30 days in medicine

Weather-related disasters increasing
An international team reporting in *The Lancet* say that climate change is already having a significant effect on health. This because of an increase in the number of weather-related disasters, greater exposure to heatwaves and an increased risk of dengue fever because conditions are more favourable for mosquitoes.

A key underpinning assumption is that the rise in temperatures where people live is much higher than the average increase in global temperature as a whole, because land warms to a greater extent than do oceans. This means that the number of people exposed to heatwaves rose by 125 million between 2000 and 2016. Between 2007 and 2016, weather-related disasters increased by 46% compared with the 1990 - 1999 average, with most deaths occurring in resource-poor countries.


Still gaps in yellow fever vaccination cover
Recent large outbreaks of yellow fever in Angola and Brazil in the past 2 years, combined with global shortages in vaccine stockpiles, highlight a pressing need to assess present control strategies. A study published in the *The Lancet Infectious Diseases* estimated global yellow fever vaccination coverage from 1970 through to 2016 to calculate the number of individuals still needing vaccination in order to reach the thresholds for outbreak prevention.

The authors found major increases in vaccine coverage since 1970, but with notable gaps within yellow fever risk zones, with an estimated 393.7 million to 472.9 million people who still need vaccination in yellow fever risk zones to reach the 80% coverage recommended by the World Health Organization.


Stents for stable angina of no benefit
Percutaneous coronary intervention (PCI) is not significantly better than a placebo procedure in improving exercise capacity or symptoms, even in patients with severe coronary stenosis, according to the ORBITA study published in *The Lancet*. This is the first double-blind randomised controlled trial to directly compare stenting with placebo in patients with angina who are receiving the correct drug treatment.

Exercise tests were carried out before the procedure and 6 weeks later in 200 patients with severe (≥70%) single-vessel stenosis, who had been given 6 weeks of intensive medical treatment and were then randomly assigned to PCI (105 patients) or a placebo group (95 patients). The placebo group only had an angiogram. There was no statistically significant difference in overall exercise time or symptom alleviation before and after the procedure between the two groups.


Misdiagnosis of type 3 diabetes
A large primary care study in the UK has found that type 3 diabetes, or diabetes of the exocrine pancreas, is commonly misdiagnosed as type 2 diabetes in most patients.

Researchers used routinely collected primary care records for more than 2 million patients in England for incident cases of adult-onset diabetes between 1 January 2005 and 31 March 2016. In results reported in *Diabetes Care*, they identified 31 789 new diagnoses of adult-onset diabetes. They found 559 cases of diabetes that occurred after pancreatic disease. Doctors treating these cases generally classified them as type 2 diabetes (87.8%), with only 2.7% of cases being classified as diabetes of the exocrine pancreas.

Compared with patients with type 2 diabetes, patients with diabetes occurring after pancreatic disease were nearly twice as likely to have poor glycaemic control and much more likely to need insulin within 5 years of diagnosis.