



Brad Hazzard
Minister for Health and Medical Research

MEDIA RELEASE

Monday, 10 February 2020

NSW RESEARCHERS BREAKTHROUGH ON CORONAVIRUS

Health experts around the world will be able to contain the spread of novel coronavirus among the population faster, following a breakthrough by NSW Health researchers.

Health Minister Brad Hazzard said experts from NSW Health Pathology's state-of-the-art biosecurity P4 laboratory have successfully grown the live virus from NSW patients.

"Early and accurate diagnosis of infectious and deadly viruses is critical because undiagnosed patients can unknowingly transmit it to others," Mr Hazzard said.

"But unless clinicians understand the epidemiology of the disease – how it behaves and replicates - they can't develop reliable diagnostic testing to identify and contain it.

"A team of elite NSW researchers have achieved this by undertaking genome sequencing of the virus and growing the live virus from real patients as opposed to using synthetic materials."

The team of 10 scientists and pathologists at NSW Health Pathology's Institute of Clinical Pathology and Medical Research and clinicians at Westmead Hospital is hopeful their efforts will support the race to develop an effective treatment and vaccine.

NSW Health Pathology's Director of Public Health Pathology, Professor Dominic Dwyer, said the team has been working around the clock to rapidly cultivate the virus.

"This cutting-edge work will expand access to faster, reliable diagnostic testing for infected patients not just here in NSW but around the world," Professor Dwyer said.

"Being able to cultivate the novel coronavirus with samples from NSW patients as opposed to trying to mimic it from synthetic specimens is a terrific breakthrough.

"Synthetic virus tools don't offer the same high degree of diagnostic accuracy needed to help us develop effective antiviral drugs that can be used to treat infected patients.

"We're proud to be able to share our discovery with the World Health Organization, and international researchers and clinicians, so together we ultimately help save lives."

Across Australia – and around the world – there are only a relatively small number of specialist institutes with the expertise, technology and facilities to safely handle and grow these highly infectious and deadly pathogens.

The NSW Government invested \$2.4 million in 2018 to establish the state's first public health pathogen genomics service.

MEDIA: Julie Garvey | Minister Hazzard | 0448 569 746