

Briefly

Antibiotic-resistance: At least 2 million people in the United States are infected by antibiotic-resistant bacteria every year and 23 000 of these infections lead to death, according to a report by the Centers for Disease Control and Prevention (CDC). The paper groups bacteria into three categories according to degree of threat: urgent (includes *Clostridium difficile* and drug-resistant *Neisseria gonorrhoeae*), serious (includes drug-resistant *Salmonella* Typhi and drug-resistant tuberculosis) and concerning (includes vancomycin-resistant *Staphylococcus aureus* and erythromycin-resistant Group A *Streptococcus*.) The CDC proposes several “core actions” to fight the spread of antibiotic resistance: preventing infections from occurring, tracking resistant bacteria, improving use of antibiotics, and promoting the development of new antibiotics and new diagnostic tests for resistant bacteria. — Roger Collier, *CMAJ*

Holy infections: Holy water in places of worship or springs considered by some religious groups to have healing properties are not held to common safety standards and may be underestimated sources of illness, according to a study in the *Journal of Water and Health*. Researchers at the Institute of Hygiene and Applied Immunology in Vienna, Austria, assessed the water quality in 21 holy springs and 18 places of worship (churches and chapels). “Holy spring water is also used extensively for personal drinking water, although not assessed according to drinking water standards,” states the abstract. “Holy water in churches and chapels may cause infection via wetting of lips and sprinkling on persons.” Only 14% of the springs examined met national drinking water standards. All water samples from churches and chapels had “extremely high concentrations” of heterotrophic plate count bacteria, and the holy water in the

busiest places of worship also contained fecal strains of *Pseudomonas aeruginosa* and *Staphylococcus aureus*. — Roger Collier, *CMAJ*

Radiology review: Trillium Health in Toronto, Ontario, has alerted 3500 patients that their computed topography and mammograms are under review. There are concerns about potential mistakes made by a radiologist whose privileges were restricted and who later voluntarily stopped working, reports the *Toronto Star*. It is already known that at least one patient had been misdiagnosed. The health centre will be reviewing 3500 diagnostic tests administered between Apr. 1, 2010, and Mar. 31, 2013, at two of its sites: Mississauga Hospital and Queensway Health Centre. A team of more than 20 radiologists are reviewing the tests for mistakes in the interpretation of results. — Roger Collier, *CMAJ*

Skippping breakfast: The popular belief that skipping breakfast contributes to weight gain “exceeds the strength of scientific evidence,” according to a meta-analysis in the *American Journal of Clinical Nutrition*. The theory often put forth in favour of “the most important meal of the day” is that going without it will lead to overeating later in the day. Much of the research commonly used to support this theory, however, uses causal language improperly, provides biased interpretations of data or misleadingly cites the results of other studies, states the meta-analysis. Observational studies touting a link between skipping breakfast and weight gain are frequently published, yet contain little or no evidence to back up the claim, Dr. David Allison, one of paper’s authors, told *The New York Times*: “We’re doing studies that have little or no value. We’re wasting time, intellect and resources, and we’re convincing people of things without actually generating evidence.” — Roger Collier, *CMAJ*

Caffeine dependence: Caffeine is the most popular drug in the world, yet too little is known about the potential health risks posed to those who consume it in great quantities, according to the *Journal of Caffeine Research*. In a comprehensive literature review, researchers examined published evidence about the prevalence and biological underpinnings of caffeine dependence. Though moderate consumption is considered safe, the paper states, high doses of caffeine can produce negative effects for some people, including cardiovascular problems and perinatal complications. “The literature reviewed in this article shows that caffeine produces behavioral and physiological effects similar to those produced by other drugs of dependence,” the authors conclude. “Further, a number of recent clinical studies show that a nontrivial proportion of caffeine users develops clinically meaningful features of caffeine dependence, including a persistent desire or unsuccessful efforts to cut down or control caffeine use, continued use despite harm, and a characteristic withdrawal syndrome.” — Roger Collier, *CMAJ*

Changes in gut flora impacts weight: Changes in intestinal bacteria after quitting smoking may well be behind weight gain in those who kick the habit, according to a Swiss National Science Foundation study. The study, which examined the gut flora of smokers, nonsmokers and recent quitters over nine weeks, found participants who quit smoking gained an average 2.2 kg, even if they maintained or reduced their calorie intakes. Researchers attribute the gain to changes in the diversity of recent quitters’ intestinal bacteria. While smoking and nonsmoking participants experienced little change in bacterial diversity over time, participants who quit smoking one week into the study experienced major shifts. “These results indicate that smoking is an environmental factor

modulating the composition of human gut microbiota,” the authors concluded. “The observed changes after smoking cessation revealed to be similar to the previously reported differences in obese compared to lean humans and mice respectively, suggesting a potential pathogenetic link between weight gain and smoking cessation.” — Lauren Vogel, *CMAJ*

First Canadian single-incision kidney removal: Surgeons at London Health Sciences Centre in Ontario have successfully performed Canada’s first living-donor kidney removal for transplant using a single incision point. The new robotic-assisted procedure is considered a major advance in living-donor transplant surgery because risk of adverse events is lower and recovery times are shorter than for open organ retrieval and laparoscopic surgery. “Living donors are selflessly offering a part of themselves to another human, with full knowledge that their lives will also be impacted by this gift,” Dr. Patrick Luke, who performed the surgery with Dr. Alp Sener, said in a news release. “If we can utilize technology and medical innovation to reduce that impact, perhaps more individuals will consider living-donor kidney donation in the future.” Kidney donor Kelley Kunkel of Walkerton, Ontario, said in the release that she was happy to be the first Canadian to have her kidney removed through a small incision in her navel. “I was out of hospital in three days, and had a fully healed incision within four weeks. You can’t even tell I had surgery now.” — Lauren Vogel, *CMAJ*

Another birth control recall: A pharmaceutical distributor who recalled contraceptive pills Aug. 27 because of a packaging mistake is recalling another brand of birth control pills as a precaution. On Sept. 5, Mylan Pharmaceuticals recalled one lot of the oral contraceptive Esme-28. The distributor recalled two lots of its Freya-28 birth control pills on Aug. 27 after a pharmacy discovered a placebo pill in place of an active pill. The company says it cannot guarantee that Esme-28 does not have the same packaging error. Famy Care Ltd., a company that manufactures reproductive health products for women, makes the pills for Mylan Pharmaceuticals. As of yet, no one has identified problems with Esme-28’s packaging, making the recall precautionary. Esme-28 packages should include three rows of seven pink pills, and one row of seven green pills. — Catherine Cross, *CMAJ*

Texas restricts abortions: A new law in Texas banning abortions after 20 weeks takes effect this October, as does a regulation that doctors performing abortions must have admitting privileges to a hospital located within 48 kilometres of their clinic. The legislation, which Republican Governor Rick Perry signed in July, also requires the state’s 42 abortion clinics to meet the same standards as outpatient surgery centres, and prohibits anyone except a doctor from dispensing RU-486 (mifepristone), the medication that can end a pregnancy of up to nine weeks. Twelve other US states have banned

abortions after 20 weeks, and North Dakota and Arkansas prohibit abortion at six weeks and 12 weeks, respectively. The Planned Parenthood Action Fund has promised to challenge the new law as unconstitutional. The effect of the new clinic requirements and hospital privileges regulations mean many of the state’s abortion clinics may close, opponents of the law say. — Laura Eggertson, *CMAJ*

WHO urges universal health coverage: Calling universal health coverage “the single most powerful concept that public health has to offer,” the director-general of the World Health Organization is urging countries to invest in local research to develop universal health systems so their citizens aren’t forced into poverty to pay for health services. Dr. Margaret Chan calls universal coverage “the best way to cement the health gains made during the previous decade. It is a powerful social equalizer and the ultimate expression of fairness.” Emerging economies such as Brazil, China and India, which have embraced universal health coverage, need to continue to invest in research to identify what health issues they should focus on, how to measure progress on those issues and how to structure systems that respond to their specific health situations, Chan said in a news release. She spoke at the launch of the *World health report 2013: Research for universal health coverage* in Beijing, China. — Laura Eggertson, *CMAJ*.

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