

Australia to focus research on five virus families likely to cause future pandemics

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CSIRO highlights six key science and technology areas for fighting future pandemics



The Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia's national science agency, has outlined the science and technology that can help improve resilience to future pandemics, reduce their economic impact and protect communities.

The *Strengthening Australia's Pandemic Preparedness* report makes 20 recommendations that could support the Indo-Pacific region by reducing pandemic impacts while improving economic, social and health outcomes.

The six key science and technology areas identified are:

1. Preclinical capabilities for vaccines, therapeutics and diagnostics enabling faster development
2. Onshore vaccine manufacturing across a diverse range of vaccine technologies, ensuring vaccine supply
3. Therapeutics repurposing and novel antivirals
4. Point of care diagnostics for case identification
5. Genomic analysis of pathogens and their variants
6. Data sharing for informing response strategies

The report suggests focusing research on five virus families likely to cause future pandemics: *Coronaviridae* (e.g., COVID), *Flaviviridae* (e.g., Dengue), *Orthomyxoviridae* (e.g., Influenza), *Paramyxoviridae* (e.g., Nipah) and *Togaviridae* (e.g., Chikungunya fever).

While developing the report CSIRO consulted 146 experts from 66 organisations across government, industry, and the research sector.