

# Epidemiology of Covid 19 and measures in response and preparedness

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## ABSTRACT of the Lecture

In this lecture we will examine different epidemiological aspects of the Covid-19 pandemic including trends in the number of cases and deaths during its different phases, possible acute and post-acute sequelae as well as the effectiveness of containment measures and vaccines.

Two sections will be dedicated to methods for estimating total excess deaths during the pandemic period and prediction of future trends.

More than 14 million excess deaths have been estimated globally in 2020-2021, i.e. probably 18 million now, with wide differences among countries ranging from no excess in Australia to more than 50% excess in some South American countries. In Italy we estimated an excess mortality of 13%, accounting for more than 200,000 deaths up to August 2022.

Some acute and post-acute complications have been reported with a remarkable excess risk for some cardiovascular events over the first 60 days from infection. However, the excess risk significantly decreases thereafter, and most complications resolve within a year from infection.

The pandemic resulted in a derangement and reorganization of healthcare systems, especially in the pre-vaccine era, whose impact on incidence, management, and outcomes of chronic disease needs to be quantified.



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Dr. La Vecchia received his medical degree from the University of Milan and a master of science degree in Medicine (epidemiology) from Oxford University. Presently, he is Professor of Medical Statistics and Epidemiology at the School of Medicine at the University of Milan. Dr. La Vecchia serves as an editor for numerous clinical and epidemiologic journals. He is among the most renowned and productive epidemiologists in the field with over 2300 peer-reviewed papers in the literature and is among the most highly cited medical researchers in the world, according to Clarivate HighlyCited.com, the developer and publisher of the Science Citation Index (2003, 2016, 2017, 2018, 2019- 2022, H index 198, H10 index 1833). Dr. La Vecchia was an Adjunct Professor of Medicine at Vanderbilt Medical Centre and the Vanderbilt-Ingram Cancer Centre, Nashville, TN, (2002-18) and of Epidemiology at the University of Lausanne, CH (2000-14).

## REFERENCES

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