

Work on gene-edited babies is illegal, says Beijing

Controversial research by the scientist He Jiankui has broken Chinese law and he must stop, says official

By Sophia Yan in Beijing

A CHINESE government official has declared that the controversial research of scientist He Jiankui - who said that he created the world's first gene-edited babies - was a violation of

Chinese law, and has called for all related work to be halted.

"The genetically edited infant incident reported by media blatantly violated China's relevant laws and regulations," Xu Nanping, a vice-minister for science and technology, told Chinese state broadcaster CCTV yesterday evening. "It has also violated the ethical bottom line that the academic community adheres to. It is shocking and unacceptable."

Earlier this week, national and local authorities said investigations had

been launched into Mr He's work and conduct after videos and interviews from him and his lab were published on YouTube, and by two prominent Western media outlets.

The shocking claims have yet to be independently verified by experts and published in a journal, though if true, would represent a monumental leap in biomedical research.

Mr He spoke on Wednesday in Hong Kong, defending his work at a global industry summit and describing years of secret, self-funded research. He also

revealed that a second woman was potentially pregnant as a result of his work, though he had suspended further work given the international outcry at the disclosure of his research.

So far, he has claimed to have produced two gene-edited baby girls, dubbed "Lulu" and "Nana", whose DNA was altered to be more resistant to HIV.

All couples he recruited for this study had an HIV-positive father and a non-infected mother. Using a method called Crispr-Cas9, Mr He was able to target blocks of DNA with precision.

While the technology to change DNA has existed for decades, it has improved in recent years, allowing scientists to make targeted changes. Still, that practice is surrounded by ethical debate and questions on safety. It is governed by laws in some countries; in the UK, it is illegal to edit the genes of human embryos over 14 days old.

In China, where scientists have forged ahead with astonishing speed, regulations are still catching up.

Globally speaking, the field is so new and cutting edge that experts cannot

calculate the risk involved for a gene-edited embryo as it develops into adulthood, and how changed DNA might pass into future generations.

In the future, such technology could be used to eradicate inherited illnesses, but it could also pave the way for "designer babies" engineered to have certain traits, such as a particular hair colour or intelligence.

Chinese scientists were quick to denounce Mr He's work, as was his institution, the Southern University of Science and Technology in Shenzhen.