COVID-19 rapid guideline: acute myocardial injury
(Last update: 23 April 2020)

Adult with known or suspected COVID-19, without known pre-existing cardiovascular disease

Symptoms or signs (chest pain, palpitation, severe fatigue, shortness of breath) leading to clinical suspicion of acute myocardial injury

Perform diagnostic tests
- Measure high sensitivity troponin I (hs-cTnI) or T (hs-cTnT)
- Measure NT-proBNP
- Perform an ECG

Use the following to inform a diagnosis
- Evolving ECG changes suggesting myocardial ischaemia
- NT-proBNP level above 400 ng/litre
- High levels of high sensitivity troponin (hs-cTnI or hs-cTnT), particularly levels increasing over time (elevated troponin levels may reflect cardiac inflammatory response to severe illness rather than acute coronary syndrome and should be considered in the clinical context)

Monitoring
- Monitor in a setting where cardiac or respiratory deterioration can be rapidly identified
- Perform continuous ECG monitoring
- Monitor blood pressure, heart rate and fluid balance

Clear diagnosis
- Acute coronary syndrome
- Arrhythmias
- Cardiogenic shock
- Cardiomyopathy
- Heart failure
- Myocarditis
- Pericarditis and pericardial effusion

Seek specialist cardiology advice on treatment, further tests and imaging
Follow local treatment protocols

High clinical suspicion but without a clear diagnosis
Repeat high sensitivity troponin and ECG daily to monitor the course of the illness and establish a clear diagnosis

Seek specialist cardiology advice on further investigations, such as transthoracic echocardiography, and their frequency