

# No-mercury future for thermometers

About 7 million mercury thermometers in hospitals and clinics across China may be phased out by the end of this year, as an international treaty to protect human health and the environment from poisonous mercury took effect in China on Wednesday.

They will be replaced by mercury-free products, including electronic thermometers, which have been widely adopted in hospitals across China, according to the China Medical Devices Industry Association.

Yang Xiaofang, from the association's legal department, said at a news conference on Wednesday that China will follow the World Health Organization's proposal to reduce global demand for mercury thermometers and blood pressure gauges 70 percent by the end of this year.

There are currently more than 11 million mercury thermometers in use at medical institutions in China, according to the National Institute of Hospital Administration.

China will immediately ban the opening of new primary mercury mines, and will ban further mining at all existing primary mercury mines starting in 2032, according to a public notice released on Tuesday by 17 central government ministries and bureaus, including the Ministry of Environmental Protection.

China will also gradually ban the production, import and export of certain types of electrical switches, cosmetics and pesticides that contain mercury.

Production of thermometers and blood pressure gauges that contain mercury will be banned in China in 2026, the notice said.

The sales value of mercury thermometers accounts for more than 70 percent of the total value of thermometer sales in China, but many producers had already started the switch to mercury-free thermometers before China ratified the convention, Yang said.

Authorities should encourage the development of cheaper and more reliable alternatives to mercury thermometers and roll out policies for handling thermometers that are phased out or damaged, the National Institute of Hospital Administration said.

Medical equipment containing mercury, such as mercury thermometers, has already been banned in some European countries, such as Sweden. Mercury can vaporize at normal temperatures, causing serious damage to the human nervous system.

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# Arms exhibition highlights China's weaponry innovation

Tanks are rumbling past and missiles roaring. These are not scenes from a war film, but highlights of a weaponry exhibition held in north China's Inner Mongolia Autonomous Region on Wednesday.



A domestically developed tank used by Chinese land forces is presented to hundreds of foreign military officers at a shooting range in the Inner Mongolia autonomous region on Aug 16, 2017. [Photo by Zhao Lei/chinadaily.com.cn]

In the city of Baotou, where the country's first domestically made tank rolled off the assembly line nearly 60 years ago, the 2017 Armour Day event was hosted by China North Industries Group Corporation (NORINCO), the largest manufacturer of armored vehicles for China's armed forces and police departments.

Aiming at showcasing some of China's latest innovations in weapons for land operations, the event attracted officials from the army and defense authorities, as well as foreign ambassadors and military officers from various countries.

A live fire demonstration was the highlight on Wednesday. Nearly half of the weapons on display were never shown before with live ammunition, NORINCO said at a press conference Tuesday.

The star of the day was the VT5. Debuted at Airshow China 2016 in Zhuhai, the newly-developed light tank finished its first dynamic demonstration Wednesday

after a maneuverability and a live fire display.

Equipped with a domestically-made engine, auto gear box and a 105-mm tank gun, the lightweight tank is compatible with various types of terrain.

Wednesday's exhibition also featured the live fire debut of the Red Arrow 10 and Red Arrow 12, China's famous anti-tank and multi-purpose missiles.

The Red Arrow missiles can automatically locate and engage targets. In the live fire demonstration, the missiles hit and destroyed the targets without a single miss.

The VT4 and several other battle tanks and armored vehicles also took part in the event.

Seven major programs were in display, including an active protection system demonstration, a mine-resistance demonstration and a firing demonstration by a multitude of battle tanks and armored vehicles.

China is stepping up efforts to reform and modernize its army and national defense, with weaponry innovation weighing heavily on the cause.

"I think innovation is one of the major priorities in the field of weapon manufacturing," said Zhu Zheng from NORINCO. "The innovative spirit of generations of scientists has driven the development of Chinese defense."

China's military manufacturers like NORINCO should continue to innovate to facilitate the country's defense and military modernization, Zhu told Xinhua.

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## [2 disease control officials punished over HIV/AIDS](#)

Two disease control officials in Henan province have been punished for embezzling government subsidies paid to local HIV/AIDS carriers and forcing patients to buy drugs that were not approved by the China Food and Drug Administration.

Xie Yafeng, director of the Luoyang Center for Disease Control and Prevention's infectious diseases department, was expelled from the Party, while Sun Huaiwei was fired as the center's head, news website ThePaper.cn reported on Monday.

In June, the Luoyang commission for discipline inspection received a tip that Xie was abusing his position for personal gain. In addition to pocketing dozens of HIV/AIDS patients' annual subsidies from the local health commission, he also forced patients to pay for treatments that he claimed to be "safe and effective" enough to "cure" the disease, it was told.

According to a patient surnamed Zhu, Xie created a group chat with about 100 patients on WeChat.

“He said the group chat was only for releasing notices. Any discussion or private talk between group members was forbidden,” Zhu said.

Zhu, who was a member of the group chat for nearly two years, said Xie seldom communicated about the schedule of free drugs released by the State health authorities.

“Most information was about new trials, or medicine he encouraged us to take,” he said.

At the very beginning, participation to those trials or medicines was free. But after a few weeks, Xie asked the participants to pay from 300 to 1,000 yuan (\$45 to \$150), according to the report.

Among the medicines he recommended was an herbal powder—ostensibly a secret recipe from the 77th generation of a famed ancient Chinese doctor, Hua Tuo, who lived in the late Eastern Han Dynasty (25-220). The powder was said to be very effective in curing the disease.

“Most of us really believed in Xie because he was from the government health sector. We are all afraid of death and wanted to grab any possible chance to survive,” Zhu said, adding that once they participated in the trial or took the medicine Xie recommended, they would not get the drugs provided free from the local health department.

Since 2016, China has offered free antiviral therapy to all citizens living with HIV/AIDS. Previously, antiviral therapy was offered only to those who had developed low immunity levels, which can lead to life-threatening infections like pneumonia.

In Henan, the local government also provides a 2,400 yuan annual subsidy to every HIV/AIDS carrier. The subsidy was provided through a deposit card.

“Xie took our deposit cards. But no one expressed anger, because we dared not irritate him. He is someone who could decide whether we lived or died,” Zhu said.

Moreover, Xie had requested some patients who were confirmed HIV/AIDS carriers to make a video or take a picture of themselves and provide it to him. The implicit threat was that he could release the pictures and hurt people’s reputations, according to Xiao Dong, who runs Tongzhi, an NGO based in Beijing committed to combating AIDS.

“Xie threatened the carriers that if they didn’t follow the ‘suggestion’ from him, he would transfer their health documents to the local CDC where their identification was registered,” Xiao said.

“Many HIV/AIDS carriers went outside their hometown to take tests and drugs to hide their health condition from friends and colleagues. Xie’s threats hit them in a weak spot,” Xiao said, because of the stigma of HIV/AIDS.

After Xie's activities were reported, some patients got their money back, according to Zhu. But no announcement has been made about whether Xie has been prosecuted.

Liu Xixiang, director of the Henan Health and Family Planning Commission's HIV/AIDS prevention office, said traditional Chinese medicine and other antiviral therapies that were involved in the case were not approved by the State Drug and Food Administration, and staff members in the health department are not allowed to be involved in trials.

"Publicity and knowledge about HIV/AIDS should be better promoted, and staff members in health departments should be better regulated in the future to prevent such cases from happening again," Liu said.

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## Chinese cities see fewer 'good air' days in July

Chinese cities reported fewer days with "good air" in July compared with the same period last year despite a decline in levels of a key pollutant PM2.5, official data showed Wednesday.

The 338 cities monitored by the Ministry of Environmental Protection (MEP) enjoyed good or excellent air quality on 82.5 percent of the days in July, down 6.3 percentage points year on year, according to Liu Zhiqian, head of the environmental monitoring department at the MEP.

During the same period, the density of hazardous fine particle matter PM2.5 nationwide dropped 6.9 percent from a year ago. Notably, the density of PM2.5 slumped 24.6 percent in Beijing, helping the city enjoy more "good air" days in July.

In the first seven months of this year, Beijing's PM2.5 density dropped 1.5 percent year on year to 64 micrograms per cubic meter, still above its target of around 60 micrograms per cubic meter in 2017.

Air quality in 13 cities in the Beijing-Tianjin-Hebei area was rated good or excellent on 50.4 percent of the days in July, down 4.9 percentage points year on year.

The density of PM2.5 and PM10 in these regions went down by 13.8 percent and 4.7 percent, respectively, indicating improved air quality in these areas.

Authorities have been undertaking a year-long on-site investigation to discover the sources of air pollution in Beijing-Tianjin-Hebei area, where winter smog frequently occurs.

Recent findings showed that more than half of the nearly 40,000 enterprises checked have violated environmental rules.

MEP data also showed that of the country's 74 major cities, Haikou in southern China's Hainan Province had the best air quality in July while Tangshan in northern China's Hebei Province was the most polluted.

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## [Great Wall graffiti photos circulate online](#)

A range of photos picturing foreign language graffiti on the Great Wall, particularly at the Badaling section, are circulating online.



Korean words on a brick of the Great Wall on Aug 11. [Photo/Sina Weibo]

The images have sparked conversation among internet users, along with public anger, and a few netizens have even proposed the installation of signs around the area to limit the behavior.

The photographs on Sina Weibo, a Twitter-like service, show Korean and English words, as well as Chinese characters, scratched onto the bricks of Great Wall.

While scratchings on the Great Wall at the Badaling and Mutianyu sections are not new, particularly among Chinese visitors, the behavior has now attracted the eye of foreign tourists, including Bobby Brown, an NBA player, who

cribbled his name and number on the Great Wall in October 2016.

Web users have criticized the behavior as “ill-mannered and uncivilized”, and “heavy penalties should be required.”

A worker of the Badaling scenic area, who declined to be named, said there were more than 100 patrollers on the Great Wall to prevent damaging behaviors; however, the patrollers had difficulty in monitoring the behavior of every one as there were too many tourists in summer.

“Tourists could also report such behaviors to workers on the Great Wall or call police,” the worker said.

The country listed the Great Wall’s Badaling section in the first group of key national heritage conservation units in 1961, and the State Council, or China’s cabinet, approved the scenic area in 1982. It was inscribed on the world heritage list by UNESCO in 1987.

China has the Law on the Protection of Cultural Relics, but has not detailed the penalties on scratching behavior. The Beijing municipal government published a regulation on the protection of the Great Wall in 2003, and according to which, people who scratch the wall could face fines from 200 to 500 yuan (\$29.9-\$74.7).

Web users said that compared with the punishments on such behavior in other countries, the penalties in China are too light. In Egypt, people who damage cultural relics could face a maximum fine of \$100,000 and life sentence, news website chinanews.com reported.