



Australian  
National  
University

# **Example Data Analysis Plan Template**

## **For Observational Studies**

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Research School of Population  
Health

ANU College of Medicine, Biology &  
Environment

## Example Data Analysis Template

**Note:** This data analysis template is a modified version of the template created by the **Master of Philosophy (Applied Epidemiology) teaching team** at the Australian National University.

DATA ANALYSIS PLAN TEMPLATE			
Reference No.		Study name	
Date of plan		Chief investigator	
Person conducting analysis		Telephone	
		Mobile	
		Email	
Analysis team members			

### Background to the study and analysis (Please use plain language)

Provide an overview of the necessary background for the study including evidence of what is already known in the area of study and what the gaps are in the literature. Finish with a clear stated aim of the project.

Number study participants		Duration of study	
Study research question			
Specific hypothesis under study			
Endpoints or outcomes of interest			

### Data details (Please complete all that apply)

Study type	
Data sets used	
Analysis package	
Study population	
Inclusion/exclusion criteria for participants	
Exposure variables	
Outcome measures	
Covariates	
Sub-groups	

Approach to dealing with missing data	
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**Please outline proposed analytical strategy**

Include:

- Outline of main comparison groups
- Frequency and cross-tabulations of main variables
- Basic analysis model (usually age- and sex-adjusted)
- Final analysis model (including adjustment for other confounders)

**Analysis dissemination strategy**

Outline the intended steps to be taken to disseminate the results of the study (i.e. will the results be published, presented at a conference etc)

**Interpretation**

Detail how you will interpret the results in the context of your stated hypothesis. I.e. if the results do/do not meet your hypothesis, what will you conclude? A concept map (see below) may assist with this.

**Concept map or directed acyclic graph**

Drawing a diagram of the ways in which the exposure might be related to the outcome will help to visualise your hypotheses as well as serving as a basis for clearly communicating this to your collaborators. The diagram should include the possible confounders or mediators of the relationship. This will require good knowledge of the background to the study.

Directed acyclic graphs are a type of causal graph. Further information about these graphs can be found through a Google search and in the paper “Causal Diagrams for Epidemiologic Research” by Sander Greenland, Judea Pearl, and James M. Robins (Epidemiology 1999;10:37-4)

**Dummy tables & Charts**

Dummy tables and charts are empty skeleton tables and charts which show how the results will be presented but which do not contain any data/results.