# NATIONAL DELPHI STUDY ON PUBLIC HEALTH FUNCTIONS IN AUSTRALIA

**Report on the findings**

**January 2000**

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# Foreword

What capacity should the Australian public health system have to effectively respond to known and emerging public health challenges as we step into the 21st century ?

This fundamental question underlies the National Pubic Health Partnership's (NPHP) work to define the core functions of public health in Australia, and is the principal motivation behind this report on the *National Delphi Study on Public Health Functions in Australia*

No-one would question that to provide acute health care services you need to ensure a basic infrastructure comprising a trained workforce, hospital facilities and equipment, management and information systems, and health services research. Public health also needs to define its infrastructure requirements. However, as public health has evolved to encompass many different issues and activities, there is less of a clear sense of what is an adequate infrastructure.

To extend the analogy, hospitals are readily identified with the broad functions they provide such as surgery, paediatrics, obstetrics, oncology etc. Public health too comprises a set of functions. However the general public does not readily understand them. The reasons for this are obviously many but the problem in part is that public health functions are not clearly articulated.

Public health can be seen from many angles: in terms of the problems it addresses (communicable diseases, environmental health, cancer screening and prevention, illicit drugs etc); the types of solutions it offers (epidemiology, health education, social marketing etc); its broad objectives and principles (eg protection, prevention and promotion); or from the viewpoint of its broad functions. All these perspectives are evident in the findings of the Delphi Study.

The Australian Delphi study is a snapshot of how a significant cross-section of public health practitioners and leaders view the core functions of public health. The World Health Organisation used this method to develop an international consensus-based statement of essential public health functions. Core public health functions have been of interest in the US since 1988, and more recently in the UK.

The next goal for the NPHP in this area will be to derive, on the basis of this report, a succinct, workable and inclusive statement of what constitutes the core functions of public health. The key intent is that a statement on core functions will provide a common reference point or platform, for reviewing, developing and consolidating public health infrastructure in Australia.

The Study data will also be made available to interested researchers who wish to conduct further analyses. Further enquiries are to be directed to the NPHP Secretariat.

As the Chair of the NPHP Group I thank all those who took time to participate in the Delphi Study, the chief researcher Dr Jenny Lewis and members of the Study Team, the Technical Working Group led by Professor Tony Adams for its expert steering of the project, and the Reference Group for its advice and guidance.

I commend this report to all of you with an interest in ensuring a robust, responsive and effective public health system in Australia.

**Dr Andrew Wilson**
**Chair**
**National Public Health Partnership Group**

# National Delphi Study Management and Advice

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## National Delphi Study Reference Panel

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# Table of contents

# List of tables

# Introduction

Defining public health is a vexed and complex undertaking and there is a significant overlapping of the terms and concepts currently in use, such as 'new public health' and 'population health'. Defining public health functions is also fraught with difficulties. Yet, there has been increased attention paid to defining public health functions, practices, programs and services in the USA and Canada, in the UK, and on an international level by the World Health Organization. This report outlines the results of a study by the National Public Health Partnership to define public health functions in Australia.

## The study design

In November 1998 the National Public Health Partnership Group agreed to advance the work on public health functions by undertaking a Delphi study. The study was managed by staff in the NPHP Secretariat, and steered by a Technical Working Group in consultation with a Reference Panel. A Senior Researcher was employed on a part time basis to conduct the study. Further details on the processes for managing the study and receiving advice can be found in Appendix 1. The list of personnel can be found at the front of this report.

## Aim and objectives of this study

The aim of undertaking this study was to measure the range of opinion amongst Australian public health experts, on defining public health functions. It was expected that the results would be used to assist in defining public health functions and enhancing public health capacity in Australia.

This study used two rounds of questionnaires. The two questionnaires addressed different objectives:

The objective of the first questionnaire was to assess the range of opinion on:

i) the characteristics of public health functions,
ii) establishing a general list of public health functions,
iii) what public health functions should address, and
iv) what characteristics make public health functions "core".

The objective of the second questionnaire was to use the list of public health functions drawn up from the responses to the first questionnaire, and assess the range of opinion on which of these were considered to be:

i) always a public health function (core);
ii) often a public health function;
iii) sometimes a public health function; or
iv) not a public health function.

## The Delphi method

The study used the Delphi method to establish the opinion of the expert group. The Delphi technique is a research method aimed at achieving consensus on particular issues, providing a means of synthesising information from a wide range of sources particularly from unpublished material via experts. The aim of consensus methods is to determine the extent to which experts or lay people agree about a given issue.

This method takes its name from the Delphic oracle's skills of interpretation and foresight and proceeds in a series of rounds. Others have used the Delphi process to feed back responses from earlier rounds and ask participants to reassess their positions in the light of the views of others. In this study, the results from the first round were fed

back to respondents, but they were not asked to reassess their earlier opinions. Instead, the second round was used to elicit opinions on more specific items than in the first round.

The Delphi method seeks to overcome some of the disadvantages normally found with decision making in groups or committees that are commonly dominated by one individual or by coalitions representing vested interests. It also allows a wider range of opinion than can be canvassed by using a committee approach, in assessing the extent of agreement (consensus measurement).

In summary the method aims to obtain the most reliable consensus of opinion of a group of experts; uses a step by step process to conduct the investigation, and results in a kind of historical action research picture of the time it was undertaken.

The results from the two rounds of the study are presented in this report, following the background information provided on defining public health functions.

# Background discussion: *What are public health functions? What makes them core?*

Attempts to define public health functions around the world are linked to a redefinition of what public health is, and whether there is some consensus on the scope of public health, and the activities that come under the rubric of public health (Nexus, 1998).

Work in defining public health functions has been undertaken in the US (and reinterpreted by the National Public Health Partnership) and by the World Health Organization. As this work has used a different terminology in each case, sometimes with the same terms used to indicate disparate aspects or levels and overlapping concepts, confusion results. Similar difficulties arise in the use of "core" and "essential". The work undertaken in the US and by the WHO and the National Public Health Partnership is described briefly below.

## The United States - core functions and essential practices

The US Institute of Medicine in 1988 described three core functions of public health at a broad level: assessment, policy, and assurance (National Academy of Sciences, 1988). The Centres for Disease Control and Prevention identified ten organizational practices associated with core public health functions (Public Health Practice Program Office, 1991). These practices are "essential" in the sense that they are "must do" practices which are critical to ensuring that core functions are being performed. Essential public health practices in the US have been defined as a mixture of processes, practices and outcomes. Confusion arises with later work undertaken in the US (US Department of Health and Human Services, 1995), because these ten practices were reworked and renamed "essential public health services", even though they are a mixture of processes, practices and outcomes, and not services (see Appendix 2).

The public health functions work undertaken in the US has been based on working party approaches, drawing on the expertise of participating stakeholders to achieve consensus, and has been carried out under the auspices of government agencies. This work focussed on a notion of completeness – or generating a list of those functions which must be performed by all public health agencies to fulfil the public health mission.

The NPHP has previously defined core functions and essential practices of public health, based on a modification of the US definitions, for specifying the minimum capacity and infrastructure standards for the Australian public health system. This work was originally undertaken as part of the *Planning Framework.* [1] The NPHP list used the original US Institute of Medicine categorisation *of Assessment, Policy Development, Assurance* and turned it into *Assessment, Policy and Management, Program Delivery.* The NPHP list modified the CDC list of ten practices and extended them to 12. The 12 practices listed under these three functions include processes, practices and outcomes, similar to the US essential functions, but also services.

As the NPHP's work evolved, the wider application of an agreed definition of core functions became evident- for example, in determining public health capacity standards and public health workforce requirements. The National Public Health Partnership began more detailed work on public health functions by initiating a study in 1999. This study used both the US work and the NPHP adaptation of that work on defining public health functions as a launching point, but it also closely examined the approach taken by the WHO.

[1] The *Planning Framework for Public Health Practice* describes a common process and conceptual tools for planning in public health. It is available from the NPHP Secretariat.

## The World Health Organization - essential functions

The World Health Organization took a very different approach to defining public health functions to the US. Using a Delphi approach to elicit expert opinions by questionnaire, the WHO surveyed 138 people from around the world. One of the objectives of the WHO study was to use expert opinions to define the concept of "essential public health functions".

The WHO used the terminology "essential public health functions" in a different way to the US studies. This study proceeded from concerns that countries at all levels of development were experiencing rapid changes in their health systems, which might result in dramatic, negative health impacts. It therefore began with the question of whether a set of functions in public health can be identified, which are "essential" because they ensure that the public health system can respond to emerging and priority needs. They used nine "categories" to group together these functions (see box below).

The WHO's definition of "essential" as a set of minimum standards is different to the US notion of "essential" as practices which must be undertaken to ensure that the core functions of public health are being performed. This difference is highlighted by the comment of one of the study's initiators:

> *"there are certain public health functions which are so important and cost-effective for maintaining and improving health, that countries at all levels of development must be encouraged and supported to provide these public health services."* (Stephen A Sapirie)

This definition also points to the WHO study's inclusion of programs and services in the resulting list of functions.

The list of 37 essential public health categories and functions which emerged from the WHO study covers a vast array of processes and practices, and program delivery and services (see Appendix 3). The nine categories resulting from this study (Bettcher, Sapirie and Goon, 1998) were:

- prevention, surveillance and control of communicable and non-communicable diseases; monitoring the health situation;
- health promotion;
- occupational health;
- protecting the environment;
- public health legislation and regulations;
- public health management;
- specific public health services; and
- personal health care for vulnerable and high risk populations.

## Differences between the US and WHO work on public health functions

The US and the WHO work on public health functions have defined "essential" in varying ways, used "functions" to indicate different kinds of activities, and used very different methods to establish what "essential public health practices / functions" are.

Clearly, previous studies have had different considerations when starting out to define core public health functions. The World Health Organization used the term "essential" to indicate functions which ensure that the public health system has the capacity to respond to emerging and priority needs, proceeding from concerns about rapid changes to health systems around the world. The US definition of "essential" as practices which must be undertaken to ensure that public health functions are being performed, differs to the WHO's emphasis on a set of minimum standards.

Different perspectives on core functions also indicate the different uses to which the information gained about core functions is to be put. In the US, the emphasis has been linked to public health capacity building activities. Hence, the essential organizational practices have been used to: generate approaches to practice surveillance;

certify local health departments using practice guidelines; and develop leadership in public health (Turnock et al, 1994).

The WHO study's perspective was determined by its focus on maintaining a minimum set of public health activities, in the face of health care reforms, and the reduction of government responsibility and funding for health. Linked with the international focus of this study, there was no expectation that the results would be used to change organizational practice or build public health capacity. The perceived usefulness of this study was its ability to help in shoring up minimum resource requirements in countries experiencing rapid health system and other changes.

# The Australian Delphi study

The approach taken for the National Public Health Partnership's Delphi study was to see "core" as something which is regarded as absolutely necessary, the absence of which would imply gaps in public health capacity. Part of this study involves eliciting expert opinions on what characteristics make a public health function core. Potential uses of this Delphi study include defining public health functions and enhancing public health capacity in Australia.

The US and WHO work provided a starting point for defining the issues to be covered by the Australian study. The Technical Working Group (TWG), which first met in May 1999, used the initial NPHP work, along with the US work and the WHO international Delphi Study, to develop a categorisation and list of public health core functions.

The NPHP study reported here has taken an approach that:

- is closer to the US in terms of focussing on capacity building rather than minimum standards
- is based on expert opinions rather than working parties and so uses a similar method to the WHO study
- considers functions to encompass processes, practices, services and programs

## Study sample

In June, a list of 239 public health experts was drawn up by the TWG with input from the NPHP reference panel for this project, and from the NPHP Advisory Group. Each of these 239 people were sent an invitation to participate in the study, and 114 people responded positively to this invitation, four people indicated that they were too busy and 121 people made no response. The TWG decided that the first round questionnaire should be sent both to those who responded positively and to those who had not responded at all – a total of 235 people.

Using the workplace names and addresses of people on this list, the following tables show the breakdown into organisation type and state/territory of the chosen experts. The two largest groups of people chosen worked in academic institutions and state/territory governments, and the third largest group in national level NGOs. The spread of people chosen around Australia was reasonably good, reflecting the populations of each state/territory with some accuracy. The main exception to this was the high percentage of people from the ACT, reflecting the numbers of people chosen from national level government.

Table 1. Organisational type of public health experts invited to participate

| | Number of people | Percentage |
|---|---|---|
| Academic institution (research and training) | 74 | 31.4 |
| National government department | 23 | 9.8 |
| State/territory government department | 54 | 23.0 |
| National NGO | 36 | 15.3 |
| State/territory NGO | 18 | 7.7 |
| Health service provider | 13 | 5.5 |
| Other (consultants, professional associations, no organisational base) | 17 | 7.2 |
| Total | 235 | |

Table 2. State/territory of public health experts invited to participate

| | Number of people | Percentage |
|---|---|---|
| ACT | 30 | 12.8 |
| New Zealand | 1 | 0.4 |
| NSW | 63 | 26.8 |
| NT | 13 | 5.5 |
| QLD | 28 | 11.9 |
| SA | 19 | 8.1 |
| TAS | 5 | 2.1 |
| VIC | 50 | 21.3 |
| WA | 26 | 11.1 |
| Total | 235 | |

# Results from the first round

The first round questionnaire was sent out in July 1999. Of the 114 people who agreed to participate, 85 completed the first round questionnaire (75 per cent), and an additional 34 of the 121 people who made no response to the invitation (28 per cent per cent) also completed the questionnaire. This gave a total of 119 responses which the results that follow are based upon (compared with 138 responses to the first round of the WHO international study). The first round of the NPHP study concentrated on defining the characteristics of public health functions, creating a general list of public health functions, and establishing what characteristics make a function "core". [2]

## Respondent information

Information on the profile of the organisational type and state/territory of respondents is presented in Tables 3 and 4 below. The only significant discrepancy between the distribution of respondents and the initial list chosen is the national NGO group, with fewer from this group responding than were chosen. The respondent group is approximately divided into three groups – one-third being academics, one-third working in government at either state/territory or Federal level, and the remaining one-third comprising NGOs, service providers and others. There are no major differences between the state/territory distributions of those chosen and those who responded.

Table 3. Organisational type of first round respondents

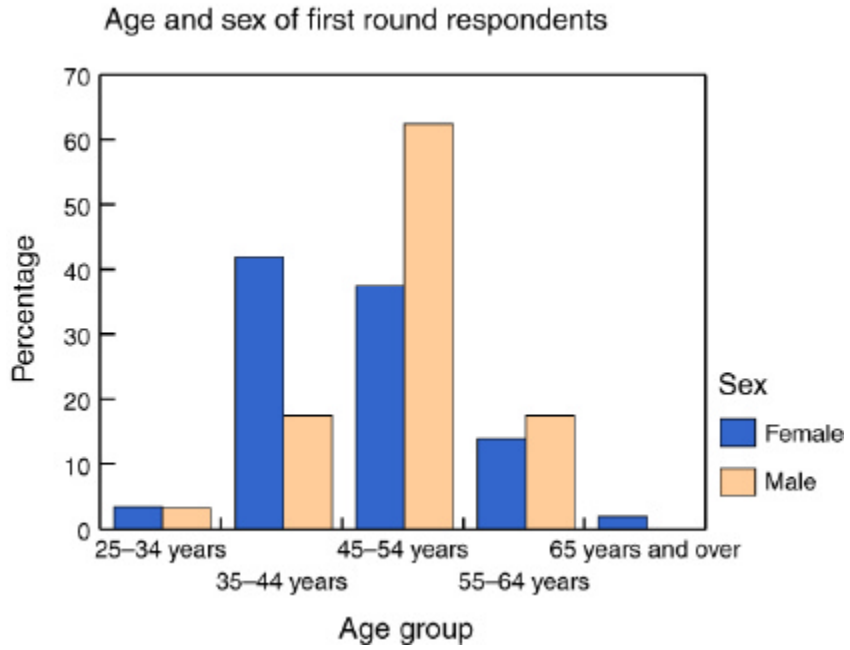
| | Number of people | Percentage |
|---|---|---|
| Academic institution (research and training) | 41 | 34.5 |
| National government department | 8 | 6.7 |
| State/territory government department | 33 | 27.7 |
| National NGO | 9 | 7.6 |
| State/territory NGO | 9 | 7.6 |
| Health service provider | 9 | 7.6 |
| Other (consultants, professional associations, no organisational base) | 10 | 8.4 |
| Total | 119 | |

[2] The first round questionnaire used in the current study combined what was asked in the first round WHO questionnaire, with a more specific list of public health functions, but did not ask participants to indicate whether they thought these were essential or not – just whether they were public health functions. The first round of the WHO study concentrated on defining what public health functions are, establishing what characteristics make a function "essential", and creating an initial list of public health functions.

Table 4. State/territory of first round respondents

| | Number of people | Percentage |
|---|---|---|
| ACT | 14 | 11.8 |
| New Zealand | 1 | 0.8 |
| NSW | 31 | 26.1 |
| NT | 5 | 4.2. |
| QLD | 17 | 14.3 |
| SA | 10 | 8.4 |
| TAS | 3 | 2.5 |
| VIC | 26 | 21.8 |
| WA | 12 | 10.1 |
| Total | 119 | |

There was an even split between males and females, with 56 females and 59 males responding. The largest group in terms of age was the 45 to 54 years age group, followed by the 35 to 44 years group, then the 55 to 64 years, and small numbers in the youngest and oldest groups.




About 20 per cent of respondents had spent ten years or less working in public health, with 23 per cent having spent 11 to 15 years, and 27 per cent having spent 16 to 20 years, and 30 per cent, 21 or more years working in public health.

Table 5. Years worked in public health of first round respondents

| | Valid percentage (n=116) |
|---|---|
| Up to 10 years | 19.8 |
| 11 to 15 years | 23.3 |
| 16 to 20 years | 26.7 |
| 21 or more years | 30.2 |

Respondents were asked to provide information on the main disciplines in which they are trained, and also the main areas of public health they have worked in. Both of these were open ended questions and most respondents provided more than one discipline and area of work. Hence the numbers that follow in Tables 6 and 7 are numbers of *responses* rather than *respondents*. Up to four responses were coded for each participant.

Table 6 shows that in the respondent group there are substantial numbers of people with training in epidemiology and biostatistics, medicine and policy, followed by training in health promotion, management and/or administration, and public health.

Table 6. Main disciplines of first round respondents

| | Frequency | Valid Percent |
|---|---|---|
| Aboriginal Health | 4 | 1.4 |
| Basic Sciences | 10 | 3.6 |
| Community Development | 14 | 5.0 |
| Economics | 5 | 1.8 |
| Education / Training | 11 | 3.9 |
| Environmental Health / Science | 7 | 2.5 |
| Epidemiology and biostatistics | 46 | 16.4 |
| Health Promotion | 22 | 7.8 |
| Management / Administration | 19 | 6.8 |
| Medicine | 36 | 12.8 |
| Nursing | 9 | 3.2 |
| Occupational Health and Safety | 6 | 2.1 |
| Other occupations (law, physiotherapy, nutrition, social work | 10 | 3.6 |
| Policy | 29 | 10.3 |
| Psychology, behavioural science | 10 | 3.6 |
| Public Health | 17 | 6.0 |
| Health services research / evaluation | 5 | 1.8 |
| Social Sciences (sociology, history, anthropology, politics) | 14 | 5.0 |
| Miscellaneous (industrial relations, transport and urban development, organisational behaviour) | 7 | 2.5 |
| Total | 281 | |

Table 7 gives the profile of respondents in terms of their main areas of work. The most frequently mentioned area of work was health promotion, followed by administration and/or management, then health policy and then Aboriginal health.

Table 7. Main work areas of first round respondents

| | Frequency | Valid Percent |
|---|---|---|
| Aboriginal Health | 19 | 7.1 |
| Administration / Management | 27 | 10.1 |
| Adolescent Health | 3 | 1.1 |
| Cancer Control / Screening | 4 | 1.5 |
| Communicable Diseases (including HIV/AIDS) | 15 | 5.6 |
| Community Development | 11 | 4.1 |
| Community Health | 8 | 3.0 |
| Drug and Alcohol (including tobacco) | 5 | 1.9 |
| Environmental Health | 7 | 2.6 |
| Epidemiology | 5 | 1.9 |
| Food / Nutrition | 7 | 2.6 |
| General Practice / Preventive Medicine | 3 | 1.1 |
| Health Education / Information / Training | 12 | 4.5 |
| Health Monitoring / Surveillance / Screening | 3 | 1.1 |
| Health Policy | 20 | 7.5 |
| Health Promotion | 37 | 13.9 |
| Health Service Delivery | 5 | 1.9 |
| Injury Control / Prevention | 4 | 1.5 |
| Maternal and Child Health | 9 | 3.4 |
| Mental Health | 5 | 1.9 |
| Microbiology / Toxicology | 2 | 0.7 |
| Occupational Health and Safety | 14 | 5.2 |
| Public Health | 3 | 1.1 |
| Reproductive Health / Sexual Health | 3 | 1.1 |
| Research / Evaluation | 14 | 5.2 |
| Women's Health | 10 | 3.7 |
| Miscellaneous health services (refugees, cardiovascular, dental, ethnic health, corrections, waste management) | 6 | 2.2 |
| Miscellaneous health issues (gun control, mass media, physical activity, consumer rights, international health) | 6 | 2.2 |
| Total | 267 | |

# First round questionnaire results

There were four questions in the first round questionnaire, which is included as Appendix 4. The first question on the questionnaire asked participants in the study to indicate whether they agreed or disagreed (on a four point scale) with nine statements describing characteristics of public health functions. This was based on a question in the WHO study, but the statements were reworded for clarity and also to make some of them more provocative. The TWG decided that rather than use statements that everyone would agree with, there should be some more controversial statements included in this question, in order to test whether respondents would be willing or able to draw definite distinctions. It is unlikely that inclusive and general statements would provoke disagreement, so there was a mixture of more and less controversial statements. This also provided a means of checking that respondents did not simply agree with every statement. The results are shown in Table 8 below.

## *Question 1 - characteristics of public health functions*

Participants were provided with the following definition of public health functions, and asked to keep this in mind when answering the questions.

**Public health functions are defined here as: "those activities (processes, practices, services and programs) which are undertaken in order to protect and promote health, and to prevent illness, injury and disability".**

Table 8. Defining public health functions

| | Valid percentage (n=119) | | | |
|---|---|---|---|---|
| | Strongly agree | Agree | Disagree | Strongly disagree |
| 1.1 A public health function is any activity which is necessary to improve, maintain, or promote the health of the entire population | 57.1 | 31.9 | 8.4 | 2.5 |
| 1.2 Public health functions can have primary benefits for specific populations (e.g. indigenous groups, refugees, remote population groups, and vulnerable groups) | 72.3 | 26.1 | 0.8 | 0.8 |
| 1.3 A service directed to individuals is only a public health function if it provides population wide health benefits | 14.5 | 30.8 | 41.0 | 13.7 |
| 1.4 Public health functions include health care services delivered to individuals | 14.5 | 54.7 | 27.4 | 3.4 |
| 1. 5 Activities constitute public health functions only if they are the responsibility of the health sector | 2.5 | 0.8 | 29.4 | 67.2 |
| 1.6 Public health functions are only those activities which benefit society as a whole | 4.2 | 17.8 | 51.7 | 26.3 |
| 1.7 Activities constitute public health functions only if they address the social determinants of health | 4.2 | 10.1 | 53.8 | 31.9 |
| 1.8 Public health functions are best carried out by public sector organisations | 7.6 | 39.0 | 38.1 | 15.3 |
| 1.9 Only activities which empower communities are public health functions | 0 | 8.5 | 64.1 | 27.4 |

The highest level of agreement for this question was reached for the second item, with only one person disagreeing, and only 9.8 per cent disagreed with the first item. Opinion was very evenly divided on two items (1.3 and 1.8), on public health functions providing population wide benefits and being carried out by public sector organisations. Some 78.0 per cent disagreed with 1.6 (public health functions benefit society as a whole), and 30.8 per cent disagreed with 1.4 (public health includes individual services). There were high levels of disagreement with public health being confined to the health sector (96.6 per cent disagreed with 1.5), public health having to empower communities (91.5 per cent disagreed with 1.9), and public health being only activities that address the social determinants of health (85.7 per cent disagreed with 1.7).

Many respondents commented on the problem of making distinctions between the entire population and sub groups and individuals, and that activities directed at individuals and groups can have flow on effects to the entire population. Several people objected to the use of "only" in some of the items, saying that they would have agreed if "only" was eliminated or replaced by "in general" or "are best".

Many respondents made comments on the scope of public health in relation to this question. Some people argued that public health is anything that results in health gain, while others were concerned that if public health defines itself too widely, then the focus, priority and achievements will be lost. Comments on this question were used to construct a composite definition of public health functions, which was provided at the beginning of the second round questionnaire. This definition is given in the section on the second round results.

## *Question 2 - Identifying public health functions*

The next question provided participants with a list of 29 public health functions. This list was drawn up from the WHO study, the US Institute of Medicine's work on essential practices, and the NPHP *Public Health Planning and Practice Framework*. Participants were asked to indicate whether they agreed or disagreed that each item is a public health function. The results are shown in Table 9.

High levels of agreement were reached on some public health functions, but opinion was divided on a number of items. The items on which opinions were fairly strongly divided (20 per cent or more disagreed or strongly disagreed) were:

- health technology assessment (50.4 per cent disagreed or strongly disagreed)
- evaluation of the quality of health care services (36.8 per cent)
- patient education (37.0 per cent)
- encouraging community control of health services (31.4 per cent)
- ensuring access to health care services (28.8 per cent)
- undertaking randomised controlled trials to evaluate health interventions (28.2 per cent)
- health care services for vulnerable and high risk populations (26.3 per cent)
- assessment of need for health care services (23.7 per cent disagreed or strongly disagreed)

Table 9. General list of public health functions

| | Valid percentage (n=119) | | | |
|---|---|---|---|---|
| | Strongly agree | Agree | Disagree | Strongly disagree |
| 2.1 Establishing and coordinating intersectoral partnerships which improve health | 69.5 | 29.7 | 0.8 | 0 |
| 2.2 Health policy development, implementation and evaluation | 62.7 | 32.2 | 5.1 | 0 |
| 2.3 Health promotion | 71.2 | 27.1 | 0.8 | 0.8 |
| 2.4 Planning for health care services | 26.7 | 53.4 | 17.2 | 2.6 |
| 2.5 Mobilizing financial resources for promoting, protecting and maintaining health | 61.5 | 33.3 | 5.1 | 0 |
| 2.6 Developing human resources for promoting, protecting and maintaining health | 58.0 | 37.8 | 4.2 | 0 |
| 2.7 Planning and managing health research | 32.2 | 48.3 | 18.6 | 0.8 |
| 2.8 Assessment of health outcomes | 42.9 | 50.4 | 6.7 | 0 |
| 2.9 Undertaking randomised controlled trials to evaluate health interventions | 19.7 | 52.1 | 23.9 | 4.3 |
| 2.10 Assessment of need for health care services | 28.8 | 47.5 | 20.3 | 3.4 |
| 2.11 Monitoring the health and social and economic status of populations | 61.2 | 34.5 | 4.3 | 0 |
| 2.12 Health technology assessment | 10.9 | 38.7 | 43.7 | 6.7 |
| 2.13 Health legislation and regulations | 52.1 | 45.4 | 1.7 | 0.8 |
| 2.14 Promoting healthy public policy | 79.0 | 21.0 | 0 | 0 |
| 2.15 Analysing health problems and their determinants | 58.8 | 37.8 | 3.4 | 0 |
| 2.16 Evaluation of the quality of health care services | 13.7 | 49.6 | 29.9 | 6.8 |
| 2.17 Assessing social capital within populations | 35.0 | 47.0 | 17.1 | 0.9 |
| 2.18 Developing community capacity to address health issues | 60.7 | 33.3 | 5.1 | 0.9 |
| 2.19 Ensuring healthy and safe environments | 73.9 | 23.5 | 2.5 | 0 |
| 2.20 Prevention, surveillance and control of injuries | 68.6 | 28.8 | 2.5 | 0 |
| 2.21 Patient education | 13.4 | 49.6 | 28.6 | 8.4 |
| 2.22 Advocacy for the health of the public | 67.2 | 30.3 | 2.5 | 0 |
| 2.23 Encouraging community control of health services | 24.6 | 44.1 | 28.0 | 3.4 |
| 2.24 Emergency and natural disaster management | 33.1 | 50.0 | 11.9 | 5.1 |
| 2.25 Prevention, surveillance and control of communicable diseases | 72.3 | 27.7 | 0 | 0 |
| 2.26 Prevention, surveillance and control of non communicable diseases | 63.9 | 35.3 | 0.8 | 0 |
| 2.27 Early detection of diseases | 34.2 | 54.7 | 10.3 | 0.9 |
| 2.28 Ensuring access to health care services | 30.5 | 40.7 | 23.7 | 5.1 |
| 2.29 Health care services for vulnerable and high risk populations | 33.9 | 39.8 | 23.7 | 2.5 |

The highest levels of agreement were achieved with the following 14 items (all with 95 per cent or more agreement):

- promoting healthy public policy (100 per cent agreed or strongly agreed)
- prevention, surveillance and control of communicable diseases (100 per cent)
- health promotion (99.2 per cent)
- health legislation and regulations (99.2 per cent)
- prevention, surveillance and control of non communicable diseases (99.2 per cent)
- establishing and coordinating intersectoral partnerships which improve health (99.2 per cent)
- ensuring healthy and safe environments (97.5 per cent)
- prevention, surveillance and control of injuries (97.5 per cent)
- advocacy for the health of the public (97.5 per cent)
- analysing health problems and their determinants (96.6 per cent)
- developing human resources for promoting, protecting and maintaining health (95.8 per cent)
- monitoring the health and social and economic status of populations (95.7 per cent)
- health policy development, implementation and evaluation (94.9 per cent)
- mobilizing financial resources for promoting, protecting and maintaining health (94.9 per cent)

Amongst the comments regarding this question there were several about the troublesome distinctions between public health functions and acute or individual health care. Some respondents wished to make clear distinctions between what is and is not a public health function, claiming that (for example): "if public health represents all activities impacting on population health it is in danger of being nothing in particular". Others thought that drawing distinctions between public health and other health services, or services that contribute to public health but are provided outside the health sector, was irrelevant, simplistic, or even dangerous for public health.

Many additional items were suggested for inclusion in the second round questionnaire, and these suggestions were incorporated. The expanded list can be seen in the results of the second round in Table 15.1 to 15.11. Each of the 14 items that had high levels of agreement (listed earlier), were carried into the second round and expanded, along with some items that were reworded. Items with low levels of agreement (such as health technology assessment) were not included in the second round.

## *Question 3 - how public health functions address needs*

The third question asked participants to indicate whether they agreed or disagreed with 19 statements on what public health functions do in addressing public health needs. This question was based on one used in the WHO study, but again the statements have been reworded in order to be more provocative and to gauge whether people could or would want to make such choices. Table 10 shows the results for this question.

High levels of disagreement were recorded for 2 items - that public health functions will: "work only for improving health outcomes" (70.8 per cent) and "always have quantitatively measurable outcomes" (69.5 per cent). Opinion was fairly evenly divided on two items - that PH functions will:

- always involve community participation in decision making (47.4 per cent disagreed or strongly disagreed)
- emphasize the importance of community control (49.6 per cent).

There was also substantial disagreement with the items: "address community priorities in preference to the priorities of government (39.3 per cent), and "increase community control over public health priorities" (29.8 per cent).

Table 10. What public health functions do in addressing public health needs

| | Valid percentage (n=119) | | | |
|---|---|---|---|---|
| *In addressing public health needs, public health functions will:* | Strongly agree | Agree | Disagree | Strongly disagree |
| 3.1 prioritize the health of populations in preference to the choices of individuals | 31.3 | 53.0 | 12.2 | 3.5 |
| 3.2 address community priorities in preference to the priorities of government | 21.4 | 39.3 | 35.7 | 3.6 |
| 3.3 address the social and economic determinants of health | 53.0 | 44.4 | 2.6 | 0 |
| 3.4 be monitored by government agencies | 21.1 | 55.3 | 22.8 | 0.9 |
| 3.5 increase community control over public health priorities | 25.4 | 44.7 | 26.3 | 3.5 |
| 3.6 always have quantitatively measurable outcomes | 4.2 | 26.3 | 60.2 | 9.3 |
| 3.7 give priority to reducing inequalities in health | 47.8 | 46.1 | 6.1 | 0 |
| 3.8 involve collaboration with other sectors | 59.1 | 39.1 | 1.7 | 0 |
| 3.9 always involve community participation in decision making | 21.6 | 31.0 | 44.0 | 3.4 |
| 3.10 improve individual and community health literacy | 23.7 | 63.2 | 12.3 | 0.9 |
| 3.11 emphasize the importance of cost control | 7.0 | 43.5 | 42.6 | 7.0 |
| 3.12 focus on areas where the greatest health gains can be made | 29.3 | 52.6 | 15.5 | 2.6 |
| 3.13 have improved social outcomes as a priority | 20.0 | 58.3 | 21.7 | 0 |
| 3.14 work only for improving health outcomes | 9.7 | 19.5 | 64.6 | 6.2 |
| 3.15 build community capacity to improve health | 37.1 | 57.8 | 5.2 | 0 |
| 3.16 address only the most acute health issues | 0 | 2.6 | 64.7 | 32.8 |
| 3.17 be scientifically based | 23.5 | 58.3 | 15.7 | 2.6 |
| 3.18 always recognise culturally diverse groups | 35.9 | 49.6 | 11.1 | 3.4 |
| 3.19 be sensitive to gender issues | 34.7 | 56.8 | 5.9 | 2.5 |

The responses to this question were far more spread than for the first two questions, with fewer "strongly agree" responses. Only two items had more than half of the respondents strongly agreeing - that public health functions will:

- involve collaboration with other sectors (59.1 per cent strongly agreed)
- address the social and economic determinants of health (53.0 per cent).

Respondents found this a difficult question, and objected to some of the forced distinctions and choices that were made in it – particularly in relation to item 3.2 and the items that used the terms "always" or "only". One respondent felt that this question had a strong ideological bias and an oppositional tone.

Several comments were made on items 3.6, 3.11 and 3.17 in relation to what counts as evidence and that there should be more than a reliance on randomised controlled trials, cost or "science" in determining what public health functions do. Several comments were made in relation to a confusion between "will do" or "should do" in answering this question.

## *Question 4 - characteristics of 'core' public health functions*

The final question related to defining the characteristics of "core" public health functions. Participants were asked to agree or disagree with nine statements on what makes a public health function "core". Again, this question was based on one in the WHO study, but the statements were reworded to make them more provocative. In the questionnaire, it was suggested that: *"core" means something which is regarded as absolutely necessary, the absence of which would imply gaps in public health capacity.*

This appeared to be the most difficult question to answer, with respondents having more difficulty in clearly expressing an opinion on what constitutes a "core" function. This relates to the problem of defining "core", and to the inclusion of "only" in many questions, which was used to try and force an opinion one way or the other. The results are shown in Table 11.

Table 11. The characteristics of "core" public health functions

| | Valid percentage (n=119) | | | |
|---|---|---|---|---|
| | Strongly agree | Agree | Disagree | Strongly disagree |
| 4.1 Public health functions are only "core" if they aim to protect and promote health in **all** communities | 9.5 | 18.1 | 58.6 | 13.8 |
| 4.2 Public health functions are only "core" if they aim to protect and promote the health of populations | 36.6 | 43.2 | 16.9 | 4.2 |
| 4.3 Core public health functions include the treatment of disease only where it protects the health of others | 11.1 | 35.0 | 43.6 | 10.3 |
| 4.4 Public health functions are "core" only if it can be **demonstrated** that they improve or protect the health of the population | 10.2 | 38.1 | 39.8 | 11.9 |
| 4.5 Core public health functions are a set of indispensable activities, which should not be traded off for other policy priorities | 39.3 | 43.6 | 15.4 | 1.7 |
| 4.6 Public health functions are only "core" if they are delivered by the health sector | 0.8 | 2.5 | 55.1 | 41.5 |
| 4.7 Core public health functions are those activities which can be **demonstrated** to provide the greatest health benefit for the resources spent | 3.4 | 27.1 | 60.2 | 9.3 |
| 4.8 Core public health functions are those activities that cannot be privatized | 3.4 | 9.3 | 59.3 | 28.0 |
| 4.9 Public health functions are "core" only if they seek to redress inequalities in health | 6.8 | 24.6 | 57.6 | 11.0 |

Only two of the items in this question reached substantial levels of agreement:

- Core public health functions are a set of indispensable activities, which should not be traded off for other policy priorities (82.9 per cent agreed or strongly agreed)
- Public health functions are only "core" if they aim to protect and promote the health of populations (78.8 per cent).

However, there was a high level of disagreement with two items:

- Public health functions are only "core" if they are delivered by the health sector (96.6 per cent disagreed or strongly disagreed)
- Core public health functions are those activities that cannot be privatized (87.3 per cent).

Opinion was evenly divided on one item - "core public health functions include the treatment of disease only where it protects the health of others" (46.1 per cent agreed or strongly agreed).

In relation to this question, many comments were made on the narrowness or restrictiveness of the concept of "core", or that this was a negative or reductionist approach. One respondent linked the term "core" with "core business", which meant (to this respondent) only those activities that cannot be traded off, leaving a very limited public health program. Several people thought that "core" should be related to basic necessities (food, water, housing), or public goods, or maintaining the current health of the population, or everything that is currently being provided. Others noted that what is "core" should be flexible and will change from place to place and time and time.

Several respondents disliked the two items which included "demonstrated" (4.4 and 4.7), commenting that this was a problematic concept in itself and that it is difficult to demonstrate health improvement or protection for many activities. Some respondents disliked the use of "only" in a number of questions. Several comments were made regarding whether 4.8 should have read "cannot" or "should not", and some respondents wanted to qualify their disagreement with this item by saying that there is a role for the private sector, but public health should be the responsibility of, or controlled by, public not-for-profit entities.

Many of the final comments made on the questionnaire overall, were related to the issue of drawing a line between public health and acute health, with some respondents arguing that this was a necessary and worthwhile task, and others viewing this and other distinctions as irrelevant. Some respondents suggested other classifications (two

people referred to the US Institute of Medicine's work) and others raised particular issues, such as international health development and environmental management.

The results from the first round were compiled during August 1999. A report outlining the results of the first round was sent out to the 119 people who returned a completed questionnaire from the first round, along with the second round questionnaire, in September.

# Results from the second round

The objective of the second round of this study was to move from a general list of public health functions to a more detailed list, and to move from defining public health functions to defining "core" public health functions. In order to do so, the second round questionnaire fed back the results of the first round questionnaire to participants; provided a more detailed list of public health functions than the list of 29 functions used in the first questionnaire, and asked respondents to indicate which of these items are "core" using a four point classification adapted from the WHO study.

In the second round questionnaire, the intention was to combine parts of the second and third round questionnaires used by the WHO. The second WHO questionnaire focussed on reaching consensus on a list of the most Essential Public Health Functions (EPHFs), but it also revisited some of the items from the first round in which no consensus or weak consensus was reached. The WHO third round questionnaire focussed on confirming the list of EPHFs identified in the second round, asked respondents how this list will differ in the year 2020, and revisited some outstanding issues from round 2.

## Respondent information

There was a substantial reduction in the number of people responding to the second round survey. Of the 119 first round respondents, 75 people returned completed second round questionnaires (63 per cent). This compares with 111 responses to the third round (a 79 per cent response rate) for the WHO study. [3] The organisational type for the first round respondents is shown in Table 12 and the state/territory breakdown in shown in Table 13. These tables include comparisons with the round 1 profiles.

Table 12. Organisational type of second round respondents

| | Number of people | Percentage | Percentage in 1st round |
|---|---|---|---|
| Academic institution (research and training) | 23 | 30.7 | 34.5 |
| National government department | 2 | 2.7 | 6.7 |
| State/territory government department | 23 | 30.7 | 27.7 |
| National NGO | 7 | 9.3 | 7.6 |
| State/territory NGO | 7 | 9.3 | 7.6 |
| Health service provider | 7 | 9.3 | 7.6 |
| Other (consultants, professional associations, no organisational base) | 6 | 8.0 | 8.4 |
| Total | 75 | | |

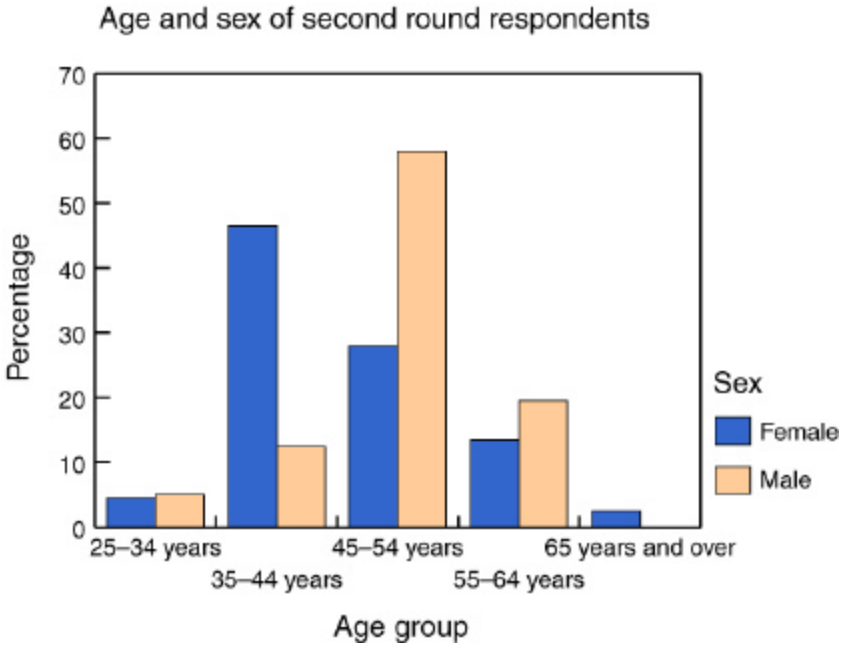
There are no major differences in the distribution of respondents in the second round compared to the first. There are slightly higher percentages of state and territory government, NGO and provider respondents, and lower percentages of academic and national government respondents. However, these differences are small and there does not appear to have been a large drop out rate by one particular group.

[3] The response rate for the WHO study fell from 92 per cent in round two down to 79 per cent in the third round.

Table 13. State/territory of second round respondents

| | Number of people | Percent in 2nd round | Percent in 1st round |
|---|---|---|---|
| ACT | 5 | 6.7 | 11.8 |
| New Zealand | 0 | 0 | 0.8 |
| NSW | 20 | 26.7 | 26.1 |
| NT | 4 | 5.3 | 4.2 |
| QLD | 11 | 14.7 | 14.3 |
| SA | 7 | 9.3 | 8.4 |
| TAS | 2 | 2.7 | 2.5 |
| VIC | 20 | 26.7 | 21.8 |
| WA | 6 | 8.0 | 10.1 |
| Total | 75 | | |

Similarly there are some small shifts between the round 1 and 2 respondents in terms of state or territory, with the percentages for the ACT and WA falling and the percentage for Victoria rising. As for the organisational type data, these do not indicate large falls in any particular group, with the possible exception of the ACT. Hence, it does not seem that there has been any particular group who have not participated in the second round of the survey and it can be assumed that the results are drawn from a similar mixture of people as the first round results (in terms of organisation and geographical location).




The split between males and females remained even, with 38 females and 37 males responding in the second round. Again the largest group was the 45 to 54 year olds, followed by the 35 to 44 year olds and then the 55 to 64 year old group.

The main difference between the first and second rounds in terms of respondent characteristics can be seen in Table 14. There appears to have been a high drop off from those who have the most experience in public health group, with the 21 or more years group falling from 30.2 per cent down to 18.7 per cent.

Table 14. Years worked in public health of second round respondents

| | Number of people | Percent in 2nd round | Percent in 1st round |
|---|---|---|---|
| Up to 10 years | 18 | 24.0 | 19.8 |
| 11 to 15 years | 19 | 25.3 | 23.3 |
| 16 to 20 years | 24 | 32.0 | 26.7 |
| 21 or more years | 14 | 18.7 | 30.2 |
| Total | 75 | | |

Table 15 indicates that there has not been a major change in the profile of respondents to the second round, with respect to the main disciplines they were trained in. The largest difference from the first to the second round has been a fall in the number of people with training in epidemiology and biostatistics, but this difference is not great.

Table 15. Main disciplines of second round respondents

| | Frequency | Percent in 2nd round | Percent in 1st round |
|---|---|---|---|
| Aboriginal Health | 3 | 1.7 | 1.4 |
| Basic Sciences | 8 | 4.5 | 3.6 |
| Community Development | 9 | 5.1 | 5.0 |
| Economics | 2 | 1.1 | 1.8 |
| Education / Training | 8 | 4.5 | 3.9 |
| Environmental Health / Science | 5 | 2.8 | 2.5 |
| Epidemiology and biostatistics | 22 | 12.5 | 16.4 |
| Health Promotion | 17 | 9.7 | 7.8 |
| Management / Administration | 10 | 5.7 | 6.8 |
| Medicine | 26 | 14.8 | 12.8 |
| Nursing | 7 | 4.0 | 3.2 |
| Occupational Health and Safety | 4 | 2.3 | 2.1 |
| Other occupations (law, physiotherapy, nutrition, social work | 4 | 2.3 | 3.6 |
| Policy | 18 | 10.2 | 10.3 |
| Psychology, behavioural science | 8 | 4.5 | 3.6 |
| Public Health | 11 | 6.2 | 6.0 |
| Health services research / evaluation | 2 | 1.1 | 1.8 |
| Social Sciences (sociology, history, anthropology, politics) | 7 | 4.0 | 5.0 |
| Miscellaneous (industrial relations, transport and urban development, organisational behaviour) | 5 | 2.8 | 2.5 |
| Total | 176 | | |

Table 16 shows that there are no major differences in terms of main work areas or respondents to round 2 compared to round 1. This is important in relation to the findings of the second round survey. In drawing up a list of public health functions with regard to their relative importance, it was crucial that the respondents to the second round were not markedly different from the initial list of people chosen and those who responded to the first round.

Table 16. Main work areas of second round respondents

| | Frequency | Percent in 2nd round | Percent in 1st round |
|---|---|---|---|
| Aboriginal Health | 14 | 7.8 | 7.1 |
| Administration / Management | 7 | 9.4 | 10.1 |
| Adolescent Health | 2 | 1.1 | 1.1 |
| Cancer Control / Screening | 4 | 2.2 | 1.5 |
| Communicable Diseases (including HIV/AIDS) | 9 | 5.0 | 5.6 |
| Community Development | 5 | 2.8 | 4.1 |
| Community Health | 4 | 2.2 | 3.0 |
| Drug and Alcohol (including tobacco) | 5 | 2.8 | 1.9 |
| Environmental Health | 6 | 3.3 | 2.6 |
| Epidemiology | 3 | 1.7 | 1.9 |
| Food / Nutrition | 2 | 1.1 | 2.6 |
| General Practice / Preventive Medicine | 3 | 1.7 | 1.1 |
| Health Education / Information / Training | 4 | 2.2 | 4.5 |
| Health Monitoring / Surveillance / Screening | 4 | 2.2 | 1.1 |
| Health Policy | 11 | 6.1 | 7.5 |
| Health Promotion | 27 | 15.0 | 13.9 |
| Health Service Delivery | 5 | 2.8 | 1.9 |
| Injury Control / Prevention | 2 | 1.1 | 1.5 |
| Maternal and Child Health | 8 | 4.4 | 3.4 |
| Mental Health | 3 | 1.7 | 1.9 |
| Microbiology / Toxicology | 1 | 0.6 | 0.7 |
| Occupational Health and Safety | 10 | 5.6 | 5.2 |
| Public Health | 3 | 1.7 | 1.1 |
| Reproductive Health / Sexual Health | 2 | 1.1 | 1.1 |
| Research / Evaluation | 9 | 5.0 | 5.2 |
| Women's Health | 7 | 3.9 | 3.7 |
| Miscellaneous health services (refugees, cardiovascular, dental, ethnic health, corrections, waste management) | 7 | 3.9 | 2.2 |
| Miscellaneous health issues (gun control, mass media, physical activity, consumer rights, international health) | 3 | 1.7 | 2.2 |
| Total | 180 | | |

The information presented in Tables 12 to 16 indicate that there was no major drop out of any particular group (in terms of organisational type, geographical location, age, sex, disciplines or work areas). The only relatively large difference between the first and second round was the smaller proportion of people who had worked in public health for longer periods. Hence, responses to the second round reflect responses from a group that is not markedly different from the first round, in relation to these characteristics.

## Second round questionnaire results - refining the list of public health functions

Participants in the second round were provided with a report from the results of the first round of the study, and the following definition at the beginning of the questionnaire, which draws on the original definition of public health functions and the responses from the first round:

> "Public health functions are a set of activities which protect, promote or improve health, and prevent illness, injury and disability. The activities may be directed at entire populations, priority sub-populations, or individuals in some circumstances. Public health functions can be carried out by public and private organisations, within and outside the health sector. But the overall responsibility for identifying public health needs, and coordinating and managing responses to these needs, rests with governments."

The second round questionnaire contained only one question, which was divided into eleven general categories of public health functions. The eleven categories used are based on a combination of those used by the WHO, those in the US Institute of Medicine's classification (and the reinterpretation of these categories by the NPHP), and responses to the first round questionnaire. The categories are:

- research, monitoring and assessment
- ensuring healthy and safe environments
- health education and community development
- health policy and public policy development and implementation
- public health education and training
- public health management
- prevention, surveillance and control of communicable diseases
- prevention, surveillance and control of non communicable diseases
- prevention and surveillance of injury
- healthy growth and development programs and services
- programs and services directed at specific population groups and individuals.

Within each of these eleven categories, the 29 items used in the first round questionnaire were expanded into a more detailed list of functions. Where support for a function was high in the first round, the function was split into a number of more detailed functions. For example, health policy development, implementation and evaluation became a number of items within the three categories of health policy and public policy development and implementation; public health management; and research, monitoring and assessment. Where support was not as high, the functions were reworded to clarify their meanings, or removed where there was very little support (e.g. in the case of health technology assessment).

This process resulted in a list of 86 specific functions being drawn up under the 11 categories given above. Respondents were asked to indicate whether they thought each item was *always, often, sometimes*, or *not* a public health function. The second round questionnaire has been included in this report as Appendix 5.

The results from the second round questionnaire are presented in Tables 17.1 to 17.11. These tables present a rank ordering of functions within each general category, from the highest to the lowest percentage of respondents who indicated that they thought this was ***always*** a public health function (core). Where more than one item has the same percentage for this category, the items are then ordered from the highest percentage who indicated ***often*** a public health function, and then (where necessary) the highest percentage who indicated ***sometimes***.

Within each of the 11 categories, **the functions that had 75 per cent or more of respondents indicating that this was "always" or "often" a public health function have been bolded,** giving a slightly different impression of which are most highly rated. Using this 75 per cent or more rated "always" or "often" classification, 44 of the 86 items have been bolded as the most highly rated public health functions.

In the first category of research, monitoring and assessment (Table 17.1), the most highly rated functions were those associated with monitoring and assessment of populations, and evaluation of health policies. Functions dealing with health care services and programs were rated the lowest within this category

Table 17.1 Detailed list of public health functions ranked by "always" percentage - research, monitoring and assessment

| | Always a public health function (core) | Often a public health function | Sometimes a public health function | Not a public health function |
|---|---|---|---|---|
| **1.6 Monitoring morbidity and mortality** | 77.3 | 17.3 | 5.3 | 0 |
| **1.7 Monitoring the determinants of health** | 76.0 | 20.0 | 2.7 | 1.3 |
| **1.4 Assessment of population needs and risks to determine which groups require services** | 56.0 | 36.0 | 6.7 | 1.3 |
| **1.2 Undertaking research on health issues in populations** | 56.0 | 34.7 | 8.0 | 1.3 |
| **1.8 Evaluation of health policies** | 42.7 | 38.7 | 18.7 | 0 |
| 1.1 Identifying health research priorities | 32.0 | 42.7 | 25.3 | 0 |
| 1.9 Evaluation of health care services and programs | 17.3 | 38.7 | 42.7 | 1.3 |
| 1.5 Monitoring the delivery of health services and programs | 14.7 | 42.7 | 40.0 | 2.7 |
| 1.3 Undertaking research on health services and programs | 13.3 | 44.0 | 40.0 | 2.7 |

The items that rated the highest within the category on ensuring healthy and safe environments (Table 17.2) are focussed on food and water quality and safety, environmental protection and basic services provision. The functions that were less highly rated relate to town planning, access to facilities, and control of land degradation.

Table 17.2 Detailed list of public health functions ranked by "always" percentage - ensuring healthy and safe environments

| | Always a public health function (core) | Often a public health function | Sometimes a public health function | Not a public health function |
|---|---|---|---|---|
| **2.4 The production and protection of safe water** | 68.0 | 18.7 | 12.0 | 1.3 |
| **2.9 Vector control** | 60.3 | 30.1 | 9.6 | 0 |
| **2.14 Controlling food access, quality and safety** | 60.0 | 36.0 | 2.7 | 1.3 |
| **2.10 Controlling hazardous substances and wastes** | 52.0 | 34.7 | 12.0 | 1.3 |
| **2.13 Controlling radiation** | 50.7 | 29.3 | 18.7 | 1.3 |
| **2.3 Ensuring drainage, sewerage and solid waste disposal** | 49.3 | 32.0 | 16.0 | 2.7 |
| **2.11 Controlling atmospheric pollution** | 41.3 | 36.0 | 20.0 | 2.7 |
| 2.16 Ensuring safe workplaces | 38.7 | 34.7 | 24.0 | 2.7 |
| 2.12 Controlling noise | 37.3 | 29.3 | 30.7 | 2.7 |
| 2.15 Controlling the quality of therapeutic goods and appliances | 35.1 | 25.7 | 31.1 | 8.1 |
| 2.7 Ensuring access to physical activity and other recreation facilities | 24.0 | 33.3 | 42.7 | 0 |
| 2.2 Controlling housing standards and provision | 24.0 | 29.3 | 44.0 | 2.7 |
| 2.1 Town planning and land use | 24.0 | 28.0 | 42.7 | 5.3 |
| 2.8 Ensuring access to facilities for social interaction | 20.3 | 25.7 | 40.5 | 13.5 |
| 2.6 Ensuring access to public transport and educational opportunities | 18.9 | 29.7 | 39.2 | 12.2 |
| 2.5 Controlling land degradation and soil loss (e.g. by erosion) | 14.7 | 21.3 | 49.3 | 14.7 |

Functions associated with developing community capacity, mobilisation of communities, and provision of information and education (Table 17.3) rated the highest in the category of health education and community development. Providing information and education in community languages and developing individuals' knowledge, attitudes, practices and skills also rated highly.

Table 17.3 Detailed list of public health functions ranked by "always" percentage - health education and community development

| | Always a public health function (core) | Often a public health function | Sometimes a public health function | Not a public health function |
|---|---|---|---|---|
| **3.5 Developing community capacity to protect and promote health** | 50.7 | 34.7 | 14.7 | 0 |
| **3.3 Developing community capacity to participate in health issues** | 45.3 | 37.3 | 17.3 | 0 |
| **3.4 Community mobilisation & advocacy for health issues** | 38.7 | 38.7 | 18.7 | 4.0 |
| **3.2 Providing health information and education to individuals and groups** | 35.1 | 50.0 | 14.9 | 0 |
| **3.8 Providing health information and education in community languages** | 32.0 | 44.0 | 24.0 | 0 |
| 3.7 Social marketing of health information | 30.7 | 45.3 | 22.7 | 1.3 |
| **3.1 Developing individuals' health knowledge, attitudes, practices and skills** | 28.4 | 50.0 | 18.9 | 2.7 |
| 3.6 Building social networks and social support in communities | 25.3 | 38.7 | 32.0 | 4.0 |

Functions associated with legislation and regulations, impact assessment and financing were the items that rated most highly for the health policy and public policy development and implementation category (Table 17.4).

Table 17.4 Detailed list of public health functions ranked by "always" percentage - health policy and public policy development and implementation

| | Always a public health function (core) | Often a public health function | Sometimes a public health function | Not a public health function |
|---|---|---|---|---|
| **4.8 Developing and advocating for legislation and regulations that protect and promote health (e.g. occupational health & safety standards, road safety legislation)** | 66.7 | 20.0 | 10.7 | 2.7 |
| **4.2 Assessing the differential impact of health policies on disadvantaged communities** | 57.3 | 34.7 | 8.0 | 0 |
| **4.5 Developing sustainable financing for health protection and promotion** | 52.0 | 32.0 | 9.3 | 6.7 |
| 4.7 Reviewing, formulating & enacting health legislation | 50.7 | 24.0 | 22.7 | 2.7 |
| **4.1 Assessing the impact of other sectors' policies on health** | 49.3 | 34.7 | 13.3 | 2.7 |
| **4.9 Enforcing health legislation and regulations** | 47.9 | 28.2 | 23.9 | 0 |
| 4.4 Developing fiscal strategies that support health improvement | 40.0 | 33.3 | 24.0 | 2.7 |
| 4.6 Developing financial incentives to encourage preventive health care | 40.0 | 28.0 | 26.7 | 5.3 |
| 4.3 Ensuring universal access to health care services | 35.1 | 33.8 | 24.3 | 6.8 |

The provision of education and training for public health practitioners was the only public health function that rated highly for the public health education and training category (Table 17.5)

Table 17.5 Detailed list of public health functions ranked by "always" percentage – public health education and training

| | Always a public health function (core) | Often a public health function | Sometimes a public health function | Not a public health function |
|---|---|---|---|---|
| **5.1 Providing education and training for public health practitioners** | 73.3 | 20.0 | 6.7 | 0 |
| 5.4 Providing education and training for consumers and community groups | 18.7 | 44.0 | 34.7 | 2.7 |
| 5.2 Providing education and training for other health care workers | 17.3 | 50.7 | 30.7 | 1.3 |
| 5.3 Providing education and training for professionals in other sectors | 10.7 | 38.7 | 46.7 | 4.0 |

Functions relating to quality assurance, human resource development, and organisational structures rated the most highly for the public health management function category (Table 17.6). All of the functions within this category had 75 per cent or more people rating them as always or often public health functions.

Table 17.6 Detailed list of public health functions ranked by "always" percentage – public health management

| | Always a public health function (core) | Often a public health function | Sometimes a public health function | Not a public health function |
|---|---|---|---|---|
| **6.4 Developing and implementing quality assurance processes for public health** | 69.9 | 23.3 | 5.5 | 1.4 |
| **6.5 Human resource development in the public health workforce** | 60.3 | 27.4 | 11.0 | 1.4 |
| **6.1 Building organisational structures and processes for public health within agencies** | 47.9 | 42.5 | 9.6 | 0 |
| **6.6 Developing resource allocation and priority setting systems** | 38.9 | 38.9 | 20.8 | 1.4 |
| **6.3 Building links between the health sector and other sectors** | 35.1 | 45.9 | 18.9 | 0 |
| **6.2 Building organisational links between health agencies** | 31.5 | 45.2 | 21.9 | 1.4 |

Only two functions did not rate highly on the prevention, surveillance and control of communicable diseases category – treatment of individuals and veterinary services (Table 17.7)

Table 17.7 Detailed list of public health functions ranked by "always" percentage – prevention, surveillance and control of communicable diseases

| | Always a public health function (core) | Often a public health function | Sometimes a public health function | Not a public health function |
|---|---|---|---|---|
| **7.3 Disease surveillance** | 86.5 | 10.8 | 2.7 | 0 |
| **7.4 Disease outbreak control** | 85.1 | 12.2 | 2.7 | 0 |
| **7.2 Immunization provision** | 81.1 | 9.5 | 8.1 | 1.4 |
| **7.1 Screening for selected communicable diseases** | 73.0 | 18.9 | 8.1 | 0 |
| **7.7 Risk assessment and management in relation to environmental hazards** | 58.3 | 30.6 | 11.1 | 0 |
| **7.8 Public health laboratories** | 57.1 | 27.1 | 12.9 | 2.9 |
| 7.5 Treatment of infectious disease cases | 36.5 | 27.0 | 31.1 | 5.4 |
| 7.6 Veterinary public health services | 30.6 | 37.5 | 29.2 | 2.8 |

Screening for non communicable diseases and risk factor surveillance were the only highly rated functions in the non communicable diseases category (Table 17.8).

Table 17.8 Detailed list of public health functions ranked by "always" percentage – prevention, surveillance and control of non communicable diseases

| | Always a public health function (core) | Often a public health function | Sometimes a public health function | Not a public health function |
|---|---|---|---|---|
| **8.2 Screening for selected non-communicable diseases (e.g. cervical cancer, diabetes)** | 55.4 | 31.1 | 10.8 | 2.7 |
| **8.1 Behavioural risk factor surveillance** | 52.7 | 33.8 | 9.5 | 4.1 |
| 8.5a Lifestyle programs | 17.8 | 31.5 | 45.2 | 5.5 |
| 8.3 Chronic disease self management | 16.2 | 24.3 | 47.3 | 12.2 |
| 8.6 Drug treatment and rehabilitation services (e.g. methadone) | 12.2 | 25.7 | 45.9 | 16.2 |
| 8.4 Provision of cholestorol lowering and anti-hypertensive drugs | 8.1 | 10.8 | 48.6 | 32.4 |
| 8.5 Provision of anti-depressant drugs | 2.7 | 13.5 | 37.8 | 45.9 |

Injury surveillance rated most highly in the prevention and surveillance of injuries category (Table 17.9), followed by prevention of non-intentional injury.

Table 17.9 Detailed list of public health functions ranked by "always" percentage – prevention and surveillance of injuries

| | Always a public health function (core) | Often a public health function | Sometimes a public health function | Not a public health function |
|---|---|---|---|---|
| **9.3 Injury surveillance** | 63.5 | 29.7 | 6.8 | 0 |
| **9.2 Prevention of non-intentional injury** | 47.9 | 30.1 | 21.9 | 0 |
| 9.1 Prevention of intentional injury | 37.8 | 29.7 | 27.0 | 5.4 |

None of the functions in the healthy growth and development category (Table 17.10) rated 75 per cent or more as always or often a public health function. Mental health promotion was the highest rated within this category.

Table 17.10 Detailed list of public health functions ranked by "always" percentage – healthy growth and development programs and services

| | Always a public health function (core) | Often a public health function | Sometimes a public health function | Not a public health function |
|---|---|---|---|---|
| 10.8 Mental health promotion programs | 35.6 | 38.4 | 23.3 | 2.7 |
| 10.4 School health services | 28.0 | 32.0 | 33.3 | 6.7 |
| 10.2 Prenatal and neonatal screening | 26.8 | 28.2 | 33.8 | 11.3 |
| 10.3 Maternal and child health care (not including pregnancy) | 24.0 | 37.3 | 30.7 | 8.0 |
| 10.1 Family planning services | 21.3 | 34.7 | 37.3 | 6.7 |
| 10.5 Individual dental check ups | 6.7 | 16.0 | 45.3 | 32.0 |
| 10.6 Individual medical check ups | 4.0 | 16.0 | 44.0 | 36.0 |
| 10.7 Prevention based care from alternative or complementary therapists | 2.7 | 13.3 | 49.3 | 34.7 |

For the final part of the question, one column was missing on the questionnaire. Respondents were asked to correct this and many did. Where they did not, the responses aligned with those above them (always and often) were coded accordingly. The third column, which sat on the border between sometimes and not a public health function were coded separately, as there is no way of distinguishing between responses when this was not corrected. Hence there is an extra column for this part of the question.

The most highly rated functions in the programs and services for individuals category (Table 17.11) were emergency and natural disaster services, and health services for indigenous peoples, refugees and homeless people.

Table 17.11 Detailed list of public health functions ranked by "always" percentage - programs and services directed at specific population groups and individuals

| | Always a public health function (core) | Often a public health function | Sometimes a public health function | Either sometimes or not (not indicated) | Not a public health function |
|---|---|---|---|---|---|
| **11.6 Emergency and natural disaster services to protect health** | 56.0 | 33.3 | 4.0 | 5.3 | 1.3 |
| **11.2 Health services for indigenous peoples** | 37.3 | 46.7 | 9.3 | 6.7 | 0 |
| **11.3 Health services for refugees** | 36.0 | 46.7 | 10.7 | 6.7 | 0 |
| 11.1 Generating an organised approach to dealing with the consequences of chronic illness and disability | 34.2 | 38.4 | 9.6 | 16.4 | 1.4 |
| **11.4 Health services for homeless people** | 32.0 | 45.3 | 12.0 | 10.7 | 0 |
| 11.5 Health services for victims of violence and other crises | 24.0 | 46.7 | 9.3 | 18.7 | 1.3 |
| 11.8 Occupational health services | 18.9 | 50.0 | 10.8 | 18.9 | 1.4 |
| 11.7 Mental health care services | 14.7 | 46.7 | 8.0 | 26.7 | 4.0 |

# Public health functions in Australia

Another way of presenting this information is a straight ordering of all of the 86 functions, not in each of the more general categories as presented above. Table 18 shows the functions rank ordered from the highest to the lowest percentage of respondents who indicated that they thought this was ***always*** a public health function (core). Where more than one item has the same percentage for this category, the items are then ordered from the highest percentage who indicated ***often*** a public health function, and then (where necessary) the highest percentage who indicated ***sometimes***. In addition to this rank ordering, the second column of this table shows the percentage of respondents rating each function as either ***always*** or ***often*** (i.e. always and often combined) a public health function. This gives a slightly different picture of which functions are most highly rated.

Table 18. Rank ordering of "core" and "always or often" public health functions

| | Percentage ***always*** a public health function (core) | Percentage ***always or often*** a public health function |
|---|---|---|
| 7.3 Disease surveillance | 86.5 | 97.3 |
| 7.4 Disease outbreak control | 85.1 | 97.3 |
| 7.2 Immunization provision | 81.1 | 90.6 |
| 1.6 Monitoring morbidity and mortality | 77.3 | 94.6 |
| 1.7 Monitoring the determinants of health | 76.0 | 96.0 |
| 5.1 Providing education and training for public health practitioners | 73.3 | 93.3 |
| 7.1 Screening for selected communicable diseases | 73.0 | 91.9 |
| 6.4 Developing and implementing quality assurance processes for public health | 69.9 | 93.2 |
| 2.4 The production and protection of safe water | 68.0 | 86.7 |
| 4.8 Developing and advocating for legislation and regulations that protect and promote health (e.g. occupational health & safety standards, road safety legislation) | 66.7 | 86.7 |
| 9.3 Injury surveillance | 63.5 | 93.2 |
| 2.9 Vector control | 60.3 | 90.4 |
| 6.5 Human resource development in the public health workforce | 60.3 | 87.7 |
| 2.14 Controlling food access, quality and safety | 60.0 | 96.0 |
| 7.7 Risk assessment and management in relation to environmental hazards | 58.3 | 88.9 |
| 4.2 Assessing the differential impact of health policies on disadvantaged communities | 57.3 | 92.0 |
| 7.8 Public health laboratories | 57.1 | 84.2 |
| 1.4 Assessment of population needs and risks to determine which groups require services | 56.0 | 92.0 |
| 1.2 Undertaking research on health issues in populations | 56.0 | 90.7 |
| 11.6 Emergency and natural disaster services to protect health | 56.0 | 89.3 |
| 8.2 Screening for selected non-communicable diseases (e.g. cervical cancer, diabetes) | 55.4 | 86.5 |
| 8.1 Behavioural risk factor surveillance | 52.7 | 86.5 |
| 2.10 Controlling hazardous substances and wastes | 52.0 | 86.7 |
| 4.5 Developing sustainable financing for health protection and promotion | 52.0 | 84.0 |
| 3.5 Developing community capacity to protect and promote health | 50.7 | 85.4 |
| 2.13 Controlling radiation | 50.7 | 80.0 |
| 4.7 Reviewing, formulating & enacting health legislation | 50.7 | 74.7 |

Table 18 (contd). Rank ordering of "core" and "always or often" public health functions

| | Percentage ***always*** a public health function (core) | Percentage ***always or often*** a public health function |
|---|---|---|
| 4.1 Assessing the impact of other sectors' policies on health | 49.3 | 84.0 |
| 2.3 Ensuring drainage, sewerage and solid waste disposal | 49.3 | 81.3 |
| 6.1 Building organisational structures and processes for public health within agencies | 47.9 | 90.4 |
| 9.2 Prevention of non-intentional injury | 47.9 | 78.0 |
| 4.9 Enforcing health legislation and regulations | 47.9 | 76.1 |
| 3.3 Developing community capacity to participate in health issues | 45.3 | 82.6 |
| 1.8 Evaluation of health policies | 42.7 | 81.4 |
| 2.11 Controlling atmospheric pollution | 41.3 | 77.3 |
| 4.4 Developing fiscal strategies that support health improvement | 40.0 | 73.3 |
| 4.6 Developing financial incentives to encourage preventive health care | 40.0 | 68.0 |
| 6.6 Developing resource allocation and priority setting systems | 38.9 | 77.8 |
| 3.4 Community mobilisation & advocacy for health issues | 38.7 | 77.4 |
| 2.16 Ensuring safe workplaces | 38.7 | 73.4 |
| 9.1 Prevention of intentional injury | 37.8 | 67.5 |
| 11.2 Health services for indigenous peoples | 37.3 | 84.0 |
| 2.12 Controlling noise | 37.3 | 66.6 |
| 7.5 Treatment of infectious disease cases | 36.5 | 63.5 |
| 11.3 Health services for refugees | 36.0 | 82.7 |
| 10.8 Mental health promotion programs | 35.6 | 74.0 |
| 3.2 Providing health information and education to individuals and groups | 35.1 | 85.1 |
| 6.3 Building links between the health sector and other sectors | 35.1 | 81.0 |
| 4.3 Ensuring universal access to health care services | 35.1 | 68.9 |
| 2.15 Controlling the quality of therapeutic goods and appliances | 35.1 | 60.8 |
| 11.1 Generating an organised approach to dealing with the consequences of chronic illness and disability | 34.2 | 72.6 |
| 11.4 Health services for homeless people | 32.0 | 77.3 |
| 3.8 Providing health information and education in community languages | 32.0 | 76.0 |
| 1.1 Identifying health research priorities | 32.0 | 74.7 |
| 6.2 Building organisational links between health agencies | 31.5 | 76.7 |
| 3.7 Social marketing of health information | 30.7 | 76.0 |
| 7.6 Veterinary public health services | 30.6 | 68.1 |
| 3.1 Developing individuals' health knowledge, attitudes, practices and skills | 28.4 | 78.4 |
| 10.4 School health services | 28.0 | 60.0 |
| 10.2 Prenatal and neonatal screening | 26.8 | 55.0 |
| 3.6 Building social networks and social support in communities | 25.3 | 64.0 |

Table 18 (contd). Rank ordering of "core" and "always or often" public health functions

| | Percentage ***always*** a public health function (core) | Percentage ***always or often*** a public health function |
|---|---|---|
| 11.5 Health services for victims of violence and other crises | 24.0 | 70.7 |
| 10.3 Maternal and child health care (not including pregnancy) | 24.0 | 61.3 |
| 2.7 Ensuring access to physical activity and other recreation facilities | 24.0 | 57.3 |
| 2.2 Controlling housing standards and provision | 24.0 | 53.3 |
| 2.1 Town planning and land use | 24.0 | 52.0 |
| 10.1 Family planning services | 21.3 | 56.0 |
| 2.8 Ensuring access to facilities for social interaction | 20.3 | 46.0 |
| 11.8 Occupational health services | 18.9 | 68.9 |
| 2.6 Ensuring access to public transport and educational opportunities | 18.9 | 48.6 |
| 5.4 Providing education and training for consumers and community groups | 18.7 | 62.7 |
| 8.5a Lifestyle programs | 17.8 | 49.3 |
| 5.2 Providing education and training for other health care workers | 17.3 | 68.0 |
| 1.9 Evaluation of health care services and programs | 17.3 | 56.0 |
| 8.3 Chronic disease self management | 16.2 | 40.5 |
| 11.7 Mental health care services | 14.7 | 61.4 |
| 1.5 Monitoring the delivery of health services and programs | 14.7 | 57.4 |
| 2.5 Controlling land degradation and soil loss (e.g. by erosion) | 14.7 | 36.0 |
| 1.3 Undertaking research on health services and programs | 13.3 | 57.3 |
| 8.6 Drug treatment and rehabilitation services (e.g. methadone) | 12.2 | 37.9 |
| 5.3 Providing education and training for professionals in other sectors | 10.7 | 49.4 |
| 8.4 Provision of cholestorol lowering and anti-hypertensive drugs | 8.1 | 18.9 |
| 10.5 Individual dental check ups | 6.7 | 22.7 |
| 10.6 Individual medical check ups | 4.0 | 20.0 |
| 8.5 Provision of anti-depressant drugs | 2.7 | 16.2 |
| 10.7 Prevention based care from alternative or complementary therapists | 2.7 | 16.0 |

This table shows that the two highest rated items on the overall list (using both forms of ranking) were related to surveillance and control of communicable diseases. These were followed by functions related to monitoring morbidity, mortality and the determinants of health; screening for communicable diseases and immunization, providing education and training for public health practitioners; quality assurance development and implementation; safe water, and legislation development and implementation.

None of the items listed under the healthy growth and development category, and few of the prevention, surveillance and control of non communicable diseases, and programs and services directed at specific population groups and individuals categories, reached very high levels of support as core public health functions. Those items attracting the lowest levels of support as core functions (with less than 10 per cent of respondents indicating that these were core functions ) include providing education and training for professionals in other sectors, the provision of individual preventive services, and the provision of drugs.

This rank ordering also points to the different rankings of functions which might be termed the established functions of public health, as opposed to those that are emerging as important functions. The most highly ranked functions are those related to prevention, surveillance and control of communicable diseases, research, monitoring and assessment, education and training of public health practitioners, food and water quality and safety and screening for selected non communicable diseases. All of these represent a well established view of the functions of public health.

However, these most highly rated functions are followed by a number of functions relating to policy development and implementation, development of community capacity, public health management, injury prevention, environmental protection, health services for indigenous peoples and refugees, health education and information provision and mental health promotion. These represent a stronger emphasis on policy, management and community capacity building, as well as a number of emerging issues in public health (injury, environmental

protection, indigenous health, refugees and mental health). It may be that these emerging functions will become more important in the future, or they may be "fashionable" functions which wane in importance.

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It is worthwhile further examining the functions that were ranked the lowest by respondents, in order to assess which of the functions were deemed to be the least important. Table 19 show those functions that attracted the least support as public health functions, all of them with 10 per cent or more of respondents indicating that they considered that these items were not public health functions. Because of the problem with the last general category on the questionnaire (programs and services directed at specific individuals and groups), it was not possible to distinguish items which had 10 per cent or more of people indicating that they thought this was not a public health function.

Table 19. List of items attracting the least support as public health functions

| | Always a public health function (core) | Often a public health function | Sometimes a public health function | Not a public health function |
|---|---|---|---|---|
| 8.5 Provision of anti-depressant drugs | 2.8 | 12.5 | 40.3 | 44.4 |
| 10.7 Prevention based care from alternative or complementary therapists | 2.7 | 12.3 | 49.3 | 35.6 |
| 10.6 Individual medical check ups | 4.1 | 15.1 | 45.2 | 35.6 |
| 10.5 Individual dental check ups | 6.8 | 15.1 | 46.6 | 31.5 |
| 8.4 Provision of cholestorol lowering and anti-hypertensive drugs | 8.3 | 9.7 | 51.4 | 30.6 |
| 8.6 Drug treatment and rehabilitation services (e.g. methadone) | 12.5 | 26.4 | 45.8 | 15.3 |
| 2.5 Controlling land degradation and soil loss (e.g. by erosion) | 15.1 | 23.3 | 46.6 | 15.1 |
| 2.8 Ensuring access to facilities for social interaction | 20.8 | 25.0 | 40.3 | 13.9 |
| 8.3 Chronic disease self management | 16.7 | 22.2 | 48.6 | 12.5 |
| 10.2 Prenatal and neonatal screening | 26.1 | 27.5 | 34.8 | 11.6 |
| 2.6 Ensuring access to public transport and educational opportunities | 19.4 | 29.2 | 40.3 | 11.1 |

Items with the highest numbers of respondents indicating that these items were not considered to be public health functions were healthy growth and development programs directed at individuals, provision of drugs and chronic disease management, and access to public transport and education and other facilities.

The final table lists the eleven items in table 19 under their respective general categories. All of the items which had 10 per cent or more of the respondents indicating that they did not consider this to be a public health function fall within three general categories – prevention, surveillance and control of non communicable diseases; healthy growth and development programs and services; and ensuring healthy and safe environments (see Table 20).

Table 20. List of items attracting the least support as public health functions within categories

| | Always a public health function (core) | Often a public health function | Sometimes a public health function | Not a public health function |
|---|---|---|---|---|
| 8. Prevention, surveillance and control of non communicable diseases | | | | |
| 8.5 Provision of anti-depressant drugs | 2.8 | 12.5 | 40.3 | 44.4 |
| 8.4 Provision of cholestorol lowering and anti-hypertensive drugs | 8.3 | 9.7 | 51.4 | 30.6 |
| 8.6 Drug treatment and rehabilitation services (e.g. methadone) | 12.5 | 26.4 | 45.8 | 15.3 |
| 8.3 Chronic disease self management | 16.7 | 22.2 | 48.6 | 12.5 |
| 10. Healthy growth and development programs and services | | | | |
| 10.7 Prevention based care from alternative or complementary therapists | 2.7 | 12.3 | 49.3 | 35.6 |
| 10.6 Individual medical check ups | 4.1 | 15.1 | 45.2 | 35.6 |
| 10.5 Individual dental check ups | 6.8 | 15.1 | 46.6 | 31.5 |
| 10.2 Prenatal and neonatal screening | 26.1 | 27.5 | 34.8 | 11.6 |
| 2. Ensuring healthy and safe environments | | | | |
| 2.5 Controlling land degradation and soil loss (e.g. by erosion) | 15.1 | 23.3 | 46.6 | 15.1 |
| 2.8 Ensuring access to facilities for social interaction | 20.8 | 25.0 | 40.3 | 13.9 |
| 2.6 Ensuring access to public transport and educational opportunities | 19.4 | 29.2 | 40.3 | 11.1 |

# Conclusions: *What does the study tell us? How can the results be used?*

This study has assessed the range of opinion of a group of public health experts in Australia, on the relative importance of public health functions. Given the diversity of the public health community in Australia and of those invited to participate in this study, there is a surprising level of consensus. Despite the range of opinion found in this study, there was also broad agreement about which public health functions are considered most important.

A consensus definition of public health core functions can provide a common reference point for any exercise where a standard definition of public health activity is needed (eg. capacity building, expenditure mapping, performance standards etc). The potential uses for the findings of this study include:

- defining public health functions more clearly;
- determining the capacity required to deliver public health functions;
- assessing whether this capacity currently exists; and
- building public health capacity where required.

In the US, similar work has been used to structure the collection of public health expenditure data; contribute to legislative and workforce reviews and future planning; work on a range of quality and accreditation issues; generate performance measurements and standards; specify public health services and infrastructure needed at the local level; and build leadership and capacity in public health.

The possible uses for the work outlined in this report on defining core public health functions fall into three broad areas:

- planning and management;
- education and training; and
- quality improvement.

In terms of planning and management, the results of this study could be used to address the question of what public health functions all communities should have access to and whether each community has all these functions. They can also assist in examining which functions are the responsibility of the health sector and other sectors, and what the role of the health sector is in addressing functions which are the responsibility of other sectors. The results could also be used to determine whether current legislation dealing with or impacting on public health is adequate.

In relation to education and training issues, the results could be used to examine what skills the workforce currently has and how these map to the most important functions identified. Gaps appearing between skills and core functions could point to additional education and training needs and the emerging functions might indicate what skills will be required in the future. In particular, the degree of concurrence between the MPH course curricula and skill requirements could be examined. This work could also be used to address what state/territory and national professional and workforce development committees and bodies should do to ensure that current and future education and training needs are met.

The study results could also be used to contribute to developing performance measures and standards and examinations of whether core functions are being delivered to acceptable standards.

In summary, it is expected that the results of this study will be useful for state/territory health departments and the Commonwealth in ascertaining whether the core functions of public health identified are being covered. In Australia there are a number of other projects which are relevant to this work, including a 1997 national public health infrastructure and investment mapping project commissioned by the Commonwealth, and a classification system being developed by the AIHW for the National Public Health Expenditure Project.

Given the distinction between the more established and the emerging public health functions, and the uncertainty of whether these emerging functions will become widely viewed as “core” or whether they will disappear and be replaced by other concerns, it would be worthwhile repeating the process outlined in this study in three to five years time.

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