



The foundation  
of kidney care.

# FACING THE FACTS

Includes Highlights from the Canadian Organ Replacement Register<sup>1</sup>

2012

## Kidney Disease

- An estimated 2.6 million Canadians have kidney disease, or are at risk.
- Each day, an average of 16 people are told that their kidneys have failed.
- The two leading causes of kidney failure in new patients:
  - ✓ **Diabetes** – 35%
  - ✓ Renal Vascular Disease (including **high blood pressure**) – 18 %.
- The number of Canadians being treated for kidney failure has tripled over the past 20 years.
- 53% of new renal failure patients are 65 years of age or older.
- Among the 39,352 people being treated for kidney failure in Canada in 2010:
  - ✓ **59%** (23,188) were on **dialysis**
  - ✓ 41% (16,164) had a functioning transplant.

## Burden and Cost of Care

- Hemodialysis is the treatment used in the majority of dialysis cases and it costs roughly \$60,000 per patient per year.
- The one-time cost for a kidney transplant is approximately \$23,000, plus \$6,000 per year for medication necessary.
- Over a five-year period, a transplant is approximately \$250,000 less expensive per patient than dialysis while improving quality of life.

## Organ Donation

- Nearly 80% of the over 4,300 Canadians on the waiting list for an organ transplantation, are waiting for a kidney.
- In 2010, a third of the people who died while waiting for organs were waiting for a kidney (82 people).
- Nearly 40% of kidney transplants are made possible by living donors.
- Donor rates have stagnated since 2006 (14-17 donors/million).
- The need for organs outpaces the supply.
- Kidney patients waited a median time of 3.5 years in 2010 for a deceased-donor kidney transplant.
- Median wait times for 2008-2010 were:
  - ✓ longest in B.C (5.5. years) and Manitoba (5.2 years)
  - ✓ shortest in Nova Scotia (2+years).

## You can make a difference:

- Register your intention to donate your organs (either on your healthcare card, driver's license or through your provincial donor registry).
- Speak to your family and loved ones to make sure they know your wishes.
- Consider living organ donation and find out more at [www.kidney.ca](http://www.kidney.ca).
- Consider joining the Living Donor Paired Exchange Kidney Registry:  
<http://www.organsandtissues.ca/s/english-public/living-kidney-donation>

*Research – see over*

**Kidney transplantation is the preferred treatment for the majority of people with end-stage renal disease.**



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## Research

### Research Investments 2012

- Since 1964, The Kidney Foundation has awarded over \$100 million to support kidney-related research.
- In the period July 2011 – June 2012, 77 research awards were granted for a total of \$3,896,600. The breakdown is as follows:

Research Award Type	# Granted	\$ Amount
Biomedical Research Grants	46	2,290,798
Allied Health Research Grants	3	139,961
Allied Health Doctoral Fellowships	3	65,250
KFOC/Pfizer Cardio-Renal Research Award	1	75,000
Kidney Disease Research Chair	1	116,341
Manitoba Branch Endowment Fund (Dr. Ashley E. Thompson)	1	5,750
Agostino Monteduro Endowment Fund Research Awards	2	6,000
Kidney Research Scientist Core Education and National Training (KRESCENT) Program Awards*	20	1,197,500
<b>Total</b>	<b>77</b>	<b>3,896,600</b>

- \* KRESCENT total includes the following amounts disbursed directly by these agencies:
- Canadian Institutes of Health Research (CIHR): \$415,239
  - Fonds de la recherche en santé du Québec (FRSQ): \$56,231
  - Canadian Diabetes Association: \$35,000
  - University of Calgary : \$35,000
  - Canadian Child Health Clinician Scientist Program (CCHCSP): \$17,500
  - Michael Smith Foundation for Health Research (MSFHR): \$5,250
  - Natural Sciences and Engineering Research Council (NSERC): \$2,000

For more examples of the The Kidney Foundation's research investments and accomplishments, visit [www.kidney.ca](http://www.kidney.ca)

To find out how you can invest in Kidney Foundation research, visit [www.newchallengecampaign.ca](http://www.newchallengecampaign.ca)

### Research Accomplishments

#### Basic Science

- The Kidney Foundation funded research that led to a major breakthrough in the early detection of *diabetes insipidus*, a condition that causes dehydration and death in infants. This landmark research is now applicable to many other diseases.

#### Clinical Research

- In the 1990s, The Kidney Foundation funded the first randomized clinical trial of nocturnal dialysis versus hemodialysis, which went on to show that the former actually provides better outcomes and lowers cardiac risks for patients on dialysis.

#### Population Health and Health Systems

- Allied health researchers funded by The Kidney Foundation helped develop a Toolkit for Aboriginal People on Hemodialysis.

#### Translational Research

- Kidney Foundation funded researchers have developed a registry for advancing both knowledge and treatment of glomerulonephritis - the inflammation of kidney filters that can lead to renal failure.

#### Training the next generation of research leaders through KRESCENT

- Over 40 new kidney researcher scientists have been trained since the start, in 2005, of the national training program KRESCENT.
- 80% of KRESCENT trainees have secured positions; and 50% of these have secured peer-reviewed grant support - double the rate one would see in the traditional peer-review funding environment.
- Since 2005, the KRESCENT Program has supported kidney research trainees in a variety of important areas, including detection of acute kidney injury and its consequences, clinical trials on renal vasculitis (disorders related to inflammation of blood vessels), and ways to enhance kidney donation for transplant.

**"Science sometimes feels like it takes a really long time. It took 100 years between the time the phrase dialysis was coined to the day it became a safe, life-saving, long-term treatment for patients with kidney disease."**

*Dr. Deborah Zimmerman*