

# In this issue

1 NOVEMBER

## SEEKING OUT SIDE EFFECTS

It's been a bad year for seasonal influenza vaccine, with the suspension of its use in children aged less than 5 years, and a recent report suggesting that vaccine side effects have landed more children in hospital than influenza itself. Efficient monitoring of vaccine safety is critical to ensure that the benefits of vaccination outweigh any potential risks, say Gold and colleagues (*page 492*), and the current system of passive surveillance for adverse events is too cumbersome, patchy and slow. They argue that, to ensure safety and restore public trust, we need to develop complementary active surveillance systems to rapidly detect potential adverse events, calculate event rates and establish causality.

## DIFFUSION OF REPERFUSION

Patients treated in Australian hospitals benefit from either thrombolysis or percutaneous intervention (PCI) after ST-segment-elevation myocardial infarction (STEMI), but those who receive timely reperfusion are still in the minority. These are some of the findings of the Australian Acute Coronary Syndrome Prospective Audit (ACACIA), in which 755 patients treated for STEMI in 39 hospitals throughout Australia were recruited between 1 November 2005 and 31 July 2007 and followed for 12 months (Huynh et al, *page 496*). Reperfusion therapy was used in 66.9% of patients, but was only delivered inside the desirable timeframe (thrombolysis within 30 minutes of presentation, or angiography and primary PCI within 90 minutes of presentation) in 23.1%. Overall mortality in the cohort was 7.8% at 12 months, with those receiving any reperfusion at significantly decreased risk, especially if reperfusion was administered in a timely fashion. Although rural patients were more likely to receive thrombolysis than PCI, they were no more likely to die than their urban counterparts. In a thoughtful response to the study, Scott outlines strategies for improving in-hospital timelines for patients presenting with STEMI on *page 493*.



## CHOKING ON TRAFFIC

A Perth-based study has found a clear relationship between traffic-related air pollution and emergency department (ED) presentations for asthma in children (Pereira et al, *page 511*). Data from 603 children and young adults living in a south-west area of the city who presented to any hospital ED with asthma over a 5-year period were analysed, comparing pollutant levels (24-hour average background ozone, nitrogen dioxide [NO<sub>2</sub>], carbon monoxide [CO] and particulate levels) in the few days before and at the time of presentation with levels on matched days when the patient did not present. For children aged 0–4 years, rises in both NO<sub>2</sub> and CO significantly increased the risk of ED presentation with asthma, with a 1-day time lag.

## SOME UNSETTLING BABY FACTS

Overdiagnosis of gastro-oesophageal reflux, food allergy and lactose intolerance in persistently crying babies is counter-productive, say Douglas and Hiscock in a thought-provoking article (*page 533*). Unsettled behaviour in infants is generally a transient condition that peaks at 6 weeks of age. While there is no organic cause in 95% of cases, it can be distressing and may be a sign of correctable problems, including breastfeeding difficulties. For the sake of the mother's mental health and her relationship with her baby, the authors suggest that we should put away the proton-pump inhibitors and develop an evidence-based, multidisciplinary primary care approach to management.

## IRON DEFICIENCY OPTIONS

There are a lot of things that haven't changed in the management of iron deficiency anaemia, such as the need to doggedly pursue a source of blood loss in patients without an alternative explanation. But as this issue's Clinical Update reveals, there is an ever-expanding array of iron replacement options, including a new generation of intravenously administered products for patients whose iron stores are unable to be replaced orally (Pasricha et al, *page 525*).

## DIALYSIS CLOSE TO HOME

One of the devastating effects of renal failure for Aboriginal and Torres Strait Islander people is the need to move to major centres for treatment. In this context, the results of Marley and colleagues (*page 516*) are very welcome. During the 5 years between 2003 and 2007, 110 Aboriginal and Torres Strait Islander patients from the remote Kimberley region of Western Australia underwent haemodialysis therapy: 70% of all treatment was provided locally, by the newly formed Kimberley Satellite Dialysis Centre. A comparison of outcomes for these patients with those of patients from other regions who were entered on the Australia and New Zealand Dialysis and Transplant Registry over the same period reveals similar mortality rates, confirming the viability of the community-controlled Kimberley-based centre.

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## ANOTHER TIME ... ANOTHER PLACE

Almost daily and in every part of the world, new health hazards arise from modern technology. Some of these hazards make an immediate public impact... Others attract less attention because they lack drama and are not obvious in their effects... Such is the case for the dangers posed by certain pollutants of air, water, and food, which remain almost unnoticed despite their potential importance for public health... Hardly anything is known of the *delayed* effects of pollutants on human life, even though they probably constitute the most important threats to health in the long run.

*Man adapting, René Jules Dubos; 1965*