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Discussion paper  
COVID 19  
Ascertaining cause of deaths: Myths & Facts



Department of Health & Family Welfare

Government of Kerala

## **Ascertaining cause of deaths due to COVID-19: Myths & Facts**

Kerala state has been fighting COVID-19 with an objective to minimise the mortality during COVID-19 pandemic – both due to COVID-19 and other preventable causes of death. Every death is painful whatever the cause may be.

Objective of this document is to describe the process followed for the classification (coding) of deaths related to COVID-19. The primary goal is to identify all deaths due to COVID-19 correctly and completely.

A death due to COVID-19 is defined for surveillance purposes as a death resulting from a clinically compatible illness, in a probable or confirmed COVID-19 case, unless there is a clear alternative cause of death that cannot be related to COVID disease (e.g. trauma). There should be no period of complete recovery from COVID-19 between illness and death.

The state is following the INTERNATIONAL GUIDELINES FOR CERTIFICATION AND CLASSIFICATION (CODING) OF COVID-19 AS CAUSE OF DEATH Based on ICD-10 International Statistical Classification of Diseases (16 April 2020) for ascertaining the cause of death due to COVID.

The state is also testing brought dead bodies with suspected COVID-19 for COVID-19, which many of the states are not doing. This is to ensure that all COVID-19 deaths are accounted.

The department has been practicing scientific methods of death auditing all throughout to understand the underlying causes of death for last many years. The information so collated gives lots of inputs to the Medical Board and the Clinical Teams regarding the cases and their management. The State Death Audit Committee consists of members of the State Public Health unit, State Medical Board, Institutional Medical Boards and State Prevention of epidemic and infectious disease Cell. The detailed death audit reports are published periodically in the public domain to facilitate studies by health experts and for seeking expert views and suggestions to strengthen the response to the epidemic.

### **Process**

Medical certification of cause of death are done by the treating clinician. For any COVID death the medical certification of cause of death is approved by institutional medical board.

Cause of death will be ascertained based on INTERNATIONAL GUIDELINES FOR CERTIFICATION AND CLASSIFICATION (CODING) OF COVID-19 AS CAUSE OF DEATH Based on ICD International Statistical Classification of Diseases (16

April 2020) (Available at [https://dhs.kerala.gov.in/wp-content/uploads/2020/07/Guidelines\\_Cause\\_of\\_Death\\_COVID-19.pdf](https://dhs.kerala.gov.in/wp-content/uploads/2020/07/Guidelines_Cause_of_Death_COVID-19.pdf))

COVID-19 is recorded on the medical certificate of cause of death for ALL decedents where the disease caused, or is assumed to have caused, or contributed to death.

Copy of medical bulletin of every death is submitted by the Superintendent of hospital where death has occurred to the State Nodal Officer (Death Audit). State Nodal Officer (Death audits) prepares daily provisional list of deaths due to COVID.

### **Death Audit process**

State Level Committee does detailed audits of all deaths due to communicable diseases based on all available information on a monthly basis and issue the Death Audit reports.

Now, it is being worked out to do Death audit on a weekly basis based on the present fatality observed in the last month.

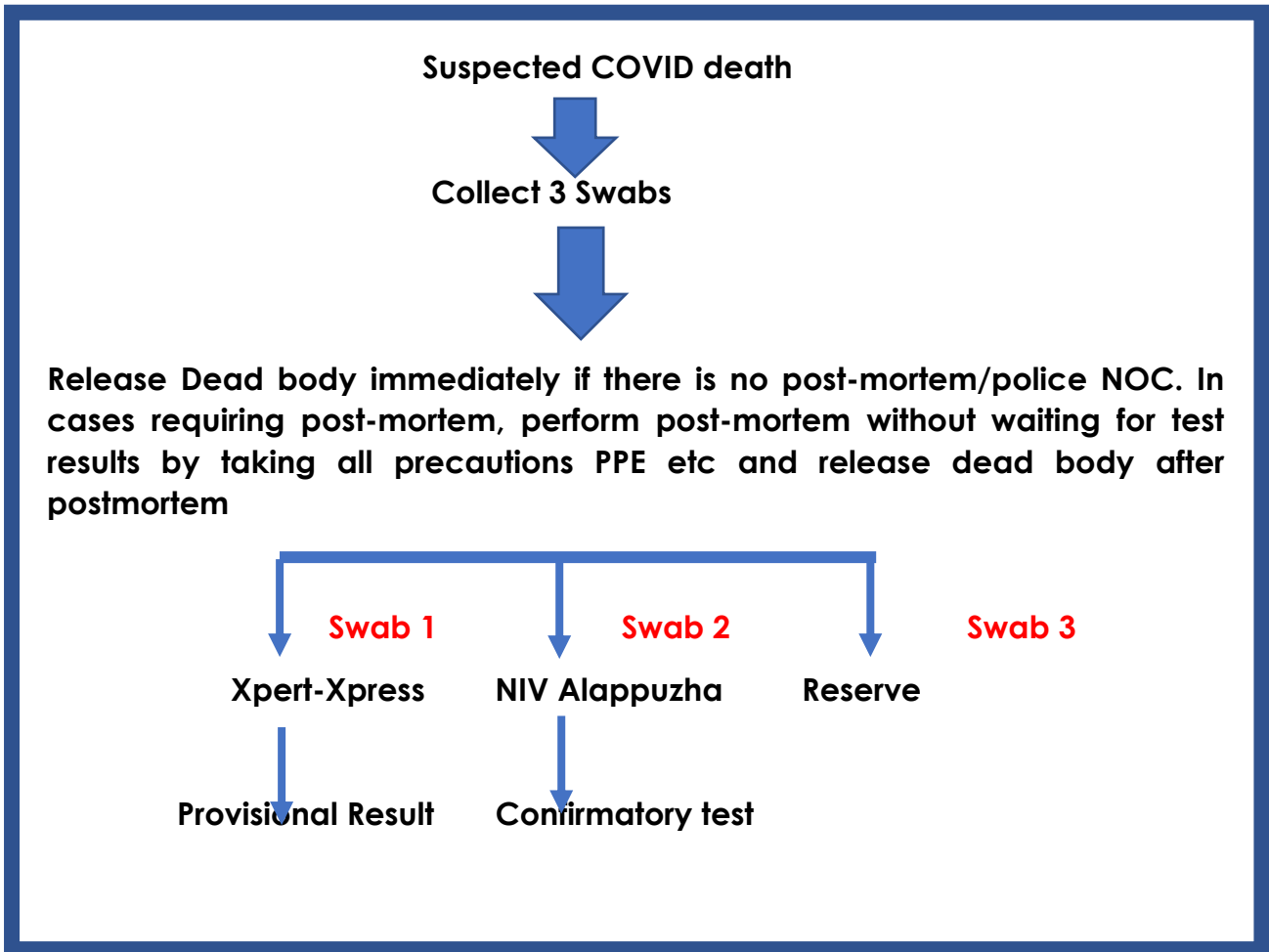
### **Testing for brought dead bodies which are suspected to be due to COVID**

If there is a brought dead body which is a suspected COVID death (to be ascertained by Clinician based on epidemiological linkage, history of illness and clinical symptoms) for which a test result is not available, **three swabs are being collected immediately from the dead body.**

**First swab** will be processed using Xpert- Xpress- CB- NAAT

**Second swab** is sent to NIV Alappuzha for confirmation

**Third swab** is kept as reserve, in case of further investigations required.



**Note:**

COVID confirmed cases which end in death during treatment are not sampled post mortem for COVID testing.

If Xpert/Xpress not available, Truenat or antigen test are being performed using swab 1.

**Myth 1: The state attributing the cause to the comorbidity and to refuse documenting COVID as the cause**

This is a wrong information. The state assess cause of death based on INTERNATIONAL GUIDELINES FOR CERTIFICATION AND CLASSIFICATION (CODING) OF COVID-19 AS CAUSE OF DEATH Based on ICD International Statistical Classification of Diseases (16 April 2020). Deaths in persons infected with Covid dying of totally unrelated causes (Suicide, Myocardial Infarction) are not counted as COVID deaths.

In the deaths happened during July 2020 where death audit is completed and reports finalised, out of 62 deaths reported to be due to COVID-19, 7 were classified as death not due to COVID infection because underlying cause of death was not COVID19 infection. 4 cases the Death audit is pending for want

of Post mortem report. The rest 51 are confirmed as deaths attributed to COVID 19 infection or the underlying cause of death is COVID 19 infection.

**Myth 2: A new swab is currently taken from all COVID positive patients and sent to NIV Alappuzha for RT PCR after death**

This is incorrect. The practise is only for brought dead patients.

**Myth 3: State has changed the policy of reporting death when the number of deaths increased**

This information is wrong. The state has not changed any policy related to reporting of death. The testing process for brough dead was released to bring in more clarity to the field functionaries.

**Myth 4: Why in a dead body sample, a swab is sent to NIV Alappuzha rather than performing it in other district labs?**

Swabs are sent to NIV Alappuzha only from a suspected COVID patient who is brought dead in the Government Hospital for confirmation of the test results. Ascertaining cause of death in a brought dead body is challenging and there should not be any scope for erroneous results. Repeat sampling from the dead bodies is not possible as in a patient who is undergoing treatment one can take repeat sample for confirmation. Final results are for documentation purpose and ascertaining cause of death. It has nothing to do with release of dead bodies. Dead bodies have to be released without any delay and not waiting for test results as per the directions from Government of India. As the relatives are oriented to do cremation as per the COVID protocol of Ministry of Health and Family Welfare Govt of India.

For confirmation of the test results, it is appropriate to send the second sample to Govt of India NIV Alappuzha ICMR Laboratory to avoid any undue controversies regarding the testing and the results.