

## WHO launches global framework for understanding origins of new or re-emerging pathogens

06 September 2024 | News

**Framework designed as a resource for scientists, researchers, public health authorities, and investigators in Member States**



With the support of the Scientific Advisory Group for the Origins of Novel Pathogens (SAGO), the World Health Organization (WHO) has published a global framework to help Member States comprehensively investigate the origins of new and re-emerging pathogens.

While there are a number of tools available for investigating infectious disease outbreaks, this is the first unified, structured approach to investigating the origins of a novel pathogen.

This framework aims to fill that gap by providing a comprehensive set of scientific investigations and studies. It is the first version of a “how-to” guide that will be updated as and when needed, based on feedback from users.

The WHO global framework outlines scientific investigations and studies for six technical elements:

- **Early investigations** of the first identified cases/ clusters / outbreaks to identify potential sources of exposure, collection of samples at the source, define the characteristics of the novel pathogen involved for establishment of diagnostic assays.
- **Human studies:** to understand the epidemiology including clinical presentation, modes of transmission, pathology and earliest presence in syndromic surveillance samples.
- **Human/Animal interface** studies to identify potential animal reservoirs, intermediate hosts and reverse zoonoses.
- studies to identify insect vectors or other sources of infection as well as earliest presence in the environment.
- **Genomics and Phylogenetics** studies to identify precursor strains, genomic characteristics, evolution in intermediate hosts and humans and spatial distribution over time.
- **Biosafety/Biosecurity studies** to determine if a breach in laboratory or research activities may have been associated with the first cases.

The WHO Global framework has been designed as a resource for scientists, researchers, public health authorities, and investigators in Member States. It provides guidance when and how to initiate such multi-disciplinary investigations and offers recommendations to countries on the capacities and tools needed to successfully implement them.