

Dr Yuji Kimura is the only full-time doctor at Namie's sole clinic, which opened on March 28, nearly 6 years after the town was devastated by the earthquake and tsunami. Residents are slowly returning to Namie, which is near Tokyo Electric Power Company's crippled Fukushima Daiichi nuclear power plant. Only several hundred of the original 21500 residents plan to return in the first wave.

Photo: Toru Hanai/Reuters/Picture Media

Treat illicit drug use as a health and social problem, not as a crime Total votes = 251 Strongly agree Disagree Agree Strongly disagree Neutral Take part in next week's poll on: www.mja.com.au/insight

MJA Podcasts



Dr Lynn Bardin is a consultant spine physiotherapist at Austin Health and SuperSpine in Melbourne. She discusses a practical approach for primary care physicians with patients with low back pain, to accompany her co-authored narrative review in this issue.

Professor Alexander McFarlane is the Director of the Centre for Traumatic Stress Studies at the University of Adelaide. He discusses comorbidities in Vietnam veterans with PTSD, to accompany his editorial in this issue.



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Ice use adds up to 150 000 emergency room visits a year

Methamphetamine use adds between 29700 and 151800 additional emergency department visits in 1 year, according to researchers from Curtin University, the University of New South Wales, the University of Newcastle and Monash University. The study, published in Drug and Alcohol Review, estimated past year rates of health service utilisation (number of attendances for general hospitals, psychiatric hospitals, emergency departments, general practitioners, psychiatrists, counsellors or psychologists, and dentists) for three levels of methamphetamine use (no use, < weekly, ≥ weekly) using panel data from a longitudinal cohort of 484 dependent methamphetamine users from Sydney and Brisbane. "We estimate methamphetamine use accounted for between 28400 and 80900 additional psychiatric hospital admissions and 29700 and 151800 additional emergency department presentations in 2013," the researchers wrote. "More frequent presentations to these services were also associated with alcohol and opioid use, comorbid mental health disorders, unemployment, unstable housing, attending drug treatment, low income and lower education." They concluded that: "Better provision of non-acute health care services to address the multiple health and social needs of dependent methamphetamine users may reduce the burden on these acute care services."

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Mapping malaria drug opens new possibilities



International research led by the Walter and Eliza Hall Institute of Medical Research (WEHI) has for the first time mapped how one of the longest-serving malaria drugs works, opening the possibility of altering its structure to make it more effective and combat increasing malaria drug resistance.

The study, published in *Nature Microbiology*, produced a precise atomic map of the frontline antimalarial drug mefloquine, showing how its structure could be tweaked to make it more effective in killing malaria parasites. The team used cryo-electron microscopy, which produces images of biological molecules in their natural state in unprecedented detail, to see exactly how and where the drug binds the malaria parasite. Mefloquine has been associated with some serious side effects, including neurological symptoms. Dr Wilson Wong, from WEHI, said that the detailed atomic map would enable future drug improvements. "We now know mefloquine binds to a hotspot of activity on the ribosome surface," he said. "However, our map of the ribosome and drug-binding site showed the fit is not perfect. We were able to mimic this interaction with compounds that were able to block the protein machinery and kill the parasite more effectively."