

## Myocarditis Brighton Collaboration Case Definition

Pericarditis Will Be Integrated Once WG Approves Draft Release in Coming Days

**Early Draft Release Under Brighton's Pandemic Emergency Response Process**

**(Click link below to register for frequent updates and to provide comments to help improve the draft case definition)**

<https://brightoncollaboration.us/myocarditis-case-definition-update/>

Brighton Collaboration

Myocarditis Case Definition (Pandemic Emergency Response Process\_Draft Release)

Level of Certainty (LOC) Classification

Version\_1.4.2\_30.May.2021

<b>Myocarditis_Level of Certainty - 1 (Definitive Case) (Pandemic Emergency Response Process_Draft Release)</b>	
<b>Histopathologic examination of myocardial tissue (autopsy or endomyocardial biopsy) showed myocardial inflammation</b>	
<b>OR</b>	
<b>Elevated myocardial biomarkers (at least 1 of the findings below)</b> Troponin T Troponin I	
<b>AND</b>	
<b>Abnormal Imaging study</b>	
<b>Abnormal Cardiac Magnetic Resonance Study (at least 1 of the findings below)</b> Edema on T2 weighted study, typically patchy in nature Late gadolinium enhancement on T1 weighted study with an increased enhancement ratio between myocardial and skeletal muscle typically involving at least one non-ischemic regional distribution with recovery (myocyte injury).	
<b>OR</b>	
<b>Abnormal Echocardiogram (at least 1 of the findings below)</b> New focal or diffuse left or right ventricular function abnormalities (eg. decreased ejection fraction) Segmental wall motion abnormalities Global systolic or diastolic function depression/abnormality Ventricular dilation Wall thickness change Intracavitary thrombi	

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**Clinical Symptoms**

**Cardiac Symptoms (at least 1 finding below)**

- Acute chest pain or pressure
- Palpitations
- Dyspnea after exercise or lying down
- Diaphoresis
- Sudden death

**OR**

**Non-Specific Symptoms (at least 2 findings below)**

- Fatigue
- Gastrointestinal symptoms (nausea, vomiting, abdominal pain)
- Dizziness/Syncope
- Edema
- Cough

**OR**

**Infants and young children (at least 2 findings below)**

- Irritability
- Vomiting
- Poor feeding
- Tachypnea
- Lethargy

**AND**

**Testing supporting diagnosis (Biomarkers, ECHO, and EKG)**

**Elevated myocardial biomarkers (at least 1 of the findings below)**

- Troponin T
- Troponin I
- CK Myocardial band

**OR**

**Echocardiogram (ECHO) abnormalities (at least 1 of the findings below)**

- New focal or diffuse left or right ventricular function abnormalities (eg. decreased ejection fraction)
- Segmental wall motion abnormalities
- Global systolic or diastolic function depression/abnormality
- Ventricular dilation
- Wall thickness change
- Intracavitary thrombi

**OR**

**Electrocardiogram (EKG) abnormalities (at least 1 of the findings below)**

- ST-segment or T-wave abnormalities (elevation or inversion)
- Paroxysmal or sustained atrial or ventricular arrhythmias (premature atrial or ventricular beats, and/or supraventricular or ventricular tachycardia, interventricular conduction delay, abnormal Q waves, low voltages)
- AV nodal conduction delays or intraventricular conduction defects (atrioventricular block (grade I-III), new bundle branch block)
- Continuous ambulatory electrocardiographic monitoring that detects frequent atrial or ventricular ectopy

**AND**

**NO Alternative etiology for symptoms**

**Myocarditis\_Level of Certainty - 3 (Possible Case) (Pandemic Emergency Response Process\_Draft Release)**

**Clinical Symptoms**

**Cardiac symptoms (at least 1 finding below)**

- Acute chest pain or pressure
- Palpitations
- Dyspnea after exercise or lying down
- Diaphoresis
- Sudden death

**OR**

**Non-Specific Symptoms (at least 2 findings below)**

- Fatigue
- Abdominal pain
- Dizziness/syncope
- Edema
- Cough

**OR**

**Infants/Young children (at least 2 findings below)**

- Irritability
- Vomiting
- Poor feeding
- Tachypnea
- Lethargy

**AND**

**Biomarkers supporting evidence of inflammation (at least 1 finding below)**

- Elevated CRP
- Elevated ESR
- Elevated D-Dimer

**AND**

**Non-Specific Electrocardiogram (EKG) Abnormalities (at least 1 finding below)**

- ST-segment or T-wave abnormalities (elevation or inversion)
- PAC
- PVC

**AND**

**NO Alternative etiology for symptoms**