



Jason Lee/REUTERS/Picture Media

*A man wearing a mask walks along a street on a heavy hazy day during winter in central Beijing. Beijing temporarily shut down 103 heavily polluting factories and took 30% of government vehicles off the roads to combat dangerously high air pollution, state media reported, but the capital's air remained hazardous to health despite the measures.*

## From *The Cochrane Library*

### Red flags, selenium, statins, foot ulcers and hiccups

The use of “red flags” (specific information from the clinical history and examination used as sentinels of disease) to guide decisions about the need for further investigation of suspected vertebral fracture in patients presenting with low-back pain is unfounded. That’s the discouraging conclusion of the latest diagnostic test accuracy review. The authors looked at eight studies and found that many red flags have high false-positive rates. The limited evidence makes recommending specific red flags a challenge, but three (older age, significant trauma and corticosteroid use) were more promising, and combinations of red flags were more informative than individual tests (doi: 10.1002/14651858.CD008643.pub2).

The primary prevention of cardiovascular disease comes under the spotlight in one new and one updated review. Selenium supplementation is aggressively

marketed in some quarters, but the evidence from a new review of 12 studies involving nearly 20000 participants does not support its use, especially in populations with adequate selenium status. Furthermore, the authors are cautious not to rule out the possibility of an increased risk of type 2 diabetes from taking selenium-only supplements (doi: 10.1002/14651858.CD009671.pub2).

More definitive is the evidence to support the use of statins in people at low risk of cardiovascular disease. This comes from an updated review that now includes data on 57000 participants from 18 randomised trials. Statins reduced major vascular events as well as all-cause mortality. Added bonuses were the absence of serious harms and the likelihood that statins are cost-effective (doi: 10.1002/14651858.CD004816.pub5).

An updated review provides mixed



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relief for people with diabetes suffering from foot ulcers. Non-removable, pressure-relieving casts heal ulcers more effectively than removable casts or dressings alone, but this comes at the price of restricted movement and a possible decrease in quality of life (doi: 10.1002/14651858.CD002302.pub2).

Hiccups are a passing nuisance for most of us, but spare a thought for the few who suffer from persistent or intractable hiccups (defined as lasting for more than 48 hours and more than 1 month, respectively). Unfortunately, there’s little relief in sight, since the four poor-quality trials reviewed all investigated treatment with acupuncture and showed that it may be no better than placebo (doi: 10.1002/14651858.CD008768.pub2).

Find these and other new and updated reviews this month in *The Cochrane Library* at [www.thecochranelibrary.com](http://www.thecochranelibrary.com).

## News



## Defibrillator users opt for deactivation

The majority of recipients of implantable cardioverter-defibrillators (ICDs) would favour deactivating the device at the end of life to prevent shocks that do not meaningfully prolong life, new US research has found. The study, published in *JAMA Internal Medicine*, involved 20-minute telephone interviews with 95 ICD

patients aged 50 years and older, who were asked, "What do you feel are the potential benefits of your ICD?" and "What do you feel are the potential harms of your ICD?". Participants were then read a standardised script explaining the best current evidence about benefits and burdens of ICDs, and presented with five scenarios: permanently unable to get out of bed; permanent memory problems; burden to family members; prolonged mechanical ventilation; and advanced incurable disease. When further questioned, 67 participants (71%) opted for deactivation of the ICD in at least one scenario. The authors hypothesised that their findings were at odds with previous studies because they provided participants with information before questioning them, a theory endorsed by the authors of an accompanying editorial. "In effect, the survey may have become a successful decision-making intervention", they said.

*JAMA Intern Med* 2013; 28 January (online)  
doi: 10.1001/jamainternmed.2013.1883

## Dual-hormone "artificial pancreas" encouraging

Dual-hormone closed-loop delivery of insulin and glucagon improved short-term glycaemic control and reduced the risk of hypoglycaemia in patients with type I diabetes, new Canadian research has found. Published in the *CMAJ*, the randomised, crossover design compared dual-hormone closed-loop delivery with standard continuous subcutaneous insulin infusion in 15 adults with type 1 diabetes. Dual-hormone closed-loop delivery increased the percentage of time for which patients' plasma glucose levels were in the target range and decreased the percentage of time for which plasma glucose levels were below the target range. Closed-loop delivery also reduced the incidence of nocturnal hypoglycaemia. An accompanying editorial praised the study as the first to compare the apparatus in a randomised design but warned that "both insulin-only and dual-hormone approaches will have to prove their mettle in progressively less regimented settings".

*CMAJ* 2013; doi: 10.1503/cmaj.121265  
*CMAJ* 2013; doi: 10.1503/cmaj.130011

## Erectile dysfunction marks cardiac risk

Erectile dysfunction (ED) is emerging as a marker of elevated risk for future cardiovascular disease (CVD), according to new Australian research published in *PLOS Medicine*. Correlating data from self-report of erectile function in the 45 and Up Study with hospitalisation and death data for 95 038 men aged 45 years and over, researchers found that the risks of CVD and death increased steadily with the severity of ED. They concluded that ED was likely to serve as an "indicator" of the severity of underlying pathological processes, rather than as a risk factor. The authors said their findings confirmed previous research that found that men with ED required assessment for CVD risk. They also warned that the utility of ED in predicting risk in the clinical setting, over and above clinically measured risk factors, required specific testing.

*PLOS Med* 2013; 10: e1001372  
doi: 10.1371/journal.pmed.1001372

## Antibiotics benefit malnourished children

Adding routine antibiotics to nutritional therapy may increase recovery rates and decrease mortality rates in children with uncomplicated severe acute malnutrition, according to research published in the latest *New England Journal of Medicine*. Previous research has indicated a high prevalence of clinically significant infections in malnourished children, leading to the recommendation of antibiotic use, but the practice has not previously been tested in a clinical trial. In this double-blind, placebo-controlled trial, 2767 Malawian children with severe acute malnutrition were randomly allocated to receive amoxicillin, cefdinir or placebo for 7 days. The recovery rates for the three groups were 88.7%, 90.9% and 85.1% respectively. The mortality rates were 4.8%, 4.1% and 7.4% respectively. Additionally, among those who recovered, the authors found that the rate of weight gain was increased among those who received antibiotics.

*N Engl J Med* 2013; 368: 425-435  
doi: 10.1056/NEJMoal202851

## From the MJA archives

**MJA 1944; 1 July (edited extract)**

### The medical aspect of naval recruiting

The medical examination of recruits should be systematic; it then becomes automatic, and there is less likelihood that any defect will be overlooked. The preliminary investigation as to height, weight, chest measurement and urine having been made and the questionnaire complete, the candidate, stripped, should stand facing the medical officer. He should be in a good light, preferably natural; rashes and skin conditions cannot be appreciated



properly in artificial light. Women candidates retain brassiere and pants under a dressing gown. This is removed and the examination is carried out as for the men, the brassiere and pants being discarded as required. This method has proved satisfactory to all concerned at this centre. Every candidate should be

examined fully, and this cannot possibly be done properly if the medical officer remains seated throughout. Even if an obvious defect presents itself early in the examination, the full routine should be carried out.

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doi: 10.5694/mja13.n0218