

News in brief

MALARIA CASES DECREASE WORLDWIDE

The number of malaria infections recorded globally has fallen for the first time in several years, according to the World Health Organization (WHO), which published its annual *World Malaria Report* on 4 December.

Rising numbers of cases in 2016 and 2017 sparked fears that progress had stalled in the global fight against the mosquito-borne disease. But the WHO estimates that there were 228 million reported cases in 2018, a decrease of around 3 million from the previous year.

This drop can be attributed in large part to fewer cases in southeast Asia (see 'Malaria in southeast Asia'). The WHO found that, in the past decade, the most marked decline has been in six countries across the Mekong River basin – Cambodia, China, Laos, Myanmar, Thailand and Vietnam.

From 2010 to 2018, malaria cases dropped by 76% in these countries, and malaria-related deaths fell by 95%. In 2018, Cambodia reported zero malaria-related deaths for the first time in the country's history. India also reported a huge reduction in infections,

with 2.6 million fewer cases in 2018 than in 2017.

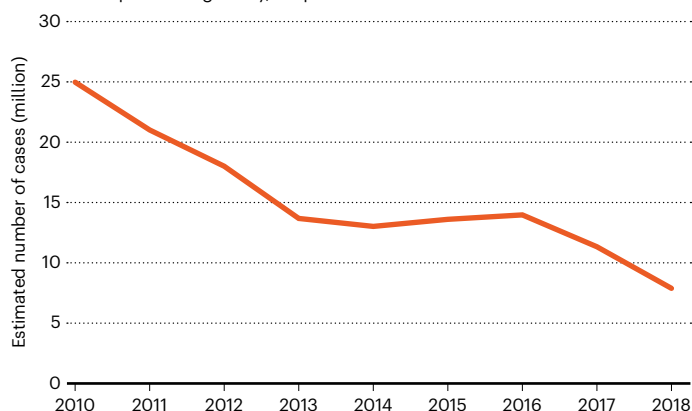
Data on malaria can be inaccurate in countries with poor surveillance systems, warns Arjen Dondorp, deputy director of the Mahidol Oxford Tropical Medicine Research Unit in Bangkok. And even if the number of officially reported deaths is zero, he adds, this doesn't mean that there are no malaria-related casualties. However, "malaria cases are definitely going down" in countries such as Cambodia, he says.

Progress has stalled and even reversed in other parts of the world. Africa, for example, reported an increase of 1 million cases from 2017 to 2018, and the continent accounted for 94% of global cases and deaths from the disease in 2018.

Pedro Alonso, director of the WHO Global Malaria Programme in Geneva, Switzerland, says that, despite the global drop in 2018, malaria cases have stabilized at "unacceptably high numbers" over the past few years. "But this is not a helpless situation," he says, noting that improved efforts to prevent, detect and treat the disease are allowing several countries to successfully eliminate malaria.

MALARIA IN SOUTHEAST ASIA

The prevalence of malaria has fallen in southeast Asia. Last year, this contributed to an overall drop in cases globally, despite increases in Africa.



EUROPEAN SPACE BUDGET GETS MASSIVE BOOST

The European Space Agency (ESA) has secured a 45% budget boost. At a meeting in Seville, Spain, on 27–28 November, ministers pledged €12.5 billion (US\$13.8 billion) for 2020–22, compared with the €8.6 billion approved at their 2016 meeting.

ESA's basic-science projects got a 10% hike, the biggest in 25 years. That will allow the agency to bring forward its space-based gravitational-wave mission, the Laser Interferometer Space Antenna (LISA), by two years, from 2034 to 2032, allowing it to observe astrophysical events in tandem with ESA's Athena X-ray telescope, set to launch in 2031.

As part of a new €432-million 'space safety' budget stream, European nations also backed a science and planetary-defence mission. For human and robotic exploration, they earmarked nearly €2 billion, with around €300 million to build modules for NASA's Moon-orbiting Gateway, as well as €150 million for robotic lunar missions.

Meanwhile, Europe's flagship Earth-observation programme, Copernicus (pictured), received €400 million more than the agency had asked for. Other projects that can now press ahead include the design of Europe's first quantum satellite, SAGA, and a project designed to demonstrate ways to remove space debris from orbit.



Ebola responders killed as violence flares



Armed groups have killed four Ebola responders in the eastern Democratic Republic of the Congo (DRC) and injured seven others in a series of attacks that began late on 27 November, according to the World Health Organization (WHO).

The dead include a vaccination worker, two drivers and a police officer, the agency said. Dozens of aid workers have been evacuated from the areas under siege, and the Ebola response there has mostly halted.

The attacks, in Biakato and Mangina, came after violence in nearby Beni (pictured) prompted the WHO and aid groups to begin evacuating workers from that city last week. “We are heartbroken that people have died in the line of duty,” WHO director-general Tedros Adhanom Ghebreyesus tweeted on 28 November.

One late-night attack targeted the residence of Ebola responders in Biakato. The same night – 27 November – armed groups charged an Ebola-response coordination centre in Mangina.

The violence is poised to drive up the number of new Ebola cases, the WHO said last week. Ebola has killed roughly 2,200 people in the DRC since August 2018.

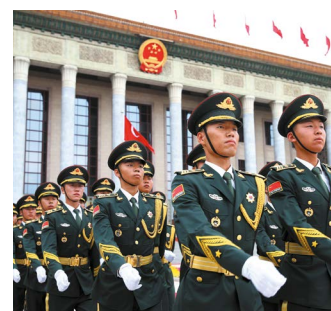
CHEMICAL-WEAPONS TREATY BANS NOVICHOKS

The group of nerve agents known as Novichoks are to be added to the Chemical Weapons Convention’s list of controlled substances, in one of the first major changes to the treaty since it was agreed in the 1990s.

The compounds, developed by the Soviet Union during the cold war, came to prominence after they were used in a high-profile assassination attempt on a former Russian military officer, Sergei Skripal, in Salisbury, UK, in March last year.

The Organisation for the Prohibition of Chemical Weapons, which is tasked with enforcing the treaty, announced the decision to explicitly ban Novichoks on 27 November as representatives from the 193 member states met in The Hague in the Netherlands for a periodic review of the convention. The update will come into effect in 180 days.

Novichoks (along with any other nerve agents or deadly chemicals) were already implicitly covered by the convention, which bans the use of any chemical as a weapon. But the specific mention of these compounds in the treaty – and information about their chemical structures – should help to raise global awareness of the ban among chemists.



CHINESE UNIVERSITIES CLASSIFIED AS ‘RISKY’ COLLABORATORS

Forty-three Chinese universities are considered ‘very high risk’ or ‘high risk’ collaborators because of their involvement in research for military and defence purposes, according to an Australian think tank. A report published on 25 November by the Australian Strategic Policy Institute in Canberra details how China is using its universities to boost its military prowess.

The institute also launched a database, partly funded by the US State Department, that classifies the level of risk posed by research partnerships with some 160 Chinese universities, security institutions and defence-industry groups. Chinese institutions were included on the basis of their links to defence agencies and the Chinese People’s Liberation Army (PLA) – such as holding security credentials for participating in classified defence or weapons-technology projects, agreements with the PLA or other defence-industry agencies, or records of the institution’s involvement in surveillance.

The analysis comes just weeks after the Australian government released guidelines to help universities reduce the threat of foreign entities, such as the government of China, attempting to leverage activities on campus that are against Australia’s interests.