

# **Chronic kidney disease in Australia**

**2005**

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# **Chronic kidney disease in Australia, 2005**

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# Abbreviations

ABS	Australian Bureau of Statistics
ACE	angiotensin converting enzyme
AIHW	Australian Institute of Health and Welfare
ANZDATA	Australia and New Zealand Dialysis and Transplant Registry
APD	automated peritoneal dialysis
AusDiab	Australian Diabetes, Obesity and Lifestyle study
BEACH	Bettering the Evaluation and Care of Health (survey)
BMI	body mass index
CAPD	continuous ambulatory peritoneal dialysis
CARI	Caring for Australians with Renal Impairment
CKD	chronic kidney disease
COPD	chronic obstructive pulmonary disease
ESKD	end-stage kidney disease
ESRD	end-stage renal disease
GFR	glomerular filtration rate
GP	general practitioner
HD	haemodialysis
ICD-10-AM	International Classification of Diseases, 10th Revision, Australian Modification
ICPC-2	International Classification of Primary Care, second edition
K/DOQI	(US) Kidney Disease Outcome Quality Initiative
MDRD	Modification of Diet in Renal Disease (formula)
NHS	National Health Survey
NKF	National Kidney Foundation of America
PD	peritoneal dialysis
PKD	polycystic kidney disease
URR	urea reduction ratio
USRDS	United States Renal Data System
WHO	World Health Organization

# Executive summary

Chronic kidney disease (long-term and usually irreversible loss of kidney function) has impacts on quality of life, use of health services, health expenditure and mortality, but it is difficult to determine how many Australians are affected. Because of a lack of specific symptoms at the early stages, the diagnosis of chronic kidney disease is often delayed or missed. However, it may lead to serious illness and death from complications or comorbid conditions before it is even detected. In 2003, chronic kidney disease was recorded as the underlying cause of death in 2,431 cases and an associated cause of death in a further 9,217 cases.

In severe cases, a person's kidney function will deteriorate so much that it will no longer be sufficient to sustain their life. These people are said to have 'end-stage kidney disease', and require kidney replacement therapy – dialysis or a kidney transplant – to survive. At the end of 2003, a total of 13,625 people with end-stage kidney disease were reliant on kidney replacement therapy. The number of people receiving this treatment has more than tripled over the last 20 years, and is still growing. Care involving dialysis accounted for 11% of all hospital separations in 2003–04. Although relatively few people with chronic kidney disease require this treatment, the personal, social and economic costs relating to end-stage kidney disease make it an important public health issue.

A variety of factors, many of which are common in Australia, can increase the risk of developing chronic kidney disease. Some of these include diabetes, high blood pressure and smoking. Although it mainly affects the older population, chronic kidney disease can occur among people of any age. As there is no cure for this illness, reducing the burden of chronic kidney disease relies heavily on its prevention and management. With advanced technology and better management, the outcomes of treatment have improved, especially for people receiving kidney replacement therapy. However, not all aspects of prevention, early detection and management are covered by national programs.

Although chronic kidney disease has been a health issue for many years, it is only recently that a clear definition and conceptualisation of the disease has been developed. Many crucial issues relating to the disease remain unclear, and are under investigation and debate. There is a general lack of information on chronic kidney disease in Australia. There is no national monitoring system for chronic kidney disease, and regular information is collected and reported only for people receiving kidney replacement therapy.

Although the impacts of chronic kidney disease are substantial and the number of Australians at risk is increasing, chronic kidney disease is preventable and treatable in many cases, and there is great potential to reduce the burden of the disease.

*Chronic kidney disease in Australia, 2005* is the first national report on this disease. The report compiles the latest information from a variety of data sources, and presents information on levels of kidney damage, reduced kidney function and end-stage kidney disease in the population, the factors that contribute to chronic kidney disease, and treatment and prevention programs. At times, limitations in knowledge and national information on chronic kidney disease have restricted the content and coverage of issues that are essential to a comprehensive understanding of the disease. Nevertheless, this report provides an opportunity to look at chronic kidney disease systematically, and also provides valuable baseline information for further monitoring of this disease in the future.

