

HIGHLIGHTS

Chronic obstructive pulmonary disease in Canadian primary care practices

Our current understanding of the extent of chronic obstructive pulmonary disease (COPD) in Canada is not based on primary care data, but on data from large population health surveys or from administrative data. This epidemiologic cohort study uses data from the Canadian Primary Care Sentinel Surveillance Network, a national network of practice-based research networks whose member primary care practices have electronic medical records. Using validated case-finding algorithms for data collected by the end of 2012, the authors found that the observed prevalence of COPD was 4.0% (10 043/250 346), representing a population prevalence of 3.4% with age–sex standardization (Table 1). Comorbidity was common, with prevalence ratios of 1.1 for one comorbid condition and 1.9 for four or more conditions. Anticholinergic agents (63%), short- (48%) and long-acting (38%) beta-agonists and inhaled steroids (41%) were the most commonly used medications. *CMAJ Open* 2015;3:E15-22

Table 1: Prevalence of chronic obstructive pulmonary disease, by patient age and sex*

Age group, yr	Total	
	N	With COPD, no. (%)
18–29	42 736	0 (0.0)
30–39	38 355	118 (0.3)
40–49	42 344	573 (1.4)
50–59	47 374	1 541 (3.3)
60–69	38 006	2 504 (6.6)
70–79	23 762	2 674 (11.3)
≥ 80	17 769	2 633 (14.8)
All age groups	250 346	10 043 (4.0)
≥ 40	169 255	9 925 (5.9)
≥ 50	126 911	9 352 (7.4)

Note: COPD = chronic obstructive pulmonary disease.
*Age-standardized prevalence for patients aged ≥ 18 yr = 3.4%; patients aged ≥ 40 yr = 5.3%, and patients aged ≥ 50 yr = 6.9%.

End-stage renal disease requiring dialysis in Manitoba

End-stage renal disease (ESRD) requiring dialysis is expensive and is associated with poor health outcomes and diminished quality of life. Understanding regional trends in the incidence and prevalence of ESRD requiring dialysis facilitates alignment of appropriate and efficient delivery of care. The authors used a validated case definition to search more than 1.2 million records within the Manitoba Health registry to examine trends in incidence and prevalence of ESRD in the province from 1989 to 2010. The total annual incidence of ESRD increased 2.5-fold, from 15.8 to 40.2 per 100 000 during the study period. In particular, the rural northern areas in Manitoba had a 12-fold increase, from 8.1 to 96.3 per 100 000 (Figure 1). The authors conclude that urgent attention is needed to support primary surveillance and prevention initiatives, especially in rural and remote locations of the province. *CMAJ Open* 2015;3:E8-14

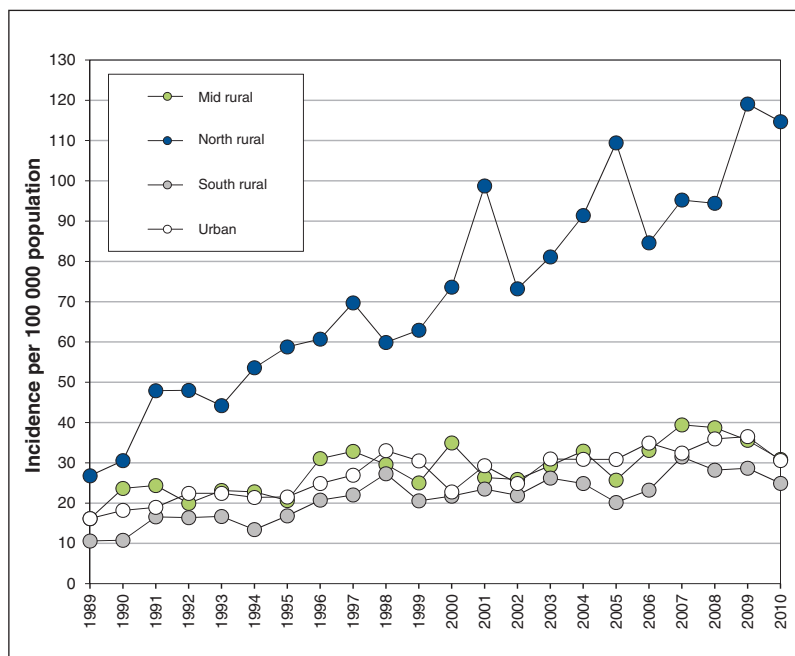


Figure 1: Age-standardized incidence of end-stage renal disease in Manitoba per 100 000 population, by region, 1989–2010.