drug use* research
- research which cannot be allocated to one of the above categories.

Exclusions

- public health evaluations.

'Public health related activities'

This is not a core public health category and therefore the figures reported under this heading were not included in the aggregate figures for 1999–00. The collection of this sort of expenditure information was voluntary for each jurisdiction. This enabled jurisdictions to include those expenditure items which did not fit into the core public health categories but that they considered to be public health related and important to that jurisdiction.

Examples of 'Public health related activities':

- drug and alcohol activities that are designated as treatment services
- reduction of the drug and alcohol supply
- those services primarily relating to the welfare services nature of drug and alcohol expenditure (for example night shelters)
- occupational health and safety regulation and education
- regulation of health facilities and services
- control of dangerous animals and licensing of pets
- sexual and domestic violence programs
- dental health services
- well baby clinics

- reproductive health and family planning
- other maternal and child health services.

13.2 Variation from Stage Two definitions

Two new core categories have been included in the definitions for the 1999–00 collection. These were:

- *Prevention of hazardous and harmful drug use* and
- *Public health research.*

It was also agreed that jurisdictions could report additional expenditure under the heading 'Public health related activities'. This is in order that jurisdictions might capture and report expenditure on activities that relate to public health but are not core public health activities.

The former 'catch-all' category—*All other core public health*—was not included in this collection. The expenditure that would have been captured under *All other core public health* would be spread across a number of the nine categories used in the 1999–00 collection or reported against 'Public health related activities'.

Table 13.1: Core public health categories, 1998–99 and 1999–00 collections

1998–99 categories	1999–00 categories[(a)]	Changes and mapping
Core public health activities		
Communicable disease control	Communicable disease control	. .
Selected health promotion activities	Selected health promotion	Health promotion relating to drugs of dependence moved to *Prevention of hazardous and harmful drug use*.
Immunisation	Organised immunisation	. .
Environmental health	Environmental health	Refined in 1999–00 to include only the public health component of environmental health activities.
Food standards and hygiene	Food standards and hygiene	. .
Breast cancer screening	Breast cancer screening	. .
Cervical screening	Cervical screening	. .
All other core public health	. .	No longer exists. Expenditure spread across *Communicable disease control*, *Environmental health*, *Prevention of hazardous and harmful drug use,* and 'Public health related activities'.
. .	Prevention of hazardous and harmful drug use	New category. Expenditure was previously included under *Selected health promotion activities* and *All other core public health*.
. .	Public health research	New category.
Non-core public health		
. .	Public health related activities	Not a category as such. Expenditure was previously included in *All other core public health* or not previously reported.

(a) These 1999–00 categories will also be used for the 2000–01 collection, thus enabling comparisons between the 1999–00 and 2000–01 expenditure data.

Other notes

The Commonwealth has included expenditure relating to the National Indigenous Australians Sexual Health Strategy and the National Indigenous Pneumococcal and Influenza Immunisation Program. States and Territories may also have counted expenditure

relating to these programs in their estimates. If this has occurred, the figures in this report may include double-counting in expenditure up to the value of $9.6 million. There was insufficient information at the time of publication to address this issue. Future collections will resolve this issue.

Figures in the tables of this report may not add due to rounding.

13.3 Jurisdictions' technical notes

13.3.1 Commonwealth

Departmental and administered expenditure—terminology

In 1999–00, Commonwealth departments and agencies moved from a cash-based accounting system to an accruals environment. An important part of this change was the introduction of an outcome and outputs framework as a means of measuring achievements against stated goals.

Part of this change also involved the introduction of two accounting terms, that are used to describe how funds were allocated and expended:

- 'departmental items' (or departmental outputs)—those expenditures applied to the production of the department's outputs (mostly consisting of the cost of employees, but also including suppliers of goods and services, particularly those where the Commonwealth retains full control of how, when and to whom funds are to be provided)
- 'administered items'—those resources administered by the Department on behalf of the government to contribute to the specified outcome (for example most grants in which the grantee has some control over how, when and to whom funds can be expended, including PHOFA payments and Specific Purpose Payments to State and Territory Governments).

This change in definitions will, to some extent, restrict the ability to directly compare Commonwealth expenditure figures for 1999–00 with those of 1998–99. It will also mean that figures for 'departmental' expenditure for 1999–00 cannot be disaggregated to the same extent as was the case in 1998–99. However, it will mean a much more streamlined and internally consistent process for future years.

Methodology used for the Medicare component of cervical screening

Cervical screening expenditure covered under Medicare is included under both *Cervical screening* and 'Public health related activities'. The method used to estimate these expenditures is outlined below.

Cervical screening

The methodology used to estimate the Medicare component of *Cervical screening* is consistent with that used in the 1998–99 report and is derived using the following three major 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 core public health expenditures
- benefits paid for 73055 and 73057 are related to 'Public health-related activities'
- where a consultation that involved the taking of a Pap smear also involved one or more other medical procedures, the related benefits 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.

In the case of the first two assumptions used in the estimates, the inclusion of only item 73053 as 'core public health' ensures that what is captured is in line with the definitions used in both the first report on expenditure on public health in Australia and the national policy of the National Cervical Screening Program.

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 of 0.68 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 core public health activity *Cervical screening*.

13.3.2 New South Wales health authorities

Revision of definitions and estimates

Like other States and Territories, there are a number of issues impacting on the comparability of the New South Wales data between this year and the previous year. Some of these relate to service changes, but most are due to the evolving nature of the data collection methodology. These include inconsistencies in identifying expenditure related to public health and fractioning across the core categories. Also, in the absence of firm guidelines in some areas of the collection, there are some differences in the judgments of managers and staff collecting data from one period to the next.

New South Wales undertook a review of differences in reported public health expenditure between 1998–99 and 1999–00. This analysis indicated that the main reasons for differences were variations in the:

- **level of centralisation or decentralisation of services**. Area health services in New South Wales have complete responsibility (financial and legislative) for the organisation of their services. From time to time, they will elect to centralise or decentralise services to meet local priorities. This affects the reported expenditure, because of the organisational change or the need to apply a new method of allocating or fractioning expenditure related to public health.

- **degree of judgment by cost centre managers and data collection coordinators.** There are still large aspects of the collection that require individual judgment about the allocation of expenditure related to public health during a particular period, or fractioning of that expenditure over the core categories specified by the collection. Combined with the fact that there are little data to inform judgment, this leads to a high degree of variation between sites and over time.
- **collection methodology**. New South Wales has a decentralised process of data collection, due to the organisation of the area health services within this State. This means that data collection is devolved to the 17 area health services and the Children's Hospital at Westmead, which involves approximately 80 coordinators across the State. All efforts are made to standardise the collection; however, as mentioned above, in the absence of firm guidelines in some areas, there is a large judgmental component, which can differ from site to site and lead to variations in reporting.

New South Wales is working towards resolving some of these issues, both through the national process with the AIHW (for example, contribution to standards for data collection and definitions for data items) and also locally in educating coordinators, seeking clarification from sites where differences are evident and stepping-up data reconciliation. However, this will take time and improvements are likely to be medium-to-long term rather than immediate. Therefore, New South Wales supports abstaining from comparing data with previous years until the collection is better established.

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 NSW 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.

The expenditure reported for the 1999–00 financial year was based on accrual accounting.

Seventeen health services, the NSW Health Department and the Children's Hospital at Westmead reported data using a set of 24 public health sub-programs. The data was then aggregated centrally and analysed at State level. The sub-programs were later mapped to the core categories required for this publication. The core category expenditure included activity-specific, program-wide and agency-wide expenditures.

13.3.3 Victorian health authorities

Revision of definitions and estimates

Data collection methods

The Public Health Division is responsible for programs that support the health and wellbeing of all Victorians. Non-government agencies and LGAs also perform some services on behalf of the division. As most of the public health outputs are delivered by agencies funded by the division, the collection of information on the NPHEP's core public health expenditure categories was performed within the division.

The steps involved in data collection were as summarised below:

1. downloading of raw figures from the department's General Ledger on Oracle Financials
2. verification to ensure the integrity of data collected. The flexible structure of the General Ledger enabled data to be sorted by activities or outputs, which in turn facilitated the further classification into the nine core public health activities
3. manual categorisation, sorting each activity against its description
4. 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.

13.3.4 Queensland Health

Revision of definitions and estimates

There are significant changes in the collection methodology used by Queensland Health to report 1999–00 public health expenditure. The changes in collection methodology were necessary to ensure future collections are consistent and maintainable.

Other factors that should be considered when comparing the expenditure include:

- Salaries and wages increased in the 1999–00 financial year due to the Enterprise Bargaining Agreement.
- There was a one-off expense to cost centres as a result of a change in accounting policy where the asset recognition threshold was increased from $2,000 to $5,000.
- The 1999–00 budget was affected by a 1998–99 deficit that represented long service leave claims not previously funded through the annual budget process.
- Due to the introduction of accrual accounting the 1998–99 expenditure was affected by an increase in the asset recognition threshold, increased long service leave liabilities, losses from asset disposals and inventory write-offs, and accrued interest.

Data collection methods

Under the 1999–00 Budget, Queensland Health was 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 an efficient, maintainable process for Queensland Health 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 NPHEP categories. Any service types that do not match to the NPHEP categories are identified under 'Public health related activities'.

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

13.3.5 Western Australian Department of Health

Revision of definitions and estimates

There are a number of reasons why comparability between 1998–99 and 1999–00 is difficult.

The 1999–00 data includes public health expenditure associated with Healthway and the Office of Aboriginal Health which was not present in 1998–99. This has especially affected the *Selected health promotion*, *Prevention of hazardous and harmful drug use*, and *Environmental health* categories.

Estimates of expenditure for 1999–00 were calculated on an accruals basis as opposed to the cash basis used in the previous report. *Breast cancer screening* figures in 1998–99 include outlays on capital items, whereas those for 1999–00 do not include outlays on capital but include depreciation expense.

Cervical screening expenditure in 1999–00 includes recruitment campaign costs not conducted in 1998–99.

The 1999–00 *Organised immunisation* expenditure is impacted by the school measles campaign conducted in 1998–99 and differences in 'Pneumococcal' and 'Influenza' expenditure.

There has been a large degree of judgment by cost centre managers in the allocation of expenditure across categories. Turnover of staff and differing judgment by managers has meant that a consistent allocation from 1998–99 to 1999–00 cannot be guaranteed.

Data collection methods

The primary source of public health expenditure data is the Western Australian Department of Health's Oracle financial system. Oracle supports a hierarchical cost centre structure that allows modelling of expenditure against each of the core public health categories. For most of the State-wide public health programs each of the cost centres is matched to one of the core public health categories. 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. Program-wide and agency-wide expenses for both the Public Health Division and the respective costs for the Western Australian Department of Health were apportioned across the public health categories 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

Draft 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. The majority of health services expenditure relates to public health activity undertaken by community health services. However, it is likely that these data are incomplete as not all health services provided this information in their returns.

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 categories on the basis of the contracted service description. Public health expenditure represents approximately 20% of the office's expenditure for the 1999–00 financial year. Expenditure recorded against each category represents actual expenditure and does not incorporate the office's overhead or corporate expenses. A model for apportioning these agency-wide or corporate expenses is being developed for the 2000–01 collection.

Considerations

In keeping with the NPHEP methodology, expenditure is reported on an accrual basis. However, some health services were only able to report expenditure against the public health categories on a cash basis. The actual effect of reporting on a cash basis is not known but is not expected to be significant, particularly as expenditure on capital items is believed to be relatively small.

Where expenditure is reported on an accrual basis, respondents were asked to identify the value of the depreciation expense. Where it was possible to reliably identify depreciation expense across the public health expenditure categories this has been done. Where this was not possible depreciation expenses have been apportioned in accordance with the modelling for allocation of agency-wide expenses. Thus the apportioning of identified depreciation expense is reflective of the manner in which these expenses have been apportioned in the reporting of all public health expenditure.

This report does 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.

13.3.6 South Australian Department of Human Services

Revision of definitions and estimates

One of the major differences between the 1999–00 and the 1998–99 results is the inclusion of agency-wide expenditure in 1999–00. This accounted for a $1.5 million apparent increase in expenditure between the two years.

Other major changes in expenditure on the core categories that should be taken into account when comparing the two years' data include:

Communicable disease control

- A 7% growth relating to increases in funding and better data capture mechanisms and interpretation of definitions.

Selected health promotion

- A 54% decrease in expenditure is explained by the following:
  - The definition for this category narrowed in 1999–00 to include only 'selected' programs ($7 million).
  - In 1999–00 the *Prevention of hazardous and harmful drug use* category was added; $1 million in programs allocated to *Selected health promotion* in 1998–99 are reported in the new *Prevention of hazardous and harmful drug use* category in 1999–00.
  - The remaining variance relates to better data capture mechanisms and interpretation of the definitions.

Organised immunisation

- Expenditure decreased by 3% due to the following:
  - A decrease in expenditure for *Organised childhood immunisation* of $0.8 million was predominantly because of a school measles campaign that was run in 1998–99 and ceased in that year.
  - An increase in expenditure for *Organised pneumococcal and influenza immunisation* of $0.5 million relates to the influenza target age dropping from over 75 years in 1998–99 to over 65 years in 1999–00.

Environmental health

- A 9% growth in expenditure is explained with the inclusion of $0.35 million in pharmaceutical and therapeutic goods regulation that was previously included in *All other core public health*.

Food standards and hygiene

- The 8% increase in expenditure relates to better allocation of costs in the 1999–00 collection.

Breast cancer screening

- Growth of 8% is the result of additional funding provided for the Breast Cancer Screening program in 1999–00.

Cervical screening

- A large increase of 47% is the result of:
  - better data capture mechanisms
  - a broader interpretation of the category (for example the inclusion of colposcopy clinics by public hospitals).

Prevention of hazardous and harmful drug use

- Expenditure reported against this new category is made up:
  - $1 million reported against *Selected health promotion* in 1998–99
  - the balance previously included in *All other core public health*.

Public health research

- In 1998–99 this expenditure was reported against *All other core public health* and/or distributed among the relevant core public health categories.

Data collection methods

Information was provided by State government departments, metropolitan and regional health units and other health-related government funded organisations.

Data was 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. These cost centres were mapped to the core public health categories as defined for this project. This accounted for $33 million or 58% of the total core 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 1999–00 collection. A total of 39 metropolitan organisations and 8 regional health services were included in the collection. Only 3 did not respond, making the response rate 94%. Of the 3 organisations that did not respond it was felt that none would have incurred material levels of public health expenditure.

A collection spreadsheet and instructions was 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.

All organisations involved in the collection were asked to report their financial data on an accrual basis.

Assessment

Most external organisations required additional clarification and guidance on the information to include and exclude. The major difficulty for most of these organisations was aligning their cost centre information with the nominated categories for core public health. In particular, community health centres and smaller organisations found it difficult to separate treatment-based or welfare-based services from 'public health' programs. In many cases, estimations for each category have been made based on salaried time commitment and/or allocation of materials and space.

Where grant funding is provided to an organisation from a major provider, such as SA Cervix Screening or Health Promotion SA, there is a danger of counting the expenditure twice. Details on the source of funds was requested from all organisations and cross-checked to ensure that double-counting was avoided wherever possible.

A major difficulty for South Australia is that, outside of DHS, all service provider agencies utilise and administer their own financial systems, as opposed to having a standard financial system and cost centre structure across the State health sector. As a result it is difficult to implement an automated expenditure collection system that incorporates these organisations. This is a trade-off for South Australia in seeking to be comprehensive in its data collection.

General reasons for variances

One of the major difficulties with the project occurred when attempting to limit and differentiate the various categories. Programs that included public health strategies and screening/treatment for specific diseases (for example HIV/AIDS) were particularly difficult to separate, as were programs pertaining to sexual health and the avoidance of sexual violence. Community health programs, such as those aimed at people from non-English-speaking backgrounds and Aboriginal or disadvantaged groups, are often based on holistic lifestyle changes and therefore include public health aspects, such as mental health promotion, as well as welfare aspects such as education about domestic and sexual violence. Depending on the main objective of these programs, this expenditure was either partially or

wholly included. In the case of HIV/AIDS, the proportion of purely public health expenditure was estimated from the various programs and funding.

13.3.7 Tasmanian health authorities

Revision of definitions and estimates

There was a major change to the methodology between the 1998–99 collection and the 1999–00 one. The scope of the collection was broadened to include all expenditure by the Tasmanian Department of Health and Human Services that fitted within the core public health categories. For the 1998–99 report, only expenditure by the Division of Health Advancement incorporating the Public and Environmental Health output had been included. The result is large apparent increases in reported expenditure, particularly in expenditure on *Communicable disease control* and *Selected health promotion*. For example, inclusion of expenditure by the Tasmanian public hospitals on *Communicable disease control* and grants to a number of NGOs mean that expenditures on that activity cannot be compared over the two years. Expenditure for the Needle Availability Program increased significantly from the previous year due to a continued rise in demand.

The apparent increase in expenditure on *Selected health promotion* is largely due to the inclusion in 1999–00 data of expenditure by the Division of Community and Rural Health Services. This division employs dedicated regional health promotion officers. Another contributing factor to the apparent increase was the reclassification of some expenditure previously reported under *Food standards and hygiene* to *Selected health promotion* in this report.

The reported drop in expenditure on *Breast cancer screening* was due to Tasmania having a cash-based accounting system and the fact that the 1998–99 data included outlays on a major IT upgrade.

Data collection methods

A number of issues identified in the previous report have been addressed. While generally the Division of Health Advancement has the responsibility for public health, other divisions' expenditures were not previously reported. This has been addressed in this report where all expenditures by the agency that fit within the core public health activities have been included. This report does not include expenditure by other State government agencies and LGAs that is attributable to public health.

While the Tasmanian Department of Health and Human Services' finance reporting system is centralised and this enables the smooth collection of expenditure data, the following should be noted:

- The data supplied for Tasmania is from cash-based accounting systems, creating the possibility of carry-over expenditure between reporting periods; however, this is likely to be of minimal impact.
- Expenditure by LGAs is 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 Department's finance system cost centre structure is such that in most cases the core public health categories 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 core public health categories.

13.3.8 Australian Capital Territory health authorities

Revision of definitions and estimates

Data collection methods

The information contained in this chapter of the report is in accordance with the core public health definitions for the 1999–00 NPHEP.

The ACT Department of Health and Community Care has a central accounting function that operates on a full accrual basis.

First, those cost centres that are within the department's chart of accounts and which public health activities were identified. Then the relevant cost centre managers were advised of the core public health definitions and were asked to allocate their costs to each of the public health expenditure categories. The expenditure of the Healthpact statutory authority was then combined with the above data to complete the data collection.

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

Changes in agreed definitions of funding categories have resulted in the expenditure figures for 1998–99 presented in this report being notably different from those in the previous report. The revised figures for last year are presented alongside the newly defined figures for this year for more accurate comparability. Direct comparison with the figures published in last year's report is not advised as the previously published figures reflect different category definitions.

13.3.9 Northern Territory Health Services

Revision of definitions and estimates

The reported aggregate expenditure on core public health activities for the Northern Territory in 1999–00 ($39.6 million) cannot be compared with that reported for 1998–99. The variation between the two years is attributed to the difference in methodologies used for each collection period and not to any decrease in real expenditure.

Variations due to changes in method

The significant changes in methodology between the two collection periods were:

- For the 1998–99 collection, total expenditure for AODP was **included** in total core public health expenditure within the *Selected health promotion* and *All other core public health* categories. In 1999–00, expenditure for treatment services was reported as 'Public health related activities' and **excluded** from total core public health expenditure.

- The estimate for agency-wide functions provided to public health during 1998–99 was calculated using distributions of expenditure, not staffing levels and workload. This resulted in an estimate of agency-wide expenditure for 1998–99 of $3.6 million. For 1999–00, the estimate was based on a combination of the public health staffing levels and the public health program workloads. The estimate of agency-wide expenditure for 1999–00, using the updated methodology, was a more realistic one of $1 million.
- For 1998–99 all public health expenditure that was not able to be allocated to one or more of the core categories was reported as *All other core public health* and **included** in the estimate of total expenditure on core public health. For 1999–00 such expenditure was reported as 'Public health related activities' and **excluded** from the aggregate of expenditure on core public health.

Other variations in expenditure

Two core categories where real growth in expenditure is known to have occurred are *Organised immunisation* and *Environmental health*.

The variation in expenditure on *Organised immunisation* was attributed to a combination of changes in the method for estimating and the completion of the special one-off hepatitis B program for children aged 6–16 years.

Expenditure on *Environmental health* increased by 6% in real terms between 1998–99 and 1999–00. This largely reflects:

- the review and consultation process of the Northern Territory Public Health Act
- the Medical Entomology Branch providing quarantine surveillance and monitoring the risk of importation of exotic mosquitoes from Indonesia and East Timor.

Expenditure categories

Three distinct types of expenditure were collected as part of the 1999–00 collection process. These were activity-specific expenditure, program-wide expenditures and agency-wide expenditure (refer to 'Technical notes', page 128).

Program-wide expenditure

Within the Territory, program-wide services that support public health were identified as:

- services provided by the Chief Health Officer
- health economics
- epidemiology
- business information management
- workforce development
- Royal Darwin Hospital—Pathology
- Royal Darwin Hospital—Radiology

Agency-wide expenditure

Agency-wide expenditure was identified as:

- business and operational support
- executive and support
- finance and general

- legal services
- library services
- ministerial liaison
- performance audit
- professional boards
- public affairs.

Discussion of variations

Every effort has been made to ensure the accuracy and reliability of the information contained within this report. However, it is acknowledged that this information reflects the structure and administration of public health services, the ability to allocate expenditure to the core public health categories and the availability of information during the collection period.

Screening programs

Within the Territory there are a number of public health screening programs such as:

- Well Women's Check
- Healthy School Aged Kids Services
- Growth Assessment and Action
- Child Health Screening
- Aboriginal Hearing Health
- Men's Health
- school dental screenings provided by Community Health.

This expenditure has been excluded from the estimates of total expenditure on core public health and has been shown in the 1999–00 collection under 'Public health related activities'. The Technical Advisory Group to the National Public Health Expenditure Project identified this issue as warranting further discussion for the 2000–01 collection.

Public health programs provided by Community Health Centres

Within remote and rural communities in the Northern Territory, public health programs are delivered by district medical officers, community health nurses and Aboriginal health workers. This expenditure is reported to the Commonwealth as community health as defined in the GPCs of the Government Finance Statistics. The public health component of community health expenditure was estimated and apportioned across the core public health categories. Thus the GPC reporting of public health expenditure varies from the expenditure contained in this report.

Data collection methods

THS stores all available health information in a central repository known as SHILO (data warehouse). Business Objects provides an annual expenditure universe which was then 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 and input into a collection tool. Expenditure information for each cost centre code was provided

in the collection tool to the relevant program directors according to the methodology recorded for the 1998–99 collection. Program directors advised of any changes to allocations across the core public health categories, comments and final validation of expenditure and program description information.

The THS financial records for 1999–00 were maintained on a cash basis. THS does not include depreciation in its accounting practices.

During 1998–99, on-costs, such as employer-funded superannuation, long service leave and workers' compensation expenditure, were met by Treasury rather than by THS. However, during 1999–00 on-costs were paid from each THS cost centre.

13.4 Expenditure components for the 1999–00 collection

Three distinct types of expenditure were collected as part of the 1999–00 collection process. These were activity-specific expenditure, program-wide expenditure and agency-wide expenditure.

Activity-specific expenditure

Activity-specific expenditures are those undertaken by cost centres that are specific to the core public health activity categories. They include:

- salary costs
- staff on-costs
- non-labour staff support costs such as office space, electricity, stationery, administrative and IT support
- program running costs such as travel, meetings, conferences and training.

Program-wide expenditure

Program-wide expenditures are those public health-specific expenditures associated with functions that support a number of core public health activities. These include:

- information systems
- disease surveillance and epidemiology
- public health policy, program and legislation development
- public health communication and advocacy
- public and environmental health laboratory services
- public health research and development.

Agency-wide expenditure

Agency-wide expenditure is expenditure on those services that support the provision of both public health and other programs of the agency. These include:

- head office policy, coordination and strategic development
- centralised corporate services such as finance, human resource development and industrial relations

- senior executive services
- other centralised functions such as complaints units and legal services.