Australian Paediatric Surveillance Unit **PAEDIATRIC INFLAMMATORY MULTISYSTEM SYNDROME TEMPORALLY ASSOCIATED WITH SARS-COV-2** Please contact the APSU by email SCHN-APSU@health.nsw.gov.au if you have any questions about this form	*APSU Office Use Only* *Study ID #:*
Instructions: Please answer each question by ticking the appropriate box or writing your response in the space provided. DK=Don't Know; NA = Not Applicable.	*Version 1.1_07/02/2023*

PIMS-TS CASE DEFINITION (please tick all that apply)

Children and adolescents (up to 18 years of age) with fever ≥3 days **AND** two of the following:

- ☐ Rash or bilateral non-purulent conjunctivitis or muco-cutaneous inflammation signs (oral, hands or feet)
- ☐ Age specific hypotension or "shock" within first 24 hours of presentation
- ☐ Features of myocardial dysfunction, pericarditis, valvulitis, or coronary abnormalities (including ECHO findings or elevated Troponin/NT-proBNP),
- ☐ Evidence of coagulopathy (by PT, PTT, elevated d-Dimers)
- ☐ Acute gastrointestinal problems (diarrhoea, vomiting, or abdominal pain) **AND**

  Elevated markers of inflammation such as ESR, C-reactive protein, or procalcitonin **AND**

  Exclusion of other infectious causes of inflammation, including bacterial sepsis, staphylococcal or streptococcal toxic shock syndromes **AND**

  Evidence of SARS-CoV-2 infection including one or more of: positive RT-PCR or antigen test or confirmed positive SARS-CoV-2 serology (noting testing may be delayed, particularly serology. If all other criteria are met, collect data pending results) ***OR*** contact with a confirmed COVID-19 case.

REPORTING CLINICIANS DETAILS

Dr Name:	_____	Phone:	_____
APSU Code (if known):	_____	Email:	_____
Hospital:	_____	Date case report form completed:	__ __/__ __/__ __ __ __
Has this child been reported via PAEDS?	☐ Yes ☐ No ☐ Don't Know		

PATIENT DETAILS

First 2 letters of first name:	__ __
First 2 letters of surname:	__ __
Date of Birth:	__ __/__ __/__ __ __ __
Sex:	☐ Male ☐ Female
Postcode of family:	__ __ __ __
Country of birth:	☐ Australia ☐ Other, specify: _____ ☐ DK
Is the child of Aboriginal or Torres Strait Islander origin?	☐ Aboriginal ☐ Torres Strait Islander ☐ Both Aboriginal and Torres Strait Islander ☐ No ☐ Don't know
Mother's country of birth:	_____ ☐ DK
Father's country of birth:	_____ ☐ DK

SECTION 2: Medical History

Was the child born pre-term (<37 weeks)?	☐ Yes ☐ No ☐ Unknown
Does the child have a history of:	
- Airway/respiratory disease?	☐ Yes ☐ No ☐ Unknown
If Yes, specify:	_____
- Cardiac disease?	☐ Yes ☐ No ☐ Unknown
If Yes, specify:	_____
- Neurological disease?	☐ Yes ☐ No ☐ Unknown
If Yes, specify:	_____
- Immunodeficiency or immunocompromised?	☐ Yes ☐ No ☐ Unknown
If Yes, specify:	_____

- Diabetes? ☐ Yes ☐ No ☐ Unknown

- Other significant medical history? ☐ Yes ☐ No ☐ Unknown

If Yes, specify: _____

_____

SECTION 3: Vaccination History

COVID-19 Vaccination History

How many doses of COVID-19 vaccine has the child received? ☐ None ☐ 1 ☐ 2 ☐ 3 ☐ Unknown

COVID-19 vaccine dose 1 brand: ☐ Comirnaty (Pfizer) ☐ Spikevax (Moderna) ☐ Unknown

Date of COVID-19 vaccine dose 1: __ __/__ __/__ __ __ __

COVID-19 vaccine dose 2 brand: ☐ Comirnaty (Pfizer) ☐ Spikevax (Moderna) ☐ Unknown

Date of COVID-19 vaccine dose 2: __ __/__ __/__ __ __ __

COVID-19 vaccine dose 3/booster brand: ☐ Comirnaty (Pfizer) ☐ Spikevax (Moderna) ☐ Unknown

Date of COVID-19 vaccine dose 3/booster date: __ __/__ __/__ __ __ __

Additional comments: _____

_____

SECTION 5: Presentation

Presenting Clinical Features

Date of onset of first symptom or sign? *(associated with suspected PIMS-TS)* __ __/__ __/__ __ __ __

Date of onset of fever (≥38.0 ºC): __ __/__ __/__ __ __ __

Clinical Feature	Please tick all that apply			Was it present:	
Rash	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Breathing difficulty	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Abdominal pain	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Diarrhoea	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Vomiting	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Oedema	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Joint pain	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Muscle pain	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Headache	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Anosmia *(loss of smell)*	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Hypogeusia *(loss of taste)*	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Conjunctival injection	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Mucosal changes *(strawberry tongue, red lips, pharyngeal erythema)*	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Peripheral cutaneous inflammation signs *(hands & feet)*	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Lymphadenopathy	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Shock	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time
Age specific hypotension	☐ Yes	☐ No	☐ Unknown	☐ At onset	☐ At any time

Additional comments

Any significant information relating to presentation that is not captured above? _____

_____

_____

SECTION 6: SARS-CoV-2 & Pathogen Testing

SARS-CoV-2 Testing

Polymerase chain reaction (PCR) assay:	☐ Positive	☐ Negative	☐ Not done
Date of PCR:	__ __/__ __/__ __ __ __		
Rapid Antigen Test (RAT):	☐ Positive	☐ Negative	☐ Not done
Date of RAT:	__ __/__ __/__ __ __ __		
COVID-19 test (unknown if PCR or RAT):	☐ Positive	☐ Negative	☐ Not done
Date of COVID-19 test (Unknown if PCR or RAT):	__ __/__ __/__ __ __ __		
SARS-CoV-2 NCP Ab Test:	☐ Positive	☐ Negative	☐ Indeterminant
Date of SARS-CoV-2 NCP Ab Test:	__ __/__ __/__ __ __ __		
SARS-CoV-2 Spike Ab Test:	☐ Positive	☐ Negative	☐ Indeterminant
Date of SARS-CoV-2 Spike Ab Test:	__ __/__ __/__ __ __ __		
Other SARS-CoV-2 assay *(e.g. ELISA, neutralisation test)*	☐ Positive	☐ Negative	☐ Not done
Specify other SARS-CoV-2 assay: *(Test type. site of specimen, titre)*	_____		
Date of other SARS-CoV-2 assay:	__ __/__ __/__ __ __ __		

Co-pathogen detection

Were any other pathogens detected? *(other than SARS-CoV-2)*	☐ Yes	☐ No
Date of sample:	__ __/__ __/__ __ __ __	
State pathogen:	_____	

SECTION 7: Investigations

Chest imaging

Was chest x-ray performed? *(standard chest x-ray - not CT or MRI)*	☐ Yes	☐ No	☐ Unknown
If yes, findings (copy & paste report conclusions):	_____		
Was other chest imaging performed? *(e.g. CT or MRI of the chest)*	☐ Yes	☐ No	☐ Unknown
Specify the details of other chest imaging: *(date, type of chest imaging, conclusions)*	_____		

Haematology

Please record the worst available results in the first 7 days.

Test	Requested		Result
Haemoglobin assay	☐ Yes	☐ Not done	(g/L)
White cell count	☐ Yes	☐ Not done	(x10^9/L)
Platelet count	☐ Yes	☐ Not done	(x10^9/L)
Neutrophil count	☐ Yes	☐ Not done	(x10^9/L)
Lymphocyte count	☐ Yes	☐ Not done	(x10^9/L)
Monocyte count	☐ Yes	☐ Not done	(x10^9/L)
Eosinophil count	☐ Yes	☐ Not done	(x10^9/L)
Fibrinogen	☐ Yes	☐ Not done	(g/L)
d-Dimer	☐ Yes	☐ Not done	(ng/mL)
Prothrombin time	☐ Yes	☐ Not done	(seconds)
Erythrocyte sedimentation rate (ESR)	☐ Yes	☐ Not done	(mm/hour)

Biochemistry

Please record the worst available results in the first 7 days.

Test	Requested		Result
Urea	☐ Yes	☐ Not done	(mmol/L)
Creatinine	☐ Yes	☐ Not done	(IU/L)
Alanine Aminotransferase (ALT)	☐ Yes	☐ Not done	(IU/L)
Aspartate aminostransferase (AST)	☐ Yes	☐ Not done	(IU/L)
Gamma-glutamyl transferase (GGT)	☐ Yes	☐ Not done	(IU/L)
Bilirubin	☐ Yes	☐ Not done	(umol/L)
Albumin	☐ Yes	☐ Not done	(umol/L)
C Reactive Protein (CRP)	☐ Yes	☐ Not done	(mg/L)
Procalcitonin (PCT)	☐ Yes	☐ Not done	(ng/mL)
Ferritin	☐ Yes	☐ Not done	(mcg/L)
Troponin T	☐ Yes	☐ Not done	(ng/L)
Troponin I	☐ Yes	☐ Not done	(ng/L)
Brain natriuretic peptide (BNP)	☐ Yes	☐ Not done	(pg/mL)
NT-pro-BNP	☐ Yes	☐ Not done	(pg/mL)
Lactate dehydrogenase (LDH)	☐ Yes	☐ Not done	(IU/L)
Creatine Kinase (CK)	☐ Yes	☐ Not done	(IU/L)
Soluble interleukin-2 receptor (sCD-25)	☐ Yes	☐ Not done	(IU/L)

Echocardiogram

Did the child have an echocardiogram during their admission? (Acute echocardiogram) ☐ Yes ☐ No ☐ Unknown

If yes, was it: ☐ Normal ☐ Abnormal ☐ Unknown

If abnormal, was there: ☐ Coronary artery abnormality ☐ Myocardial dysfunction

Additional comments

Any significant information relating to investigations that was not captured above _____

SECTION 8: Treatment and Supportive Care

Treatment

Which of the following treatments did the child receive?

- Antibiotics: ☐ Yes ☐ No

  If Yes, specify: _____

  ☐ Oral ☐ Parenteral (IM/IV)

- Antivirals: ☐ Yes ☐ No

  If Yes, specify: _____

- Corticosteroids: ☐ Yes ☐ No

  If Yes, specify: ☐ Oral ☐ Parenteral (IM/IV) ☐ Inhaled ☐ Topical

  Specify route: _____

  Specify corticosteroid maximum daily dose: _____

- Intravenous immunoglobulin (IVIG): ☐ Yes ☐ No

  Specify other brand of IVIG: _____

  Specify IVIG dose: _____ (grams/kg)

  Number of days of IVIG treatment: _____ (round up days)

- Aspirin:	☐ Yes ☐ No
Dose:	_____ (mg/kg)
- Anticoagulants?	☐ Yes ☐ No
If Yes, specify anticoagulant:	_____
Specify route:	☐ Oral ☐ Parenteral (IM/IV)
- Specify other specific treatment(s): (specify treatment, route & dose)	_____

Supportive care - including intensive care support

Was the child admitted to intensive care or high dependency unit? (ICU or HDU)	☐ Yes ☐ No
Date of ICU admission:	__ __/__ __/__ __ __ __
Date of ICU discharge:	__ __/__ __/__ __ __ __
Highest level of respiratory support required:	☐ Invasive ventilation ☐ Non-invasive ventilation CPAP or BiPAP ☐ High flow nasal prongs ☐ None of the above (During ICU admission)
Unit of oxygen supplementation:	☐ Oxygen (L/min) ☐ FiO2 oxygen (%) ☐ No oxygen (During ICU admission)

At any time during this illness did the child receive?

Inotropes/vasopressors:	☐ Yes ☐ No ☐ Unknown
If yes, specify the inotrope/vasopressor(s):	_____
Extracorporeal (ECMO) support:	☐ Yes ☐ No ☐ Unknown
Plasma exchange:	☐ Yes ☐ No ☐ Unknown
Blood transfusion:	☐ Yes ☐ No ☐ Unknown

Additional Comments

Any significant information relating to treatment or supportive care that was not captured above	_____ _____

SECTION 9: Discharge & Case Completion

What was the child's discharge status?	☐ Discharged ☐ Transferred to other hospital ☐ Still hospitalised at 60 days ☐ Deceased*
Date of death	__ __/__ __/__ __ __ __
Date of discharge or hospital transfer	__ __/__ __/__ __ __ __
Length of stay (days)	_____

Thank you for your help with this research project.

Please return this case report form to the APSU via email to SCHN-APSU@health.nsw.gov.au
or fax to 02 9845 3082, or mail to Australian Paediatric Surveillance Unit, Kids Research, Locked Bag 4001, Westmead NSW 2145
- even if you don't complete all items.

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and Faculty of Medicine and Health, The University of Sydney.
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This study has been approved by a Human Research Ethics Committee properly constituted under NHMRC guidelines.