



# TIP SHEET: Research and Data Collection

## Contents

Purpose of Resource .....	2
Units of Competency.....	2
Acknowledgement .....	2
Introduction .....	3
Quantitative Research .....	3
Qualitative Research.....	3
Data Collection Methods.....	4
Additional Reading and Links .....	5

## Purpose of Resource

The purpose of this resource is to provide a quick reference guide to support learners to understand the methods and approaches to researching and collecting data and information to inform the development, implementation and evaluation of population health projects.

## Units of Competency

This resources support learning and completion of assessment for the following units of competency:

- HLTPOP501C Apply a Population Health Framework
- HLTPOP503C Plan a Population Health Project
- HLTPOP504C Evaluate a Population Health Project
- CHCAD603B Provide Systems Advocacy Services

## Acknowledgement

This tip sheet has been adapted from *Start Stronger Live Longer: A Resource Manual for Aboriginal Health Workers*, Kulunga Research Network, 2010.

## Introduction

Research, put simply, is about finding and gathering information on a subject you want to know more about. The information you gather can help you develop or improve health programs in your community. It is also an important and ongoing part of health promotion.

Research can help you in your work through finding out:

- General health information.
- The health needs and concerns in your community.
- How to manage health issues and change behaviours.
- About important health messages.
- How to deliver health message for better community health.
- About best practice methods and models for your community.
- If your program is working.
- About other programs and how they work.
- Funding for your project.
- Knowledge and skills to empower you and your community.
- Evidence for the need of your project.

The information gathered is often referred to as data. Data can be collected in a number of ways using either quantitative (numbers) or qualitative (words) methods.

## Quantitative Research

Quantitative research gathers responses which can be quantified (counted). This type of research is good if you want to find out:

- **How much** – i.e. do people drink, smoke, eat each day?
- **How many** – i.e. drinks or cigarettes do they have a day?
- **How often** – i.e. do they drink, smoke, eat each day?
- Height, weight or age data.

## Qualitative Research

Qualitative research collects 'words' as data. You can't necessarily quantify this type of data, rather you can make some generalisations such as 'the majority of people said' or 'some people think.'

Using this type of research you can find out people's opinions, and how they think, feel and behave. Examples of this type of question include:

- What do you think about smoking in pregnancy?
- What do you think is the most important health issue in the community and why?

## Data Collection Methods

There are several different methods of data collection. Below is a summary of the main types of methods that Population Health Workers can use to assist their own research projects.

### Questionnaires/Surveys

Surveys are most often used in quantitative research. These are sets of questions designed to gather specific answers on a given topic.

They can be delivered by:

- direct hand-out, posted;
- done over the phone;
- or online.

Surveys can be anonymous which makes them suitable to undertake research on sensitive issues such as domestic violence or drug use.

Quantitative Surveys usually use closed questions which includes asking for a 'yes' or 'no' response or another specific response. For example, "How many cigarettes do you smoke per day, less than 20, more than 20"

These responses are analysed by counting up the number, and then written up in statements such as, "50% of people smoke 20 cigarettes a day, 30% smoke more than 20, and 20% smoke less than 20 cigarettes a day".

Questionnaires can also be used in qualitative research to gather short, detailed answers to questions. This is done by using open (more than yes/no responses) questions such as, "When do you have your first cigarette of the day, and why do you think you have that cigarette? Research results to the open ended questions would be written up by saying something like, "Most people indicated that they have their first cigarette with their cup of coffee because they have gotten into the habit of doing this over the years. For example, one respondent said 'I guess I just do it automatically. A cup of coffee first thing just goes with a cigarette".

### Face to Face Interviews

This involves you or a facilitator talking or yarning with people asking a set of questions, in a face to face setting. Responses are recorded either using a tape or digital recorder or in hand written notes.

There are some things to consider when doing interviews:

- Consent – you must get written approval from participants to use their data.
- Sensitivity – people might not want to talk about personal or sensitive topics.
- It helps to use an interviewer not known to the participant.
- Time consuming - works best with small numbers of people.
- Think of it as a conversation.

- Listen actively – you might have to respond as if in a conversation.
- Be confident to ask people to explain something if you haven't understood.
- Avoid leading people into giving the answers you want.
- Be sensitive and non-judgemental.

### **Focus Groups**

This is a discussion with a small group of people (6-12). A facilitator is used to lead the discussion with set topics and gather information by recording or taking notes. Focus groups are a good way to get people talking about their beliefs, and also to respond to other people's thoughts.

Some things you might like to consider are:

- Who has the skills and confidence to run the group?
- Avoid letting one or two people take over.
- Make sure you have different types of people.
- Will people open up in front others?

### **Research Protocols for Data Collection**

- It is also important to understand ethics and protocols surrounding data collection, confidentiality, and communicating information back to participants. Researchers have a responsibility to ensure that the rights of participants are upheld. There are several things to do to ensure the research process is respectful to all parties involved, such as:
- Always getting written consent from participants.
- Respecting what people have to say and treating their responses confidentially.
- Considering how you use the information – be aware of any effects on the person or the community.
- Asking people how they would like the interview recorded – not everyone wants to be taped.
- Participants should be given a copy of the interview and transcripts.
- Participants have a right to check the transcripts for any errors and to ask for corrections.

For more information on ethical research go to [www.nhmrc.gov.au](http://www.nhmrc.gov.au) 'Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research'.

### **Additional Reading and Links**

<http://w3.unisa.edu.au/researchstudents/milestones/data.asp>

<http://www.olt.gov.au/evaluation/data-collection-methods>

[http://www.sagepub.com/upm-data/10985\\_Chapter\\_4.pdf](http://www.sagepub.com/upm-data/10985_Chapter_4.pdf)