From

Director General Health Services
Haryana, Panchkula

To

All Civil Surgeons
Haryana.

No. 32/3/IDSP/20/ 2692-2713 **Dated:** 13-05-2020

Subject: Regarding constitution of Covid Death Audit Committee (CDAC) for review.

In continuation of letter **No 32/3/IDSP/20 2564-85** dated 7-05-2020, wherein it was instructed to use the Death Form and do the ICD classification of the COVID-19 death cases.

2 Further as you are aware that in Dec 2019, outbreak of Pneumonia caused by unknown virus was reported in Wuhan city of China and on 7th Jan 2020, Chinese authorities identified a new strain of Coronavirus as the causative agent for the disease. The virus has been renamed by WHO as SARS-CoV-2 and the disease spread by it as COVID-19. Further, WHO declared COVID-19 as **'Public Health Emergency of International Concern'** on 30th Jan 2020 and 'PANDEMIC' on 11th March 2020. Government of India has declared it a **'Notified Disaster'** on 19th march, 2020.

3 As the situation is evolving in the Haryana, COVID patients are increasing day by day. Considering the fact that there is surge of cases in neighboring States, it is apprehended that there may be an increase in the number of cases in Haryana as well. Accordingly, there might be increase in the number of death cases in the State.

4 Furthermore it is also mentioned that Morbidity and Mortality are the also among the few key indicators in the Surveillance which helps in reviewing the current situation and based on review of these indicators, future policies can be devised to take decisions and to tackle the problem.

5 In context of the above, it is important to capture the details of each and every death case due to COVID-19.

6 In this regard, Civil Surgeons are instructed to ensure that intimation of each and every Death case due to COVID19 is done **within 6 hours of death** to the State Head quarter in appropriate formats with all details.

7 The intimation of Covid 19 Death case also to be done to all mentioned below:

- CMO/DSO of the District where the death has occurred
- CMO/DSO of the district where the patient is residing or from where case was referred
- State Surveillance Unit IDSP

8. Further, it is requested to constitute a committee for the Review of death cases occurring due to COVID19.The Committee will do the review of the death under the chairmanship of CMO.

Constitution of the for Covid death Audit Committee (CDAC) is as under

- Civil Surgeon (Chairperson)
- Public Health expert Of Rapid response Team
- Respiratory Medicine Specialist/ General Physician (Paediatrician in case deceased is a child)
- Forensic Expert (if available)
- District Microbiologist/Pathologist
- Representative of Deputy Commissioner
- Representative of World Health Organization (if available)

- Representative of Indian Medical Association
- District Immunisation Officer - Member secretary

9. **The major activities to be conducted for the committee will be as under:**
   a. To ascertain the cause of death the audit committee will scrutinise all the reports/records/admission file/case sheet of death case, review the quality of documentation.
   b. To identify the cause of death by conducting verbal autopsy with all the stakeholders.
   c. Committee will analyse the overall trend and the factors that had led to the deaths, and suggest measures for preventing deaths related to COVID19.
   d. It will facilitate/recommend the process to use the data to predict future trends and planning for management strategies and suggest measures to reduce the mortality
   e. Report of Death Audit Committee must be submitted within 72 hours of the death.
10. You are once again requested to **constitute the death audit committee within 3 days** and send the Status of the constituted committee to the State Head Quarter.

Enclosures:

- Death Investigation Form
- Guidance Document for Death Audit Committee.
- ICMR guidelines for appropriate recording of COVID19 related deaths in India

Director Health Services (IDSP)
Haryana, Panchkula.

No. 32/3-IDSP-020/ 2714-15 **Dated** 13-05-2020

A copy is forwarded to the following for kind information please:

1. W/Add Chief secretary (Health)
2. Director General Health Services, Haryana

Director Health Services (IDSP)
Haryana, Panchkula.

No. 32/3/IDSP/20/ 2716-37 **Dated:** 13-05-2020

A Copy is forwarded to all District Surveillance Officer for information and further necessary action.

Director Health Services (IDSP)
Haryana, Panchkula.

Death Investigation Form for COVID-19
NATIONAL CENTRE FOR DISEASE CONTROL

	RESPONDENT INFORMATION			
1.	Name of respondent		2. Relationship with deceased	
3.	Age		4. Sex	
	DECEASED INFORMATION			
1.	Name of deceased	2. Age	3. Sex	4. Date of death
5.	Name of Health Facility where admitted:	6. District (Isolation facility):		7. State (Isolation facility):
2.	Name of interviewer	Address of interviewer:		Contact Number of interviewer:
3.	Case Classification: Confirmed ☐	Suspect ☐		
B	**SOCIODEMOGRAPHC PROFILE**			
	Nationality: Indian	Non-Indian (Name of country)		
	Postal Address	District	Phone number	email id
C	**CLINICAL INFORMATION**			
1	**Patient clinical course**			
1.1	Date of Onset of symptoms			
1.3	Date of admission to isolation facility:			
1.4	ICU Admission (yes/no)			
1.5	Ventilation support required (yes/no)			
1.6	Cause of death (As mentioned on death certificate):			
2	**Patient Symptoms at admission (tick all reported)**			
a)	Fever/chills	b) Sore throat	c) Nausea/Vomiting	
d)	General weakness	e) Breathlessness	f) Headache	
g)	Cough	h) Diarrhea	i) Irritability/confusion	
j)	Runny nose	k) Pain(circle)muscular, chest, abdominal, joint	l) Any other(specify)	
3	**Patient signs at admission:** Details of following Signs to be taken from the case sheet if the patient admitted			
a)	Temperature	b) Abnormal Lung X-Ray findings (yes/no)	c) Coma(yes/no)	
d)	Stridor (yes/ no)	e) Tachypnoea(yes/no)	f) Seizure(yes/no)	
g)	Redness of eyes (yes/no)	h) Abnormal lung auscultation(yes/no)	i) Any other(specify)	
4	**Underlying medical conditions** (tick all that apply)			
a)	COPD	b) Hypertension	c) Chronic neurological or neuromuscular disease	
d)	Chronic Renal Disease	e) Asthma	f) Heart disease	
g)	Bronchitis	h) Pregnancy i) (trimester)	j) Immunocompromised condition including HIV, TB	
k)	Malignancy	l) Post-partum(< 6 weeks)	m) Any other(mention)	
n)	Diabetes	o) Liver Disease	p) None	
D	**EXPOSURE HISTORY**			
5	Occupation (circle): Student/ Businessman/ Health care worker/Health care lab worker/ animal handler/ any other			
6	H/O contact with COVID-19 case (Circle): Yes/ No			
6.2	If yes to Q. 6, then mention contact setting (tick all that apply)			
a)	While taking samples/ other investigations	b) Visit to a place where COVID-19 cases are treated or sampled(specify detail)		
c)	Clinical care of case (among HCW)	d) Immigration Staff at Point of Entry (details of place)		
e)	Housekeeping (Hospital)	f) Others, Specify		
g)	Caregiver of the case (specify details of case)	h) Not known		
7	Is patient a member of a cluster of patients with severe acute respiratory illness (e.g., fever and pneumonia requiring hospitalization) or COVID 19? (Yes/No)			
E	**TRAVEL HISTORY**			
10.	Has deceased travelled outside India in the past one month? Yes/ No. If yes provide details			

Guidance Document for Covid Death Audit Committee (CDAC)

In view of the present situation of COIVD-19, State is doing many efforts to combat the situation. Surveillance is one of the key interventions to contain the infection. Many activities like contact tracing, containment of the affected area and active case search are being done aggressively. However, Morbidity and Mortality are the also among the few key indicators in the surveillance which helps in reviewing the current situation and based on review of these indicators, future policies can be devised to take decisions and to tackle the problem. To fulfill the above objective Covid Death Audit Committee (CDAC) has been constituted at district level.

This Committee will conduct the review of the all Covid related deaths under the chairmanship of Civil Surgeon. The DIO will be the Member secretary, responsible for convening for Covid Death Audit Committee (CDAC) Meeting. He will also arrange necessary documentation, coordination, summarisation and reporting of the audit. He will coordinate that least 2/3rd of the members (CDAC) are present in the meeting.

Constitution of the for Covid death Audit Committee (CDAC) is as under:

- Civil Surgeon (Chairperson)
- Public Health expert Of Rapid response Team
- Respiratory Medicine Specialist/ General Physician (Paediatrician in case deceased is a child)
- Forensic Expert (if available)
- District Microbiologist/Pathologist
- Representative of Deputy Commissioner
- Representative of World Health Organization (if available)
- Representative of Indian Medical Association
- District Immunisation Officer (Member secretary)

Terms of reference for Covid death Audit Committee (CDAC)

1. Member Secretary before enlisting the death for the auditing meeting committee should examine that the timely intimation of death has already been done to the State Head quarter in appropriate formats with all details.
2. Member Secretary to ensure that all related documents to the extent possible are ready for the meeting. The list of the documents which is needed are as under :
    - 1 page brief Case Summary of Covid Case
    - Clinical investigation Form (CIF)
    - Sample requisition Form (SRF)
    - All Treatment Record /Treatment File (copy)
    - Case Sheet
    - Investigation Reports – (Like Chest X ray, C.T scan Blood and other investigation Reports)
    - Referral Slip (if any)
    - Death Certificate
    - Discharge Summary (if any)

3. Committee to examine that ICD Coding has been done as per the guidelines (Annexure 1- ICD Coding for Covid)
4. Committee should examine that details of the Clinical information is duly filled. Areas to be examined are:
    - Date of onset of symptoms
    - Date of admission to isolation Facility
    - Date of ICU Admission
    - Whether patient was put on ventilator or not
    - Co- morbid Condition
    - History of contact with COVID positive patient etc.
    - Travel History to affected area of conformed case of Covid in last 14 days

5. Duly signed Report of Death Audit Committee must be submitted within 72 hours of the death to State Headquarters /SSU.

Guidance for appropriate recording of COVID-19 related deaths in India

INDIAN COUNCIL OF MEDICAL RESEARCH | NATIONAL CENTRE FOR DISEASE INFORMATICS AND RESEARCH

Impacting NCD Public Health Actions and Policies

Collaborate Innovate Inspire

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1. Introduction

1.1 What is Cause of Death?

The cause of death (COD) is defined as "all those diseases, morbid conditions or abnormalities, injuries which either resulted in or contributed to death and the circumstances of the accident or violence which produced any such injuries."(1)

1.2 How to record Cause of Death?

Medical Certificate of Cause of Death (MCCD) is the certificate issued by the attending medical practitioner who had treated the person during admission in a medical institution or in the last illness (prior to death) while taking treatment from a physician outside of a medical institution. Medical certification of cause of death is the process of recording and reporting death using standard Form 4 (institutional deaths) and Form 4A (non-institutional deaths) as per the rules of the Registration of Births and Death Act, 1969. The MCCD form contains Part 1 to record the immediate and antecedent causes, and Part 2 to record the significant conditions that contributed to the death but were not part of the sequence of events leading to death.

Image 1: Cause of Death section of Form 4/4A

	CAUSE OF DEATH	Interval between onset and death approx
I Immediate cause State the disease,injury or complication which caused death,not the mode of dying such as heart failure, asthenia,etc	a)..... due to (or as a consequence of)	.....
Antecedent cause Morbid conditions,if any,giving rise to the above cause stating underlying conditions last	b)..... due to (or as a consequence of)	.....
	c).....	.....
II Other significant conditions contributing to the death but not related to the disease or condition causing it	.....	.....

1.3 What is Underlying COD?

Death often results from the combined effect of two or more independent or related conditions, that is, one condition may lead to another, which in turn leads to a third condition and so on. Where there is a sequence, the disease or injury which initiated the sequence of events, called the **underlying cause of death** is recorded and reported. It is:

(a) The disease or injury which initiated the train of morbid events leading directly to death;

Or

(b) The circumstances of the accident or violence which produced the fatal injury.

All the morbid conditions or injuries consequent to the underlying cause relating to death are termed as antecedent and immediate cause.

The medical part of the certificate consists of two parts-

I. Sequence of events leading to death -

First line is the immediate cause of death – the condition / disease that directly led to death / that preceded death.

The cause of death antecedent to immediate cause should be entered in line (b), and a cause further antecedent to this should be entered in line (c).

Underlying cause of death is on the lowest line of part I – It is the disease or condition that started the sequence of events between normal health to immediate cause of death. Conditions if any, as a consequence thereof will be entered above it in ascending causal order of sequence.

How many cause of death can be entered in Part I?

Only one cause is to be entered on each line of Part I. There may be many morbid events that happened, but the sequence of events that caused death should be sorted out, and one cause should be written on each line of Part 1 so that there is a **logical sequence of events leading to death.**

What if there is only one condition?

The disease, injury or complication that immediately preceded death can be the only entry in the MCCD FORM if only one condition is present at death.

What if there is only one condition antecedent to the immediate cause?

The condition antecedent to the immediate cause should be entered in line (b). Line (c) should be kept blank.

How to record time interval from onset of disease to death?

The time interval between the presumed onset of the condition, not the diagnosis, and death should be reported. It is acceptable to approximate the intervals or use general terms, such as hours, days, weeks, or years.

II. Other significant conditions that contributed to the death

All other diseases or conditions believed to have unfavourably influenced the course of the disease leading to death, but were not related to the disease or condition directly causing death.

What should be entered in Part II - Other significant conditions?

Any disease, abnormality, injury or late effects of poisoning, believed to have adversely affected the deceased should be reported such as chronic conditions, and also information such as:

• Chronic Bronchitis /COPD/Asthma/ Tuberculosis • Cancer –Primary / Metastatic cancer / On cancer directed treatment /Old cancer - cured or treated • Cardiovascular disease- Hypertension / IHD/Coronary Heart Disease / heart failure • Stroke / Neurological conditions like epilepsy, Parkinson's disease, dementia, Alzheimer's disease • Rheumatoid arthritis / Immune related conditions	• Use of alcohol and/or other substances. • Tobacco use (smoking / smokeless) • Recent pregnancy, if believed to have contributed to the death. • Environmental factors-exposure to toxic fumes, history of working in specific industry, professional exposure to toxins, specific animals • Late effects of injury, including head injury sequelae • Any iatrogenic underlying cause • Surgical information, if applicable

1.4 Public health significance of Cause of Death data

Stating the sequence of morbid conditions in order, allows selection of the cause of death that is considered as "underlying" cause. It is the underlying cause of death that is coded with ICD -10 codes and is counted for statistical purposes.

Robust cause of death information in a population is useful for understanding disease burden estimations, and explains trends in the health of populations. It is useful for evaluation and planning of health services and programmes. Good cause of mortality statistics also aids in identifying research questions of public health significance.

2 COVID-19

2.1 COVID-19 pandemic and need for cause of death

COVID-19 is the infectious disease caused by the most recently discovered coronavirus (SARS- CoV- 2) from Wuhan, China, in December 2019. The COVID-19 disease outbreak was declared a Public Health Emergency of International Concern (PHEIC) on 30 January 2020 by the World Health Organization, and later on 11 March 2020 as a Global Pandemic. During such situations, mortality surveillance becomes a very important public health tool to assess the impact of the viral infection.

2.2 COVID-19 as Underlying Cause of Death (UCOD)

COVID-19 is reported to cause pneumonia / acute respiratory distress syndrome (ARDS) / cardiac injury / disseminated intravascular coagulation and so on. These may lead to death and may be recorded in line 'a' or 'b'. It is likely that COVID-19 is the underlying cause of death (UCOD) that lead to ARDS or Pneumonia in most of the deaths due to COVID-19 (test positive and symptoms positive). In these cases COVID-19 must be captured in the last line / lowest line of Part 1 of MCCD form 4/4 A. Acute respiratory failure is a mode of dying and it is prudent not to record it in line a/b/c.

Patients may present with other pre-existing comorbid conditions such as chronic obstructive pulmonary disease (COPD) or asthma, chronic bronchitis, ischemic heart disease, cancer and diabetes mellitus. These conditions increase the risk of developing respiratory infections, and may lead to complications and severe disease in a COVID-19 positive individual. These conditions are not considered as UCOD as they have directly not caused death due to COVID-19. Also a patient may have many co-morbid conditions, but only those that have contributed to death should be recorded in Part 2.

2.3 ICD-10 Codes for COVID-19 provided by World Health Organization

Emergency ICD-10 Code	Usage conditions
U07.1	COVID-19,virus identified
U07.2	COVID-19, virus not identified, Clinically-epidemiologically diagnosed COVID-19 Probable COVID-19 Suspected COVID-19

2.4 Public health significance of recording cause of death in COVID-19 pandemic

COVID-19 is a new disease and is a pandemic affecting all communities and countries. It's clinical presentation ranges from mild to severe, and fatality depends on the severity of the illness, associated co-morbid conditions and age of patients. Patterns of disease and patterns of death can come from only standardised recording of clinical disease history and cause of death, and therefore epidemiological surveillance of disease and death are important. Robust data is needed from every district and state in India to measure the public health impact of COVID 19 and to plan for timely health interventions and protect communities. At the same time, other health conditions affecting populations need to be also monitored so that the health system is prepared for responding to the needs of the population.

3 Completing Medical Certification of Cause of Death (MCCD) in COVID-19

3.1 Mortality coding of COVID-19 with ICD-10 codes

The ICD-10 codes presently recommended by WHO for mortality coding are:

Test	Symptoms of COVID-19	Diagnosis	Code
+ve	None	Confirmed COVID-19	U07.1
+ve	Present	Confirmed COVID-19 documented as UCOD	U07.1
+ve	Present with comorbid conditions like heart disease, asthma, COPD, Type 2 diabetes	Confirmed COVID-19 documented as UCOD	U07.1
Test Negative	Present	Clinically –Epidemiologically diagnosed COVID -19	U07.2
Test awaited	Present	Suspected COVID-19	
Test inconclusive	Present	Probable COVID-19	

3.2 Examples of underlying cause of death in COVID-19

Some examples are provided to help physicians' record cause of death in COVID-19

Example 1 : 40 year old male diagnosed with COVID-19			
	CAUSE OF DEATH		
Part I		**Interval between onset and death approx**	**For statistical use**
Immediate Cause State the disease, injury or complication which caused death, not the mode of dying such as heart failure, asthenia, etc	a) Respiratory acidosis	2 days	

Antecedent cause Morbid conditions, if any, giving rise to the above cause stating underlying conditions last.	b) Acute respiratory distress syndrome (ARDS) c) COVID-19	3 days 7 days	 **U07.1**
Part II Other significant conditions contributing to the death but not related to the disease or condition causing it.	....		

Example 2 : 60 year old male, father of COVID-19 patient and a known diabetes individual presented with Influenza like illness (ILI) and died, test for COVID-19 not available			
CAUSE OF DEATH			
Part I		**Interval between onset and death approx**	**For statistical use**
Immediate Cause State the disease, injury or complication which caused death, not the mode of dying such as heart failure, asthenia, etc	a) Acute respiratory distress syndrome (ARDS)	1 day	
Antecedent cause Morbid conditions, if any, giving rise to the above cause stating underlying conditions last.	b) Influenza like illness c) COVID-19 suspect	4 days 4 days	**U07.2**
Part II Other significant conditions contributing to the death but not related to the disease or condition causing it.	Diabetes	15 years	

Example 3 : 50 year old female completed chemotherapy for Breast cancer admitted with breathlessness and developed shock and died			
CAUSE OF DEATH			
Part I		**Interval between onset and death approx**	**For statistical use**
Immediate Cause State the disease, injury or complication which caused death, not the mode of dying such as heart failure, asthenia, etc	a) Disseminated Intravascular Coagulation (DIC)	2 days	

Antecedent cause Morbid conditions, if any, giving rise to the above cause stating underlying conditions last.	b) Pneumonia c) COVID-19	5 days 5 days	**U07.1**
Part II Other significant conditions contributing to the death but not related to the disease or condition causing it.	Breast Cancer	6 months	

Example 4 76 year old male with Ischemic heart disease developed fever and breathlessness two days ago, and was admitted and died in 24 hours, first test was inconclusive			
	CAUSE OF DEATH		
Part I		**Interval between onset and death approx**	**For statistical use**
Immediate Cause State the disease, injury or complication which caused death, not the mode of dying such as heart failure, asthenia, etc	a) Acute cardiac injury	1 day	
Antecedent cause Morbid conditions, if any, giving rise to the above cause stating underlying conditions last.	b) Probable COVID-19	2 days	**U07.2**
Part II Other significant conditions contributing to the death but not related to the disease or condition causing it.	Ischemic heart disease		

3.3 What to avoid as Cause of Death?

- Avoid Mode of Dying as Cause of Death – Mode of dying merely tells you that death has occurred and is not specifically related to the disease process.

Mode of dying		
Respiratory Arrest Asphyxia Asthenia Brain failure Cachexia Cardiac Arrest/Heart Attack	Emaciation Exhaustion Heart Failure Hepatic/Liver failure Hepatorenal failure Kidney failure/Renal failure	Vasovagal attack Cardiac arrest Heart attack Hepatic failure Liver Failure Cardio respiratory failure Multiorgan/System failure

Cardio Respiratory Arrest Coma Debility	Respiratory arrest/Failure Shock Syncope Uraemia Vagal inhibition	Respiratory Failure Cardio Pulmonary failure

- Avoid abbreviations and short forms like ARDS, COPD, SARI.

Incorrect	Correct
ARDS	Acute respiratory distress syndrome
COPD	Chronic obstructive pulmonary disease
SARS	Severe Acute Respiratory illness
CRF	CRF could be Cardio respiratory failure or Chronic Renal failure
MI	Myocardial Infarction / Mitral Incompetence
AD	Acute Diarrhoea / Alzheimer`s Dementia
MS	Mitral Stenosis / Multiple Sclerosis
RTI	Respiratory Tract Infection / Reproductive Tract Infection

- **Though COVID-19 (Corona virus disease -19) is an abbreviation, it has been specified by the WHO and is an acceptable term to be used as UCOD.**

- Avoid vague terms or ambiguity –
  Sometimes it is difficult to provide a simple description of cause of death when there are no medical records or a doctor is seeing the patient in a critical condition for the first time or the doctor is not the treating physician.

Incorrect	Correct
Irrelevant talking and feverishness	Delirium due to fever
Very poor nourishment	Severe Malnutrition
Less healthy at birth	Low birth weight / Congenital Anomaly

- Avoid short forms / incomplete description –

Incorrect	Correct
Ca Br	Cancer Breast / Cancer Brain
Ac. Infarct	Acute Myocardial Infarction / Acute Cerebral Infarction
Sev Mal	Severe Malaria / Severe Malnutrition

- Avoid symptoms / signs

Incorrect	Correct
Jaundice	Hepatitis
Fever	Infection
Chest pain	Angina

- Avoid terms such as senescence, old age, senility, infirmity, and advanced age.

These terms cannot be the immediate cause of death. There may be 1 or 2 conditions that have been due to old age and thus the etiological sequence should be specified. If old age was a contributory factor, it should be entered in Part II.

Part I	Incorrect	Correct
Ia	Bed ridden	Aspiration Pneumonia
Ib	Old Age	Stroke
Ic	Hypertension	
Part II		
I		Old Age
		Hypertension

3.4 Other considerations in recording MCCD for COVID -19

i. Provide specific medical terms as cause of death. COVID-19 is a 'viral infection' and presentations include 'influenza like illness' (ILI) or "Severe acute respiratory illness (SARI). These are not specific and can be used in the sequence of the events and the specific virus / bacteria / agent that caused the disease should be recorded as UCOD, for example COVID-19.

ii. Record the logical sequence of events in Part 1. There may be many medical conditions in a person. Based on the most logical events that caused death, only these conditions are mentioned in Part 1 of the MCCD form.

iii. **Manner of death:** It refers to the circumstances under which death has occurred.
- Manner of death due to COVID-19 infection will mostly be 'natural', as it is the disease that led to the death.
- In case of suicide by an individual tested +ve for COVID-19, the manner of death may be captured as suicide / pending investigation if the medical autopsy is awaited.

iv. **Place of death:** Most of the deaths due to COVID-19 occur in a hospital and in such cases the place of death should be captured as 'Hospital'. In case an individual is discharged from hospital and the death occurs in his/her residence, the place of death must be captured as 'House'.

4. Use of ICMR-NCDIR e-Mortality (e-Mor) software for recording cause of death

The ICMR-NCDIR e-Mortality (e-Mor) software application aids in recording and reporting cause of deaths as per national standards of death reporting laid down by the Office of Registrar General of India (ORGI) under its Civil Registration System (CRS). This software can be implemented by hospitals and district local registrar offices in a district (to record deaths occurring in residence). Institutions should register with ICMR-NCDIR or State authority for provision of authorized login credentials. This will allow access to the software with its technical training on MCCD), ICD-10 coding for cause of death and use of software for recording and reporting deaths. The application data entry form is designed to record all details of Form 2 (Death Report) and Form 4 / 4A (MCCD Forms).

NCDIR e-Mor software features include:

a. Record details of death of all institution and non-institution based deaths with guide to prevent errors in cause of death
b. Guide in recording the sequence of death events and underlying cause of death

c. Guide in ICD-10 coding as per the National list of the ORGI and codes for COVID-19 announced by the World Health Organization.
d. Quality check modules to reduce errors in recording like date check, missing field check and search and export features
e. Exporting data to maintain mortality register of the institutional deaths and generate statistical tables for data analytics to establish mortality audit systems in hospitals.
f. On completion of accurate data entry, Form 2 and Form 4 can be printed, signed by appropriate authority for further submission to the Local Registrar for Death registration under CRS.
g. District Registrar and Chief Registrar Office at the state level can monitor data coverage, MCCD coverage, and generate statistical tables on leading causes of death district and state wise.

Role of NCDIR: NCDIR e-Mor software is accessible online through dedicated secure webserver that hosts the software and shall support the online data transmission and standard data encryption. Offline access to the software may also be facilitated.

As coordinating unit, NCDIR team shall provide technical resources in implementation and monitoring of data quality. As per the NCDIR policy of data processing and disclosure, all necessary safeguards for data confidentiality and data security will be maintained. NCDIR shall develop data analytics for reporting all-cause mortality statistics and deaths related to COVID-19 as per guidelines. NCDIR will assist state/UT governments in strengthening MCCD through technical assistance.

5. Additional Guides

1. ICMR-NCDIR e-Mor : http://ncdirindia.org/e-mor/

   [This software is available free of cost for use by any hospital/health facility/private practitioner/ administrative unit concerned with recording cause of death]

2. World Health Organization. COVID-19 coding in ICD-10. Available from: https://www.who.int/classifications/icd/COVID-19-coding-icd10.pdf?ua=1
3. National Center for Health Statistics. Guidance for certifying deaths due to COVID–19. Hyattsville, MD. 2020.
4. Physicians Manual on Medical Certification of Cause of Death by ORGI, India.

Annexure-'A'

भारत सरकार/गृह मंत्रालय
GOVT OF INDIA/MINISTRY OF HOME AFFAIRS
भारत के महारजिस्ट्रार का कार्यालय
OFFICE OF THE REGISTRAR GENERAL INDIA
एम.सी.सी.डी यूनिट,जीवनांक प्रभाग, रा.कृ पुरम,पश्चिमी खंड १, नई दिल्ली-११००६६
MCCD Unit,V.S. DIVISION, R.K. PURAM, WEST BLOCK-1, NEW DELHI-110066

Speed Post/Email

सं/No. 8/2/2017-VS (MCCD) **Dated: 22.04.2020**

To

The Chief Registrar of Births & Deaths
All States/ UTs.

Subject: ICD-10 codes for COVID-19 mortality coding reg.

Madam/ Sir,

As you are aware, the COVID-19 virus outbreak has assumed a serious problem. The Government is making all out efforts to contain the spread of the deadly virus. The COVID-19 outbreak has been declared a public health emergency of International concern.

2. The World Health Organisation (WHO) has created two emergency codes for COVID-19 in the tenth revision of International Statistical Classification (ICD-10) of Diseases and Related Health Problems. These are given as under:

1. Code U07.1 COVID-19 virus identified.
2. Code U07.2 COVID-19, virus not identified
   - Clinically- epidemiologically diagnosed COVID-19
   - Probable COVID-19
   - Suspected COVID-19

More updates are available on at: https://www.who.int/classifications/icd/icd10updates/en/ Details of definitions are enclosed as **annexure**

3. In order to effect improvements in the scheme on above count, it has been decided to extend the coverage of the scheme to all medical institutions in the country. It is, therefore, requested that data on mortality due to COVID-19 may please be collected and certified accordingly through the registration units under your jurisdiction.

4. These direction are issued under Section 3(3) of the Registration of Birth and Deaths (RBD) Act 1969. Kindly acknowledge the receipt of this letter.

Yours faithfully,

(Manoj Kumar)
Deputy Registrar General (MCCD)

Copy for information to:

1. PPS to RG& CCI
2. PPS to Secretary to the Government of India, Department of Health Research, M/o Health & Family Welfare & Director General, ICMR , V. Ramalingaswami Bhawan, Ansari Nagar, New Delhi-110029
3. PPS to Addl. Registrar General (Y)/ Addl. Registrar General (S)/ DDG
4. Directorate of Census Operations, All States/ UTs.
5. Deputy Registrar General CRS/SRS, VS Division West Block-1, R.K. Puram. New Delhi.
6. Technical Director, DP Division, ORGI, NDC, IT Park, Shastri Park, with request to make necessary changes in online software for reporting mortality due to Covid-19.