

**NOVEL CORONAVIRUS (nCoV)**  
**ACUTE RESPIRATORY INFECTION CLINICAL CHARACTERISATION DATA TOOL**

**DESIGN OF THIS CASE RECORD FORM (CRF)**

This CRF is divided into a “CORE” form and a “DAILY” form for daily laboratory and clinical data.

**Complete the CORE CRF + complete the DAILY CRF on the first day of hospital admission and on ICU admission, and daily upto discharge or death.**

**GENERAL GUIDANCE**

- The CRF is designed to collect data obtained through examination, interview and review of hospital notes. Data may be collected retrospectively if the patient is enrolled after the admission date.
- Participant Identification Numbers consist of a 3 digit site code and a 4 digit participant number. You can obtain a site code and registering on the data management system by contacting [ncov@isaric.org](mailto:ncov@isaric.org). Participant numbers should be assigned sequentially for each site beginning with 0001. In the case of a single site recruiting participants on different wards, or where it is otherwise difficult to assign sequential numbers, it is acceptable to assign numbers in blocks or incorporating alpha characters. E.g. Ward X will assign numbers from 0001 or A001 onwards and Ward Y will assign numbers from 5001 or B001 onwards. Enter the Participant Identification Number at the top of every page.
- Data should be entered to the central electronic REDCap database at <https://ncov.medsci.ox.ac.uk> or to your site/network’s independent database. Printed paper CRFs may be used for later transfer of the data onto the electronic database.
- In the case of a participant transferring between sites, it is preferred to maintain the same Participant Identification Number across the sites. When this is not possible, space for recording the new number is provided.
- Complete every line of every section, except for where the instructions say to skip a section based on certain responses.
- Selections with square boxes () are single selection answers (choose one answer only). Selections with circles () are multiple selection answers (choose as many answers as are applicable).
- Mark ‘N/A’ for any results of laboratory values that are not available, not applicable or unknown.
- Avoid recording data outside of the dedicated areas. Sections are available for recording additional information.
- If using paper CRFs, we recommend writing clearly in ink, using BLOCK-CAPITAL LETTERS.
- Place an (X) when you choose the corresponding answer. To make corrections, strike through (-----) the data you wish to delete and write the correct data above it. Please initial and date all corrections.
- Please keep all of the sheets for a single participant together e.g. with a staple or participant-unique folder.
- Please transfer all paper CRF data to the electronic database. All paper CRFs needs to be stored locally, do not send any forms with patient identifiable information to us via e-mail or post. All data should be transferred to the secure electronic database.
- Please enter data on the electronic data capture system at <https://redcap.medsci.ox.ac.uk/>. If your site would like to collect data independently, we are happy to support the establishment of locally hosted databases.
- Please contact us at [ncov@isaric.org](mailto:ncov@isaric.org) if we can help with databases, if you have comments and to let us know that you are using the forms.

**CORE CASE RECORD FORM****CLINICAL INCLUSION CRITERIA**Suspected or proven acute novel Coronavirus (nCoV) infection as main cause for admission:  YES  NO**EPIDEMIOLOGICAL FACTORS**

In the 14 days before onset of illness had the patient any of the following:

A history of travel to an area with documented cases of nCoV infection  YES  NO  UnknownClose contact\* with a confirmed or probable case of nCoV infection, while that patient was symptomatic  YES  NO  UnknownPresence in a healthcare facility where nCoV infections have been managed  YES  NO  UnknownPresence in a laboratory handling suspected or confirmed nCoV samples  YES  NO  UnknownDirect contact with animals in countries where the nCoV is known to be circulating in animal populations or where human infections have occurred as a result of presumed zoonotic transmission  YES  NO  Unknown

\* Close contact' is defined as:

- Health care associated exposure, including providing direct care for novel coronavirus patients, e.g. health care worker, working with health care workers infected with novel coronavirus, visiting patients or staying in the same close environment of a novel coronavirus patient, or direct exposure to body fluids or specimens including aerosols.
- Working together in close proximity or sharing the same classroom environment with a novel coronavirus patient.
- Traveling together with novel coronavirus patient in any kind of conveyance.
- Living in the same household as a novel coronavirus patient.

## CORE CASE RECORD FORM

DEMOGRAPHICS	
Clinical centre name: _____	Country: _____
Enrolment date: [ _D_ ][ _D_ ]/[ _M_ ][ _M_ ]/[ 2_ ][ 0_ ][ _Y_ ][ _Y_ ]	
Ethnic group (check all that apply): <input type="radio"/> Arab <input type="radio"/> Black <input type="radio"/> East Asian <input type="radio"/> South Asian <input type="radio"/> West Asian <input type="radio"/> Latin American <input type="radio"/> White <input type="radio"/> Aboriginal/First Nations <input type="radio"/> Other: _____ <input type="checkbox"/> Unknown	
Employed as a Healthcare Worker? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	
Employed in a microbiology laboratory? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	
Sex at Birth: <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Not specified	
Estimated Age [ ][ ][ ] years OR [ ][ ] months	
Pregnant? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown <input type="checkbox"/> N/A    If YES: Gestational weeks assessment: [ ][ ] weeks	
<b>POST PARTUM?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A (if NO or N/A skip this section - go to INFANT)	
Pregnancy Outcome: <input type="checkbox"/> Live birth <input type="checkbox"/> Still birth    Delivery date: [ _D_ ][ _D_ ]/[ _M_ ][ _M_ ]/[ 2_ ][ 0_ ][ _Y_ ][ _Y_ ]	
Baby tested for Mother's ARI infection? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A    If YES: <input type="checkbox"/> Positive <input type="checkbox"/> Negative    Method: <input type="checkbox"/> PCR <input type="checkbox"/> Other: _____	
<b>INFANT – Less than 1 year old?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO (if NO skip this section)	
Birth weight: [ ][ ][ ] kg or [ ][ ] lbs <input type="checkbox"/> N/A	
Gestational outcome: <input type="checkbox"/> Term birth (≥37wk GA) <input type="checkbox"/> Preterm birth (<37wk GA) <input type="checkbox"/> N/A	
Breastfed? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A    If YES: <input type="checkbox"/> Currently breastfed <input type="checkbox"/> Breastfeeding discontinued at [ ][ ] weeks <input type="checkbox"/> N/A	
Appropriate development for age? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown	
Vaccinations appropriate for age/country? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown <input type="checkbox"/> N/A	

## CORE CASE RECORD FORM

CO-MORBIDITIES			
<b>Co-morbidities and risk factors – Charlson Index will be calculated for each patient at analysis.</b>			
Chronic cardiac disease, including congenital heart disease (not hypertension)	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	Obesity (as defined by clinical staff)	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Chronic pulmonary disease (not asthma)	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	Diabetes with complications	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Asthma (physician diagnosed)	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	Diabetes without complications	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Chronic kidney disease	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	Rheumatologic disorder	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Moderate or severe liver disease	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	Dementia	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Mild liver disease	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	Malnutrition	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Chronic neurological disorder	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	Smoking	<input type="checkbox"/> YES <input type="checkbox"/> Never smoked <input type="checkbox"/> Former smoker
Malignant neoplasm	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	Other relevant risk factor	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Chronic hematologic disease	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	If yes, specify: _____	
AIDS / HIV	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	_____	
ONSET & ADMISSION			
Onset date of first/earliest symptom: [ _ ] [ _ ] [ _ ] / [ _ ] [ _ ] [ _ ] / [ _ ] [ _ ] [ _ ] [ _ ]			
Admission date at this facility: [ _ ] [ _ ] [ _ ] / [ _ ] [ _ ] [ _ ] / [ _ ] [ _ ] [ _ ] [ _ ]			
Time of admission (24-hr format): [ _ ] [ _ ] [ _ ] / [ _ ] [ _ ] [ _ ]			
Transfer from other facility? <input type="checkbox"/> YES-facility is a study site <input type="checkbox"/> YES-facility is not a study site <input type="checkbox"/> NO <input type="checkbox"/> N/A			
If YES: Name of transfer facility: _____ <input type="checkbox"/> N/A			
If YES: Admission date at transfer facility (DD/MM/YYYY): [ _ ] [ _ ] [ _ ] / [ _ ] [ _ ] [ _ ] / [ _ ] [ _ ] [ _ ] [ _ ] <input type="checkbox"/> N/A			
If YES-Study Site: Participant ID # at transfer facility: <input type="checkbox"/> Same as above <input type="checkbox"/> Different: [ ][ ][ ]-[ ][ ][ ][ ][ ] <input type="checkbox"/> N/A			
Travel in the 14 days prior to first symptom onset? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown			
If YES, state location(s) & date(s): Country: _____ City/Geographic area: _____			
Return Date: [ _ ] [ _ ] [ _ ] / [ _ ] [ _ ] [ _ ] / [ _ ] [ _ ] [ _ ] [ _ ] <input type="checkbox"/> N/A (more space at the end if required)			
Contact with animals, raw meat or insect bites in the 14 days prior to symptom onset?			
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown <input type="checkbox"/> N/A If YES, complete the ANIMAL EXPOSURE section			

## CORE CASE RECORD FORM

**SIGNS AND SYMPTOMS AT HOSPITAL ADMISSION** *(first available data at presentation/admission – within 24 hours)*
**Temperature:** [ ][ ][ ][ ] °C or [ ][ ][ ][ ] °F      **HR:** [ ][ ][ ][ ] beats per minute      **RR:** [ ][ ][ ][ ] breaths per minute

**Systolic BP:** [ ][ ][ ][ ][ ] mmHg **Diastolic BP:** [ ][ ][ ][ ][ ] mmHg      **Severe dehydration:**  YES  NO  Unknown

**Sternal capillary refill time >2seconds**  YES  NO  Unknown

**Oxygen saturation:** [ ][ ][ ][ ][ ] %      **On:**  Room air  Oxygen therapy  N/A

**Admission signs and symptoms** *(observed/reported at admission and associated with this episode of acute illness)*

History of fever	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Cough	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
with sputum production	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
bloody sputum/haemoptysis	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Sore throat	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Runny nose (Rhinorrhoea)	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Ear pain	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Wheezing	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Chest pain	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Muscle aches (Myalgia)	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Joint pain (Arthralgia)	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Fatigue / Malaise	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Shortness of breath (Dyspnea)	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown

Lower chest wall indrawing	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Headache	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Altered consciousness/confusion	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Seizures	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Abdominal pain	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Vomiting / Nausea	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Diarrhoea	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Conjunctivitis	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Skin rash	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Skin ulcers	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Lymphadenopathy	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
Bleeding (Haemorrhage)	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Unknown
If Bleeding: specify site(s):	_____
	_____
	_____

## CORE CASE RECORD FORM

**PATHOGEN TESTING:**
**Was pathogen testing done during this illness episode?**  YES (*complete section*)  NO  N/A

**Influenza :**  YES- Confirmed  YES- Probable  NO **If YES:**  A/H3N2  A/H1N1pdm09  A/H7N9  
 A/H5N1  A, not typed  B  Other: \_\_\_\_\_

**Coronavirus:**  YES- Confirmed  YES- Probable  NO **If YES:**  Novel CoV  MERS CoV  
 Other CoV: \_\_\_\_\_

**RSV:**  YES- Confirmed  YES- Probable  NO

**Adenovirus:**  YES- Confirmed  YES- Probable  NO

**Bacteria :**  Yes – confirmed :  No

**Other Infectious Respiratory diagnosis:**  YES- Confirmed  YES- Probable  NO

**If yes Other Infectious Respiratory diagnosis, specify:** \_\_\_\_\_

**Clinical pneumonia:**  YES  NO  Unknown **If NONE OF THE ABOVE: Suspected Non-infective:**  YES  N/A

Collection Date (DD/MM/YYYY)	Biospecimen Type	Laboratory test Method	Result	Pathogen Tested/Detected
___/___/20__	<input type="checkbox"/> Nasal/NP swab <input type="checkbox"/> Throat swab <input type="checkbox"/> Combined nasal/NP+throat swab <input type="checkbox"/> Sputum <input type="checkbox"/> BAL <input type="checkbox"/> ETA <input type="checkbox"/> Urine <input type="checkbox"/> Feces/rectal swab <input type="checkbox"/> Blood <input type="checkbox"/> Other, Specify: _____	<input type="checkbox"/> PCR <input type="checkbox"/> Culture <input type="checkbox"/> Other, Specify: _____	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> N/A	_____
___/___/20__	<input type="checkbox"/> Nasal/NP swab <input type="checkbox"/> Throat swab <input type="checkbox"/> Combined nasal/NP+throat swab <input type="checkbox"/> Sputum <input type="checkbox"/> BAL <input type="checkbox"/> ETA <input type="checkbox"/> Urine <input type="checkbox"/> Feces/rectal swab <input type="checkbox"/> Blood <input type="checkbox"/> Other, Specify: _____	<input type="checkbox"/> PCR <input type="checkbox"/> Culture <input type="checkbox"/> Other, Specify: _____	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> N/A	_____
___/___/20__	<input type="checkbox"/> Nasal/NP swab <input type="checkbox"/> Throat swab <input type="checkbox"/> Combined nasal/NP+throat swab <input type="checkbox"/> Sputum <input type="checkbox"/> BAL <input type="checkbox"/> ETA <input type="checkbox"/> Urine <input type="checkbox"/> Feces/rectal swab <input type="checkbox"/> Blood <input type="checkbox"/> Other, Specify: _____	<input type="checkbox"/> PCR <input type="checkbox"/> Culture <input type="checkbox"/> Other, Specify: _____	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> N/A	_____
___/___/20__	<input type="checkbox"/> Nasal/NP swab <input type="checkbox"/> Throat swab <input type="checkbox"/> Combined nasal/NP+throat swab <input type="checkbox"/> Sputum <input type="checkbox"/> BAL <input type="checkbox"/> ETA <input type="checkbox"/> Urine <input type="checkbox"/> Faeces/rectal swab <input type="checkbox"/> Blood <input type="checkbox"/> Other, Specify: _____	<input type="checkbox"/> PCR <input type="checkbox"/> Culture <input type="checkbox"/> Other, Specify: _____	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> N/A	_____
___/___/20__	<input type="checkbox"/> Nasal/NP swab <input type="checkbox"/> Throat swab <input type="checkbox"/> Combined nasal/NP+throat swab <input type="checkbox"/> Sputum <input type="checkbox"/> BAL <input type="checkbox"/> ETA <input type="checkbox"/> Urine <input type="checkbox"/> Feces/rectal swab <input type="checkbox"/> Blood <input type="checkbox"/> Other, Specify: _____	<input type="checkbox"/> PCR <input type="checkbox"/> Culture <input type="checkbox"/> Other, Specify: _____	<input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> N/A	_____