

# Incidence of End-Stage Kidney Disease (ESKD), by Age Group, Sex, Province, Rate per Million Population

Name	Incidence of End-Stage Kidney Disease (ESKD), by Age Group, Sex, Province, Rate per Million Population
Short/Other Names	Not applicable
Description	All incident patients (new patients) with end-stage kidney disease who began renal replacement therapy (RRT) (either dialysis or renal transplantation) for the first time in the calendar year
Interpretation	Increasing incidence rates over time have important implications for resources, disease management and the need for kidney donation.
HSP Framework Dimension	Health System Outcomes: Improve health status of Canadians
Areas of Need	Not applicable
Geographic Coverage	All provinces/territories except Quebec
Reporting Level/Disaggregation	National, Province/Territory, Breakdown by sex, breakdown by age categories
Indicator Results	<a href="#">Incident End-Stage Renal Disease (ESRD) Patients</a>
Identifying Information	
Name	Incidence of End-Stage Kidney Disease (ESKD), by Age Group, Sex, Province, Rate per Million Population
Short/Other Names	Not applicable
Indicator Description and Calculation	
Description	All incident patients (new patients) with end-stage kidney disease who began renal replacement therapy (RRT) (either dialysis or renal transplantation) for the first time in the calendar year
Calculation: Description	Counts and rates are based on patients registered during a given calendar year in a Canadian facility. Patients who began RRT for ESKD outside of Canada but are subsequently treated in Canada are included in prevalence counts but not incidence counts.
Calculation: Geographic Assignment	Place of service
Calculation: Type of Measurement	Rate - Per 1,000,000
Calculation: Adjustment Applied	None
Calculation: Method of Adjustment	Not applicable
Denominator	<p><b>Description:</b> Canadian population</p> <p><b>Inclusions:</b> All Canadians currently residing in Canada</p> <p><b>Exclusions:</b> Not applicable</p> <p><b>Description:</b> Patients registered in the Canadian Organ Replacement Register (CORR) who started RRT for ESKD</p> <p><b>Inclusions:</b> Patients registered in CORR during a given calendar year (January 1–December 31)</p> <p><b>Exclusions:</b> Patients who began RRT for ESKD outside of Canada but are subsequently treated in Canada</p>
Numerator	
Background, Interpretation and Benchmarks	
Rationale	Tracking incidence is important to determine the number of new cases of patients beginning RRT for ESKD each year. Tracking incidence can quantify how the need for intervention may change over time. There are significant costs associated with treating this patient group.
Interpretation	Increasing incidence rates over time have important implications for resources, disease management and the need for kidney donation.
HSP Framework Dimension	Health System Outcomes: Improve health status of Canadians
Areas of Need	Not applicable
Targets/Benchmarks	Not applicable
References	Nesrallah GE, Mustafa RA, Clark WF, et al. Canadian Society of Nephrology 2014 Clinical Practice Guideline for Timing the Initiation of Chronic Dialysis. <i>CMAJ</i> . 2014;186(2):112-117. Available at <a href="http://www.cmaj.ca/content/186/2/112">http://www.cmaj.ca/content/186/2/112</a>

Levin A, Hemmelgarn B, Culleton B, et al. Guidelines for Management of Chronic Kidney Disease. *CMAJ*. 2008;179(11):1154-1162. Available at <http://www.cmaj.ca/content/179/11/1154>

Availability of Data Sources and Results  
Data Sources

CORR

**Type of Year:**

Calendar

**First Available Year:**

2008

**Last Available Year:**

2017

Available Data Years

Geographic Coverage

All provinces/territories except Quebec

Reporting Level/Disaggregation

National, Province/Territory, Breakdown by sex, breakdown by age categories

Result Updates

Update Frequency

Every year

**Web Tool:**

Quick Stats

**URL:**

[Incident End-Stage Renal Disease \(ESRD\) Patients](#)

Not applicable

Indicator Results

Updates

Quality Statement

The indicator is based on voluntary data submitted to CORR from facilities across Canada. Submission of data for patients beginning RRT for ESKD is not mandatory. Records submitted with unknown sex are not included in these totals.

Caveats and Limitations

Data from Quebec was not included because of significant under-reporting between 2011 and 2017, which may lead to biased results. An overview of under-reporting of incident ESKD cases can be found in *Data Quality Documentation for Users: Canadian Organ Replacement Register, 2008 to 2017 Data*.

Trending Issues

Comments

Not applicable