Disease X: World Health Organisation issues global alert for potential pandemic

THE World Health Organisation has a list of diseases which pose a serious outbreak threat.

outbreak threat.
Ebola.
Lassa fever.
CCHF haemorrhagic fever.
Nipah / henipaviral.
MESS.
SARS.
Zika.
Now a high level meeting of the world's best medical scientists has added another

Now a high-level meeting of the world's best medical scientists has added another to the high-risk list.

It's been dubbed 'Disease X'.



The World Health Organisation has issued a warning for 'Disease X'. Source: News Limited

The group, based in Geneva, convenes each year to discuss what new diseases pose the greatest potential of turning into a global pandemic.

This year, they've conceded they don't know what it is.

But their computations warn conditions are ripe for its arrival.

And it's not just a stressed Mother Nature — with new organisms constantly being exposed by deforestation and close contact between humans and animals — who's likely to be at fault.

The WHO points out the use of chemical warfare is on the rise, both on the battlefield and in international espionage. And a series of deadly new diseases have recently been deliberately created through gene editing.

What if one goes rogue?

EXPLORE MORE: 'Aussie flu' takes deadly toll in US, UK

"Disease X represents the knowledge that a serious international epidemic could be caused by a pathogen currently unknown to cause human disease," the WHO said in a statement.

It believes the world's not in a good position to respond to such a surprise.

"History tells us that it is likely the next big outbreak will be something we have not seen before", WHO committee science adviser John-Arne Rottingen told the *Telegraph*. "The point is to make sure we prepare and plan flexibly in terms of vaccines and diagnostic tests."



A young boy runs in front of a group of security guards wearing surgical masks to protect against the SARS virus as they patrol in Beijing, 2003. Picture: APSource:AP

GERM WARFARE

The WHO is worried a new international public health crisis could come from any

direction.

Not that it doesn't have enough to worry about as it is

The flu virus continues to rapidly mutate. And new exotic pathogens keep jumping to humans from animals.

"These diseases pose major public health risks, and further research and development is needed, including surveillance and diagnostics", it states.

But a recent explosion in gene editing technology — such as CRISPR — has come at a bad time.

It highlights how post-World War II taboos against the use of nerve and poison gas, as well as weaponised bacteria and viruses, have been breaking down.

North Korea stands accused of using a nerve agent to kill the brother of their leader, Kim Jong-un.



Syrian children and adults receive treatment for a suspected chemical attack at a

makeshift clinic on the rebel-held Eastern Ghouta region. Picture: AFPSource:AFP

Russia stands accused of using a radioactive substance to murder a former spy in Britain in 2006. It's again been implicated in a nerve-agent attack on another spy, Sergei Skripal, earlier this month.

Syria — after promising to hand over all its chemical weapons several years ago — is once again being accused of unleashing toxic substances against its own population in towns and suburbs under the control of rebel forces.

The WHO points out that synthetic diseases will face no natural immunity in the world's population. Nobody has ever been exposed to them before. So their immune systems haven't found any weak spots in such a disease.

This means a deliberate outbreak is likely to spread fast, with a high level of fatality.

And the increasing ease with which genetic material can be crafted makes the likelihood of a 'rogue' researcher crafting biological weapons that much more likely.



Urban jungle ... A security guard wears a mask in Hong Kong where an apartment block was quarantined. Source: News Limited

NATURE SICKENED

Despite the increased threat of manufactured plague, the WHO still believes it is much more likely the next worldwide epidemic will come from nature.

It highlights increasing human population densities make it easier for contagious diseases to spread. It also brings more people in contact with a greater variety of animals, plants and soils as towns and cities spread.

HIV is believed to have jumped to humans from monkeys.

SARS is likely to have passed from bats to civet cats before invading the human population.

ZIKA is carried by mosquitoes.

"The intensity of animal and human contact is becoming much greater as the

world develops. This makes it more likely new diseases will emerge but also modern travel and trade make it much more likely they will spread," says WHO scientific adviser Professor Marion Koopmans.

Several such diseases were considered for listing at this year's meeting.

Monkeypox. Leptospirosis. Chikungunya.

"The importance of the diseases discussed was considered for special populations, such as refugees, internally displaced populations, and victims of disasters," the WHO statement reads.

But none have quiet yet set off alarm bells.

Instead, the WHO hopes that formally designating "Disease X" as the unknown next pandemic will help spur researchers worldwide into preparing a rapid response to any surprise outbreak.



Children in Hong Kong learning ballet lessons wear masks to protect themselves from Severe Acute Respiratory Syndrome (SARS) in 2003. *Source:AP*

Source: http://www.news.com.au/lifestyle/health/disease-x-world-health-organisation-issues-global-alert-for-potential-pandemic/news-story/8aca8d48b253da7c164784967a6ed174

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