

North American COVID-19 MS Clinical Database

This COViMS (COVID-19 Infections in MS & Related Diseases) is a joint effort of the US National MS Society and the Consortium of MS Centers to capture information on outcomes of people with MS and other CNS demyelinating diseases (Neuromyelitis Optica Spectrum Disease, or MOG antibody disease) who have developed COVID-19.

We ask you to register any appropriate patient, regardless of severity (including asymptomatic patients detected through screening). Please report only after a minimum of 7 days and sufficient time has passed to observe the disease course through resolution of acute illness or death. Reporting a case to this database should take approximately 10 minutes.

We hope to capture outcomes of COVID-19 in people with CNS demyelinating diseases (MS, Neuromyelitis Optica Spectrum Disorder, or MOG antibody disease).

Definitions:

- Laboratory Confirmed COVID-19 - Positive viral RNA tests or positive serology for SARS-CoV-2
- Suspected COVID-19 but not confirmed - Fever with Dry cough, +/- anorexia, myalgias, dyspnea, anosmia/ageusia and potential exposure.

This registry has received "non-human research status" from the Washington University in St. Louis IRB. The database contains only de-identified data, in accordance with HIPAA Safe Harbor De-Identification standards. Please note: You can save your answers and return, but once "submit" is clicked, you cannot return to update or change any information submitted. The COViMS clinical database uses Branch Logic. Click "reset" if you make a mistake.

After you submit your report, you will not be able to edit the entry any longer. A copy of your entry will be available for download after you submit the entry.

Fields marked with a red asterisk (*) are required.

If you have any questions, please reach out to info@COviMS.org

Thank you!

Name of Reporter

Email Address of Reporter

Name of Physician Providing Care for MS

Name of Center/Practice Providing Care for MS

BASELINE DATA

Gender

- Male
 Female
 Non-binary

Age

(years)

Race

- White
 Black or African American
 Asian
 American Indian, Alaska Native or Indigenous
Canadian
 Native Hawaiian or Other Pacific Islander
 Other
 Unknown

Please specify

- Asian Indian
 Japanese
 Chinese
 Korea
 Guamanian or Chamorro
 Filipino
 Vietnamese
 Samoan
 Other Asian (i.e, Thai, Pakistani, Cambodian)
 Unknown

Other race

Ethnicity

- Hispanic or Latino
 Not Hispanic or Latino
 Unknown
 Other

Other Ethnicity

Height

- Feet/Inches
 Centimeters
 Unknown

Height (feet)

- 1
 2
 3
 4
 5
 6
 7
(ft)

Height (in) 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
(in)

Height (in cm) _____
(cm)

Weight Pounds
 Kilograms
 Unknown

Weight (in lb) _____
(lb)

Weight (in Kg) _____
(Kg)

Smoking History and Use

	Never	Past	Current	Unknown
Cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cigars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cannabis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vaping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

MS HISTORY

Year Onset of Symptoms _____
(YYYY)

MS or other demyelinating disease type CIS
 Confirmed MS
 Neuromyelitis Optica Spectrum Disorder (NMOSD)
 MOG antibody Disorder (MOG = myelin oligodendrocyte glycoprotein)

MS type Relapsing/Remitting
 Primary Progressive
 Secondary Progressive
 Unknown

NMOSD Type NMO-IgG or Aquaporin-4 antibody -positive
 NMO-IgG or Aquaporin-4 antibody -negative
 Unknown

Ambulatory Status

Fully ambulatory
 Walk with Assistance
 Non-ambulatory

Taking DMT at time of COVID-19 infection?

Yes
 No
 Unknown

DMT at time of COVID-19

Alemtuzumab
 Azathioprine
 Cladribine
 Dimethyl fumarate
 Diroximel fumarate
 Eculizumab
 Fingolimod
 Glatiramer acetate
 Hematopoietic Stem Cell Transplant (HSCT)
 Interferon-beta
 IVIG
 Methotrexate
 Mitoxantrone
 Mycophenolate
 Natalizumab
 Ocrelizumab
 Ozanimod
 Rituximab
 Sarilumab, Satralizumab, or Tocilizumab
 Siponimod
 Teriflunomide
 Other

Other current DMT

Length of time on current DMT

< 6 months
 6 or more months

Immediately Prior DMT?

- Alemtuzumab
 - Azathioprine
 - Cladribine
 - Daclizumab
 - Dimethyl fumarate
 - Diroximel fumarate
 - Eculizumab
 - Fingolimod
 - Glatiramer acetate
 - Hematopoietic Stem Cell Transplant (HSCT)
 - Interferon-beta
 - IVIG
 - Methotrexate
 - Mitoxantrone
 - Mycophenolate
 - Natalizumab
 - Ocrelizumab
 - Ozanimod
 - Rituximab
 - Sarilumab, Satralizumab, or Tocilizumab
 - Siponimod
 - Teriflunomide
 - Other
 - None
 - Unknown
-

Other DMT

Glucocorticoid for treatment of demyelinating disease during the last 2 months?

- Yes
 - No
 - Unknown
-

COMORBIDITIES

Comorbidities

Cancer
 Cardiovascular disease
 Cerebrovascular disease
 Chronic kidney disease
 Chronic liver disease
 Chronic lung disease
 Chronic neurological and/or neuromuscular disease
 Diabetes
 Hypertension
 Immunodeficiency disease
 Morbid obesity

Does the patient have any of the comorbidities listed above?

- Yes
- No
- Unknown

Please indicate any comorbidities

- Cancer
- Cardiovascular disease
- Cerebrovascular disease
- Chronic kidney disease
- Chronic liver disease
- Chronic lung disease
- Chronic neurological and/or neuromuscular disease
- Diabetes
- Hypertension
- Immunodeficiency disease
- Morbid obesity
- Other

Other Comorbidity

Please indicate the specific chronic lung disease comorbidity (if known)

- Asthma
- Bronchiectasis
- Chronic bronchitis
- Cystic fibrosis
- Emphysema/COPD
- Pulmonary fibrosing disorders
- Pulmonary hypertension
- Pulmonary vasculitis

Type of cancer

	Currently Treated	Treated within in the past year	Treatment >1 year ago
Chemotherapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Radiation Therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pregnant

- Yes
- No

Post Partum (< 6 week)

- Yes
- No

COVID-19 Diagnosis

Country at time of COVID-19 onset:

- United States
- Canada
- Mexico
- Other

US state at time of COVID-19 onset

- Alabama - AL
- Alaska - AK
- American Samoa - AS
- Arizona - AZ
- Arkansas - AR
- California - CA
- Colorado - CO
- Connecticut - CT
- Delaware - DE
- District of Columbia - DC
- Federated States of Micronesia* - FM
- Florida - FL
- Georgia - GA
- Guam - GU
- Hawaii - HI
- Idaho - ID
- Illinois - IL
- Indiana - IN
- Iowa - IA
- Kansas - KS
- Kentucky - KY
- Louisiana - LA
- Maine - ME
- Marshall Islands* - MH
- Maryland - MD
- Massachusetts - MA
- Michigan - MI
- Minnesota - MN
- Mississippi - MS
- Missouri - MO
- Montana - MT
- Nebraska - NE
- Nevada - NV
- New Hampshire - NH
- New Jersey - NJ
- New Mexico - NM
- New York - NY
- North Carolina - NC
- North Dakota - ND
- Northern Mariana Islands - MP
- Ohio - OH
- Oklahoma - OK
- Oregon - OR
- Palau* - PW
- Pennsylvania - PA
- Puerto Rico - PR
- Rhode Island - RI
- South Carolina - SC
- South Dakota - SD
- Tennessee - TN
- Texas - TX
- Utah - UT
- Vermont - VT
- Virgin Island - VI
- Virginia - VA
- Washington - WA
- West Virginia - WV
- Wisconsin - WI
- Wyoming - WY

Canadian province at time of COVID-19 onset

- Alberta - AB
- British Columbia - BC
- Manitoba - MB
- New Brunswick - NB
- Newfoundland and Labrador - NL
- Northwest Territories - NT
- Nova Scotia - NS
- Nunavut - NU
- Ontario - ON
- Prince Edward Island - PE
- Quebec - QC
- Saskatchewan - SK
- Yukon - YT

Mexican state at time of COVID-19 onset

- Aguascalientes
- Baja California
- Baja California Sur
- Campeche
- Chiapas
- Chihuahua
- Coahuila
- Colima
- Distrito Federal
- Durango
- Guanajuato
- Guerrero
- Hidalgo
- Jalisco
- México
- Michoacán
- Morelos
- Nayarit
- Nuevo León
- Oaxaca
- Puebla
- Querétaro
- Quintana Roo
- San Luis Potosí
- Sinaloa
- Sonora
- Tabasco
- Tamaulipas
- Tlaxcala
- Veracruz
- Yucatán
- Zacatecas

Other country at time of COVID-19 onset

Year of COVID-19 diagnosis

- 2019
- 2020
- 2021

Type of COVID-19 Diagnosis

- Laboratory Positive
- Suspected COVID-19 but not confirmed

COVID-19 characteristic Lung Imaging
Such as ground-glass opacities or patchy shadowing,
fine reticular opacities, abnormalities mainly
bilateral, with a peripheral distribution, and
involving the lower lobes.

- Yes
 No
-

Please specify the approximate number of days
of symptoms from COVID-19 (if known)

- 0
 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21+
-

Symptoms

(check all that apply)

- Fever
 Dry cough
 Fatigue
 Pain (joint, bone, muscle)
 Sore throat
 Shortness of breath
 Chills
 Ageusia (loss of taste)
 Anosmia (loss of smell)
 Headache
 Neurological
 Diarrhea
 Productive cough
 Other
 Asymptomatic
 Unknown
-

Other symptoms

Type of neurological symptoms

- Cognitive dysfunction / mental status decline
 Visual Dysfunction
 Cranial nerve dysfunction
 Motor/strength dysfunction
 Sensory dysfunction
 Incoordination/ cerebellar dysfunction
 Decreased Bowel-Bladder Function
 Other (seizures, spasms, etc.)
 Unknown
-

Other Neurological symptoms

COVID-19 Severity

	Yes	No	Unknown
Hospitalized?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Admitted to ICU?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ventilation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ECMO?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Length of Hospital Stay

- 1 - 3 days
 4 - 6 days
 7 - 9 days
 10 - 12 days
 13 - 15 days
 16 - 18 days
 19 - 21 days
 22 - 24 days
 25 - 27 days
 28 - 30 days
 30+ days
 Unknown

Ventilation type?

- Invasive
 Non-invasive

Outcome

- Recovered
 Not recovered
 Death
 Symptoms never developed(Positive Laboratory Test Only)
 Unknown

Cause of death

COVID-19 TREATMENTS

COVID-19 Treatments

- Antiviral
 Chloroquine
 Hydroxychloroquine
 Other Anti Inflammatory Agent
 Azithromycin
 Other Antibiotics
 Systemic Glucocorticoids
 Oxygen Therapy
 Intravenous Immunoglobulins (IVIG)
 Convalescent Plasma
 Tocilizumab or other anti-IL6 or anti-IL6 receptor therapy
 No medications and/or investigational therapies were used
 Other
 Unknown

Antiviral name

- Remdesivir
 Oseltamivir
 Lopinavir/ritonavir
 Other
 Unknown

Other antiviral name

Other inflammatory agent

Other antibiotic

Other treatment

COVID-19 RADIOLOGICAL DATA

Chest imaging done?

- Yes
 No
 Unknown

Chest imaging type

- X-ray
 CT
 MRI
 Other

Other chest imaging

Results of chest imaging

- Normal
 Abnormal

Abnormal result

- Ground glass
 Interstitial abnormalities
 Consolidation
 Patchy shadowing
 Pneumonia

Was the pneumonia unilateral or bilateral?

- Unilateral
 Bilateral

Additional Description:

LABORATORY DATA BEFORE COVID-19

Last white blood cell count before COVID-19 diagnosis

- Normal or NCS
 Abnormal and CS
 Not done

NCS=Not Clinically Significant
CS=Clinically Significant

White blood cell count abnormal

- Abnormal - LOW
 Abnormal - HIGH

Last lymphocyte count before COVID-19 diagnosis

- Normal or NCS
 Abnormal and CS
 Not done

Lymphocyte count abnormal

- Abnormal - LOW
- Abnormal - HIGH

EKG

- Normal
- Abnormal
- Not done

Echocardiogram

- Normal
 - Abnormal
 - Not done
-