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# US Renal Data System 2016 Annual Data Report: Epidemiology of Kidney Disease in the United States

A full list of authors and affiliations appears at the end of the article.

The US Renal Data System (USRDS) is the comprehensive national data system that collects, analyzes, and distributes a broad range of information about kidney disease in the United States. It is supported by the Centers for Medicare & Medicaid Services and the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) at the National Institutes of Health. The USRDS Coordinating Center is operated by the University of Michigan, at the Kidney Epidemiology and Cost Center (KECC), in partnership with Arbor Research Collaborative for Health, in Ann Arbor, Michigan. There are 2 USRDS Special Studies funded independently by NIDDK: one at the University of California, Irvine, in collaboration with the University of Tennessee Health Science Center and Kaiser Permanente of Southern California, and the other at the University of Washington, in collaboration with Stanford University.

In addition to being published as an annual, online *AJKD* supplement, and thus accessible via MEDLINE, the USRDS Annual Data Report remains available at the USRDS website (www.usrds.org). A summary of key findings is provided in the introductions to volume 1 (CKD; page S1) and volume 2 (ESRD; page S215) of the Annual Data Report. We continue further improvements to the chapters on vascular access; expanded coverage of ESRD in the pediatric population, including a section on young adults; and expanded chapters contributed by the 2 Special Study centers, the first focusing on transition of care from earlier stages of CKD to ESRD among US veterans and patients within the Kaiser Permanente Health System of Southern California, and the second on palliative and end-of-life care among ESRD patients. The international chapter is further expanded to include descriptive data from 60 countries.

In the United States, the unadjusted prevalence of CKD stages 1–5 (not including ESRD) during 2011 through 2014 was estimated at 14.8%, with stage 3 being the most prevalent stage. Awareness of CKD and screening for the condition in the general population remains low. Claims data for patients with diabetes in the Medicare population indicate that testing for urine albumin continues to be performed in fewer than half of such patients. In 2014, even among patients with a diagnosis of CKD and both diabetes and hypertension, urine albumin testing was performed for just 48% in the Medicare population.

There were 120,688 new cases of ESRD reported in 2014 (a 1.1% increase compared to 2013). A total of 678,383 individuals were treated for ESRD at the end of 2014 (up 3.5% from 2013), a number that continues to rise due to falling mortality rates among those with ESRD. On a positive note, large net reductions in mortality among patients with ESRD or earlier stages of CKD continue to be observed, as before.

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Medicare spending for beneficiaries ages 65 and older who have CKD exceeded \$50 billion, representing 20% of all Medicare spending in this age group. Medicare fee-for-service spending in the general Medicare population increased by 3.8% in 2014, to \$435.6 billion, with \$32.8 billion, or 7.2%, of that overall spending accounting for ESRD patients.

As of December 31, 2014, the kidney transplant waiting list increased by 3% over the previous year to 88,231 candidates, of which 83% were awaiting their first kidney transplant. With fewer than 18,000 kidney transplants performed in 2014, the active waiting list was 2.8 times larger than the supply of donor kidneys.

### **Authors**

Rajiv Saran, MD, Bruce Robinson, MD, Kevin C. Abbott, MD, Lawrence Y.C. Agodoa, MD, Patrick Albertus, MPH, John Ayanian, MD, Rajesh Balkrishnan, PhD, Bragg-Gresham Jennifer, PhD, Jie Cao, MPH, Joline L. T. Chen, MD, Elizabeth Cope, PhD, Sai Dharmarajan, MS, Xue Dietrich, MS, Ashley Eckard, MS, Paul W. Eggers, PhD, Charles Gaber, MPH, Daniel Gillen, PhD, Debbie Gipson, MD, Haoyu Gu, PhD, Susan M. Hailpern, MS, Yoshio N. Hall, MD, Yun Han, MS, Kevin He, PhD, Paul Hebert, PhD, Margaret Helmuth, MA, William Herman, MD, Michael Heung, MD, David Hutton, PhD, Steven J. Jacobsen, MD, PhD, Nan Ji, MS, Yan Jin, PhD, Kalantar-Zadeh Kamyar, MD, PhD, Alissa Kapke, MS, Ronit Katz, PhD, Csaba P. Kovesdy, MD, Vivian Kurtz, MPH, Danielle Lavallee, PharmD, PhD, Yi Li, PhD, Yee Lu, MD, Keith McCullough, MS, Miklos Z. Molnar, MD, PhD, Montez-Rath Maria, PhD, Hal Morgenstern, PhD, Qiao Mu, MBBS, MPH, Purna Mukhopadhyay, PhD, Brahmajee Nallamothu, MD, Danh V. Nguyen, PhD, Keith C. Norris, MD, Ann M. O'Hare, MD, Yoshitsugu Obi, MD, PhD, Jeffrey Pearson, MS, Ronald Pisoni, PhD, Brett Plattner, MD, Friedrich K. Port, MD, Praveen Potukuchi, MS, Panduranga Rao, MD, Kaitlyn Ratkowiak, MS, Vanessa Ravel, MPH, Debabrata Ray, MA, MS, Connie M. Rhee, MD, Douglas E. Schaubel, PhD, David T. Selewski, MD, Sally Shaw, DrPH, Jiaxiao Shi, PhD, Monica Shieu, MPH, John J. Sim, MD, Peter Song, PhD, Melissa Soohoo, MPH, Diane Steffick, MA, PhD, Elani Streja, PhD, Manjula K. Tamura, MD, Francesca Tentori, MD, Anca Tilea, MPH, Lan Tong, MS, Megan Turf, BA, Dongyu Wang, MS, Mia Wang, MS, Kenneth Woodside, MD, April Wyncott, MPH, MBA, Xin Xin, MA, Wei Zeng, MS, Lindsay Zepel, MS, Sai Zhang, BS, Hui Zho, PhD, Richard A. Hirth, PhD, and Vahakn Shahinian, MD

### **Affiliations**

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Nutrition, Relypsa, Sanofi-Aventis, ZS Pharma, and Nephrogenex. Dr Morgenstern is a consultant at Arbor Research Collaborative for Health. Dr O'Hare received speaker fees from Henry Ford Hospital System (Greenfield), the Japanese Society of Dialysis and Transplantation, and the University of Alabama in 2015. Dr O'Hare also receives honoraria from UpToDate and from *CJASN* for her work as an associate editor. Dr Sim has investigator-initiated research grants from Keryx Pharmaceuticals, Malinckrodt Pharmaceuticals, Sanofi Aventis Pharmaceuticals, and Ostuka Pharmaceuticals. The other authors declare that they have no relevant financial interests.