## Trends in international asthma mortality

International time trends in asthma mortality have been strongly affected by changes in management and in particular, drug treatments. The authors of this paper from the Medical Research Institute of New Zealand note that high asthma mortality rates seen between the 1960s and 1980s were probably associated with the overuse of the high-dose, potent, poorly selective  $\beta 2$  agonists isoprenaline forte and fenoterol.

In the late 1980s such treatments were replaced by the use of inhaled corticosteroids. These changes in treatment resulted in a two-thirds reduction in the global mortality rates between 1985 and 2005. However, the trend for reduction in global asthma mortality observed since the late 1980s might have stalled, with no appreciable difference in asthma mortality from 2006 to 2012.

The authors conclude that novel strategies will be required to achieve a further substantive reduction in global asthma mortality.

Lancet 2017; 390:935-45

## E-cigarette use linked to higher smoking cessation rates

Was the increase in use of electronic cigarettes in the US between 2010 and 2015 associated with a change in overall smoking cessation rate at the population level?

Smoking cessation rates from 2014–2015 were compared with those from 2010–2011. The main outcome was defined as having quit smoking for at least three months.

The increase in e-cigarette use among US adult smokers was associated with a statistically significant increase in the smoking cessation rate at the individual level as well as the population level. It would be interesting to know what the cessation rates would be years later. The outcome of long-term use of e-cigarettes is also of some interest.

BMJ 2017; 358:j3262

## Weight and metabolic outcomes 12 years after gastric bypass

The authors of this paper report the 12-year follow-up results of an observational, prospective study of Roux-en-Y gastric bypass that was conducted in the US.

Four hundred and eighteen patients with severe obesity who underwent the surgery were compared with 738 patients with severe obesity who did not have the operation. The follow-up rate exceeded 90% at 12 years. Durable weight loss was significantly greater in the surgery cohort. Remission of type 2 diabetes was significantly greater in the surgery cohort. The incidence of hypertension and dyslipidaemia were also lower in the surgically treated patients.

This study showed long-term durability of weight loss and effective remission and prevention of type 2 diabetes, hypertension and dyslipidaemia after Roux-en-Y gastric bypass. N Engl J Med 2017; 377:1143–55

URL:

http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2017/vol-130-no-1467-15-december-2017/7456

