Singapore Renal Registry



Annual Report 2023

What is chronic kidney disease stage 5 (CKD5)?

Your kidneys remove waste products from the blood. CKD5, commonly known as kidney failure, is when the kidneys do not function sufficiently, resulting in the accumulation of waste products and toxins in the body.

What are the treatment options?-----

There are three main renal replacement therapies (RRT) for kidney failure patients:

Haemodialysis (HD)

A dialysis machine removes a patient's blood, cleanses it, and returns it to the body. Patients typically need to visit a dialysis centre 3 times a week, for about 4 hours each time.

Peritoneal dialysis (PD)

A special sterile fluid is introduced into the abdomen through a permanent tube to draw impurities from surrounding blood vessels. PD is a gentler treatment that can be done at home, allowing the patient more flexibility.

Kidney transplant

A kidney is surgically removed from a donor and transplanted into the patient. The donor can be a living or a recently deceased person.

Age-standardised incidence of RRT (per million residents), 2013-2023



Although the need for RRT had increased, this was driven largely by population ageing.

After adjusting for population ageing, there were no significant changes in RRT incidence.

How many people are on RRT in Singapore?

As of December 2023, there were a total of 10836 Singapore residents on some form of kidney replacement therapy (RRT)

7988 (74%)	1208 (11%)	1640 (15%)
HD	PD	Transplant

What is the sex distribution of RRT patients?*

Among existing dialysis patients 56% 44% Males Females Among existing transplant patients 53% 47% Did you know? Males Females

What is the age distribution of RRT patients?*

	Among existing dialysis patients	Among existing transplant patients
0-29 years	<1%	4%
30-39 years	3%	8%
40-49 years	8%	13%
50-59 years	18%	28%
60-69 years	33%	33%
70-79 years	29%	13%
80 years & above	9%	<2%

*among existing RRT patients as of December 2023



- Worldwide, diabetes is the leading cause of kidney failure¹.
- In Singapore, diabetes was the cause of kidney failure for 2 in 3 new dialysis patients every year.
- In 2021, Singapore had the second highest percentage of new dialysis patients whose kidney failure was due to diabetes²

1. Filipska A, Bohdan B, Wieczorek P and Hudz N. Chronic kidney disease and dialysis therapy: incidence and prevalence in the world. Pharmacia 68(2) 2021: 463–470.

2. End Stage Renal Disease: Chapter 11 - International Comparisons. United States Renal Data System (USRDS).

https://usrds-adr.niddk.nih.gov/2023/end-stage-renal-disease/11-international-comparisons. Accessed 29 September 2024.

What can you do to lower your risk of kidney failure?



Maintain a healthy & balanced diet



Engage in regular physical activity & maintain a healthy weight







