# Enter Public Reports - Suppression Cohort

The data presented in the following reports reflect the NNTC central database as of July 21, 2025

#### **Usage Statement**

Distribution of the data contained in this report through publication or presentation should be reported to the Data Coordinating Center. Reporting usage of the NNTC resources helps to ensure continuation of this valuable resource!

The NNTC is directly funded by the NIMH, NIA, NIDA, and NINDS.

Questions regarding these data should be directed to the Data Coordinating Center

The Emmes Company

Rockville, MD

nntc@emmes.com



#### **Table of Contents**

#### **Suppressed Cohort Overview: PWH**

Cohort Enrollment & Study Status

**CNS Specimens Available** 

Peripheral Specimens Available

Fluids Available (%)

**Demographics** 

cART Era Demographics

**HIV Characteristics** 

cART Era Viral Load

Pathological Conditions: Year of Autopsy

Last Psychiatric Diagnosis

Baseline Psychiatric Diagnosis

Cognitive Diagnosis (%)

Change in Cognitive Diagnosis

Neurologic Diagnoses

**Concomitant Medications** 

**Ancillary Lab Measurements** 

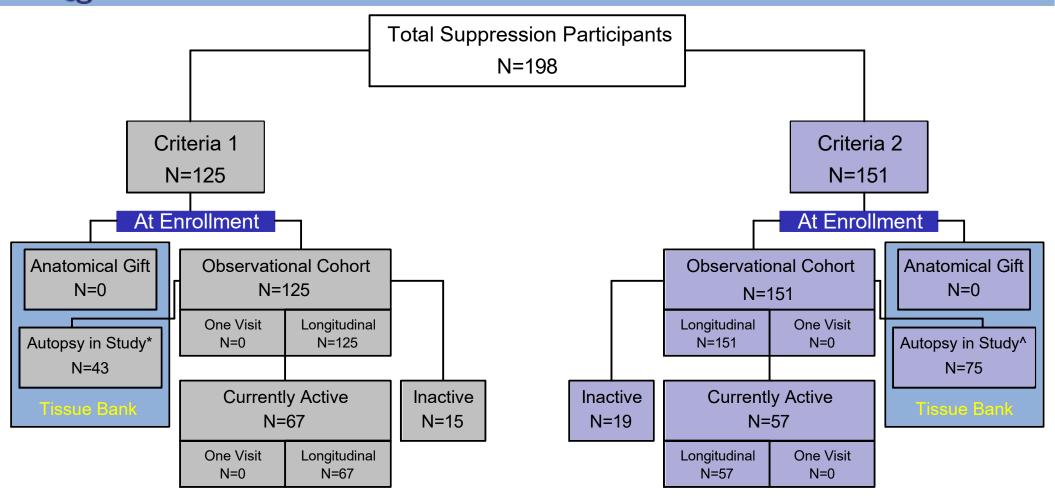
Click on a content link to navigate to the corresponding slide. To return to the Table of Contents from anywhere in the report, click on the NNTC logo found on each slide in the upper left corner.



# Suppression Cohort Overview



# Suppression Cohort Overview



#### Total number of suppressed active cases is 86. The total number of suppressed autopsy cases is 85. The total number of suppressed inactive cases is 27.

Criteria 1: Participants have been followed for at least 5 years. There must be at least 1 undetectable viral load within last 1 year, or 2 undetectable viral loads within last 2. Over last 5 year period, there must be at least 4 undetectable viral loads. Note that "blips" of detectable virus are allowed, however these must be <1000 copies/mL during this 5 year period.

Criteria 2: Participants have been followed for at least 2 years. There must be at least 1 undetectable viral load within last 6 months. Note that "blips" of detectable virus are allowed, however these must be <1000 copies/mL during this 2 year period.

Longitudinal Cohort: Participants enrolled with 2 or more study visits.

Tissue Bank: Participants deceased with autopsy.

78 cases meet both criteria. 33 autopsy cases met both criteria.

Inactive cases are either lost to follow-up/administratively censored/withdrawn (N=2) or deceased without autopsy (N=25).

- \* 0 autopsy cases included in Observational Cohort; 43 autopsy cases included in Longitudinal Cohort.
- ^0 autopsy cases included in Observational Cohort; 75 autopsy cases included in Longitudinal Cohort.



#### CNS Specimens Available

| Type:               | PWH |
|---------------------|-----|
| Frozen Brain        | 81  |
| Fixed Brain         | 77  |
| Spinal Cord         | 75  |
| Cerebellum          | 67  |
| Brain Stem          | 66  |
| Frontal Lobe        | 65  |
| Parietal Lobe       | 64  |
| Occipital Lobe      | 64  |
| Temporal Lobe       | 64  |
| Thalamus            | 60  |
| Basal Ganglia       | 57  |
| Dorsal Root Ganglia | 53  |
| Hippocampus         | 52  |
| Trigeminal Ganglia  | 24  |
| Occipital Pole      | 7   |

<sup>\*</sup>Several of the smaller brain categories listed were approved by the Steering Committee on 27JUN2017 to be reported centrally, and thus are currently underreported in the central inventory as sites work towards retrospectively updating specimen records. It is expected that the central inventory, including availability of these specimens, will continue to be updated prospectively.

21JUL2025

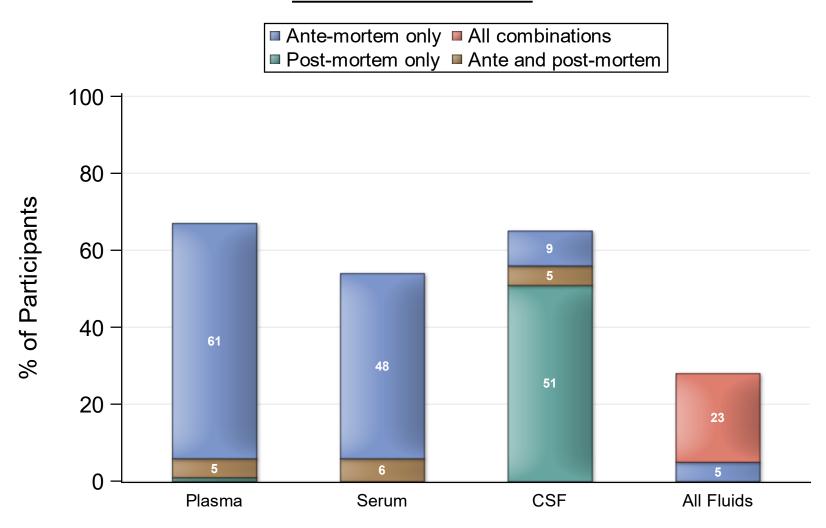


#### Peripheral Organ Specimens Available

| Type:            | PWH |
|------------------|-----|
| Heart            | 77  |
| Liver            | 76  |
| Spleen           | 73  |
| Kidney           | 70  |
| Lung             | 70  |
| Peripheral Nerve | 65  |
| Adipose Tissue   | 59  |
| Bone Marrow      | 58  |
| Muscle           | 58  |
| Lymph Node       | 53  |
| Bowel            | 42  |
| Pituitary Gland  | 32  |
| Testes           | 29  |
| Hair             | 4   |



#### Available Fluids



<sup>\*</sup>All-combinations (e.g., one specimen might be available ante-mortem while the other two might be ante- and post-mortem or any of the other 23 combinations where all 3 specimen availabilities are not the same).

Please note the totals listed above reflect only those cases who have a fixed brain specimen available and fluids collected within 1 year of death. Percentage labels not shown are 2% or less.

21JUL2025



#### Demographics\*

| <u>N</u>        | <u>78</u> |
|-----------------|-----------|
| Age             |           |
| Mean            | 61.3      |
| SD              | 9.2       |
|                 |           |
| 25th Percentile | 56        |
| Median          | 60        |
| 75th Percentile | 67        |

<sup>\*</sup>Cases with a fixed brain specimen available with a measurement at baseline and within 1 year of death.



#### Demographics cont.\*

|                           | <u>N</u> | <u>%</u> |
|---------------------------|----------|----------|
| Sex                       |          |          |
| Male                      | 58       | 74       |
| Female                    | 20       | 26       |
| Ethnicity Hispanic origin | 23       | 29       |
| Race                      |          |          |
| White                     | 38       | 49       |
| Black                     | 31       | 40       |
| Other                     | 9        | 12       |

<sup>\*</sup>Cases with a fixed brain specimen available.



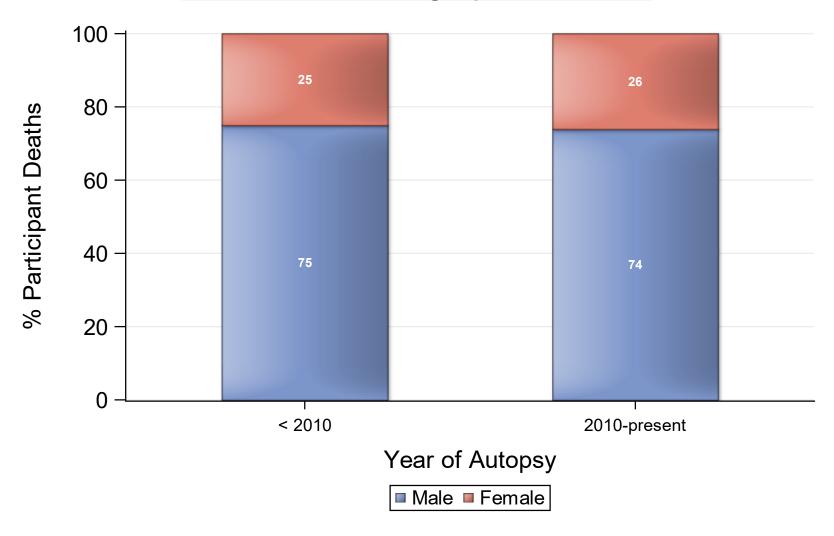
# Demographics cont.\*

|                                 | <u>N</u> | <u>%</u> |
|---------------------------------|----------|----------|
| Furthest Education              |          |          |
| 8th grade or less               | 4        | 5        |
| Some High School                | 19       | 25       |
| High School Gradudate           | 17       | 22       |
| Some College/Associate's Degree | 25       | 32       |
| College Graduate                | 5        | 6        |
| Advanced Degree work            | 7        | 9        |

<sup>\*</sup>Cases with a fixed brain specimen available.



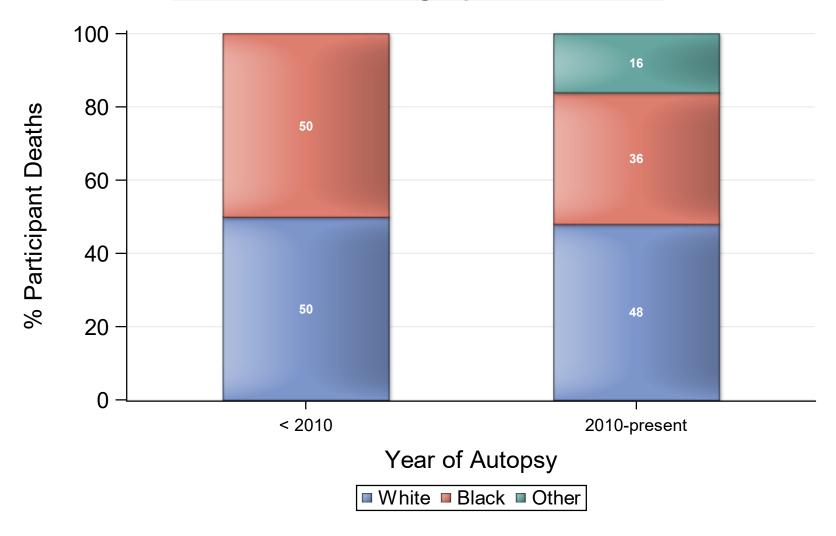
#### cART Era Demographics - Sex



<sup>\*</sup>The NNTC did not collect data before 1998.



#### cART Era Demographics - Race



<sup>\*</sup>The NNTC did not collect data before 1998.



## HIV Characteristics of autopsy cases\*

|                   | <u>N</u> | <u>%</u> |
|-------------------|----------|----------|
| Baseline HIV risk |          |          |
| IV drug use       | 26       | 33       |
| Male to male sex  | 35       | 45       |
| Heterosexual sex  | 16       | 21       |
| Other             | 1        | 1        |
| On ART            |          |          |
| at baseline       | 75       | 96       |
| at last visit     | 71       | 91       |

<sup>\*</sup>Cases with a fixed brain specimen available.



#### HIV Characteristics at time of death\*

#### CD4 Count (cells/mm<sup>3</sup>, N=70)

| 25th Percentile | 208 |
|-----------------|-----|
| Median          | 369 |
| 75th Percentile | 559 |

# Log Plasma Viral Load\* (log10 copies/mL, N=72)

| 25th Percentile | 1.39 |
|-----------------|------|
| Median          | 1.70 |
| 75th Percentile | 1.70 |

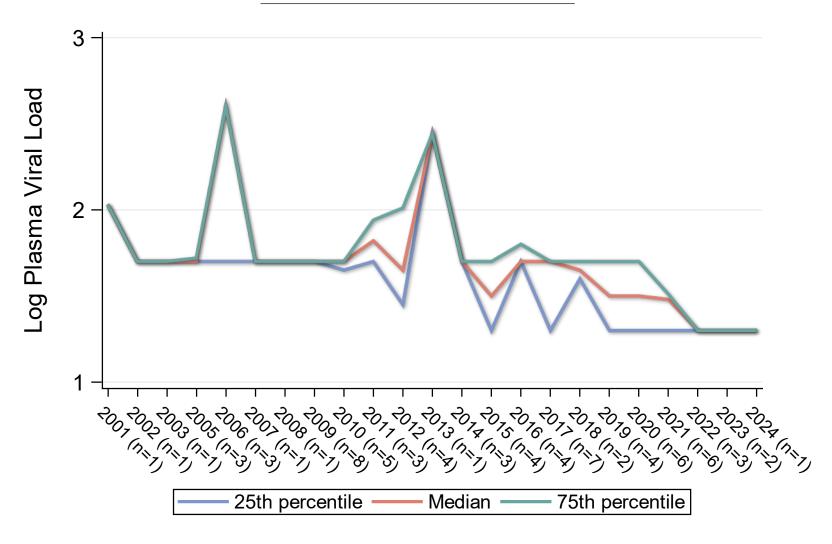
<sup>\*</sup>Cases with a fixed brain specimen available with a measurement at baseline and within 1 year of death.

<sup>\*\*</sup>Among those with known ARV medication status. 3 participants had detectable VL values of 0 where a viral log could not otherwise be calculated.

21JUL2025



#### cART Era Viral Load



<sup>\*</sup>Among those who have died during the cART era.

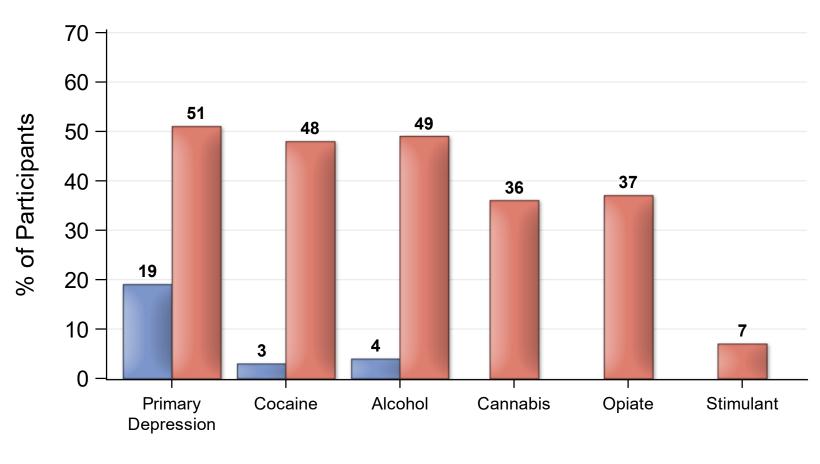


#### Pathological Conditions: Year of Autopsy

|  | Year of Autopsy |              |             |
|--|-----------------|--------------|-------------|
| Type:                                      | < 2010          | 2010-present | Total Cases |
| Total Fixed Specimens                      | 19              | 58           | 77          |
| Normal/minor neuropath changes             | 5 (26)          | 8 (14)       | 13 (17)     |
| Other non-infectious pathology             | 6 (32)          | 30 (53)      | 36 (47)     |
| Alzheimer's type 2 gliosis                 | 1 (5)           | 8 (14)       | 9 (12)      |
| Focal infarct                              | 8 (42)          | 19 (33)      | 27 (35)     |
| Hypoxic/ischemic damage                    | 5 (26)          | 15 (26)      | 20 (26)     |
| Aseptic Leptomeningitis                    | 2 (11)          | 9 (16)       | 11 (14)     |
| Microglial nodule encephalitis             | 0               | 1 (2)        | 1 (1)       |
| Hemorrhage-parenchymal                     | 0               | 8 (14)       | 8 (10)      |
| Progressive Multifocal Leukoencephalopathy | 0               | 1 (2)        | 1 (1)       |
| Other infections                           | 0               | 3 (5)        | 3 (4)       |



#### Last Psychiatric Diagnosis



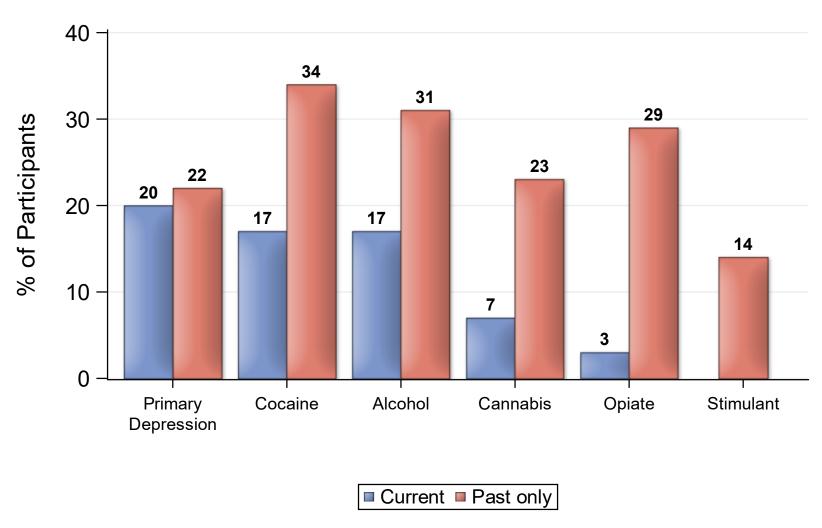
■ Current or Current+Past ■ Past Only

58% are Normal/Test Not Administered

\*Please note the totals listed above reflect only those cases who have a fixed brain specimen available and data from the PRISM/CIDI evaluation before death (N=77).



#### Baseline Psychiatric Diagnosis

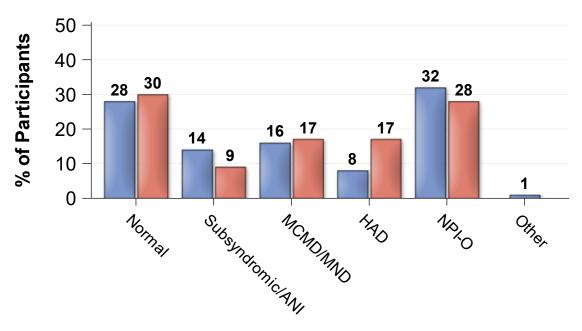


16% are Normal/Test Not Administered

\*Please note the totals listed above reflect only those cases who have a fixed brain specimen available and data from the PRISM/CIDI evaluation closest to baseline (N=77).



#### Cognitive Diagnosis



#### **Cognitive Diagnosis**

■ Baseline (N=74) ■ Last Diagnosis (N=54)

ANI = Asymptomatic Neurocognitive Impairment

MCMD = Minor Cognitive Motor Disorder

MND = Minor Neurocognitive Disorder

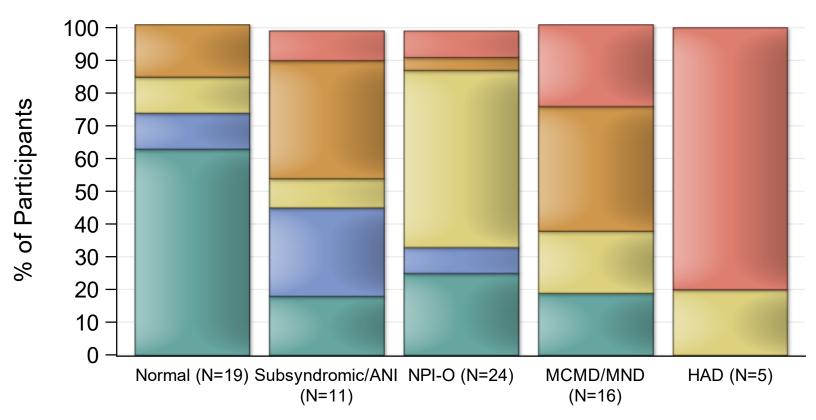
HAD = HIV-Associated Dementia

NPI-O = Neuropsychological Impairment - Other cause, not HIV

<sup>\*</sup>Please note the totals listed above reflect only those cases who have a fixed brain specimen available.



#### Change in Cognitive Diagnosis



#### **Baseline Diagnosis**





#### Neurologic Diagnoses\*

|                     | Las      | Last Dx  |             | eline            |
|---------------------|----------|----------|-------------|------------------|
|                     | <u>N</u> | <u>%</u> | <u>N</u>    | <u>%</u>         |
| Clinical Myelopathy | (N=      | :52)     | <u>(</u> N= | :73)             |
| HIV associated      | 4        | 8        | 5           | 7                |
| Other               | 0        | 0        | 2           | 3                |
| None                | 48       | 92       | 66          | 90               |
| Neuropathy          | (N=      | -46)     | <u>(</u> N= | <del>-</del> 62) |
| HIV associated DSP  | 33       | 72       | 30          | 48               |
| HIV/nucleoside      | 4        | 9        | 4           | 6                |
| None                | 9        | 20       | 28          | 45               |

<sup>\*</sup>Cases with a fixed brain specimen available.



#### Participants Reporting Concomitant Medications

| Medication  | # of Pts (N=76) | %    |
|---|-----------------|------|
| Central Nervous System Agents                       | 73              | 96.1 |
| Cardiovascular Drugs                                | 68              | 89.5 |
| Gastrointestinal Drugs                              | 68              | 89.5 |
| Vitamins  | 65              | 85.5 |
| Anti-infective Agents                               | 61              | 80.3 |
| Hormones and Synthetic Substitutes                  | 53              | 69.7 |
| Electrolytic, Caloric, and Water Balance            | 51              | 67.1 |
| Autonomic Drugs                                     | 49              | 64.5 |
| Skin and Mucous Membrane Agents                     | 41              | 53.9 |
| Blood Formation, Coagulation, and Thrombosis Agents | 38              | 50   |
| Miscellaneous Therapeutic Agents                    | 30              | 39.5 |
| Antihistamine Drugs                                 | 29              | 38.2 |
| Eye, Ear, Nose, and Throat (EENT) Preparations      | 29              | 38.2 |
| Respiratory Tract Agents                            | 22              | 28.9 |
| Antineoplastic Agents                               | 20              | 26.3 |
| Local Anesthetics                                   | 10              | 13.2 |
| Pharmaceutical Aids                                 | 9               | 11.8 |
| Serums, Toxoids, and Vaccines                       | 6               | 7.9  |
| Smooth Muscle Relaxants                             | 6               | 7.9  |
| No medication use reported on at least one occasion | 5               | 6.6  |



#### Ancillary Lab Measurements

| Ancillary Lab                                    | Total # records overall | % cohort with at least 1 measure | Total # cases<br>with baseline<br>measure | % cohort with baseline & one other measure |
|--|-------------------------|----------------------------------|---|--|
| Miscellaneous Hematology                         |                         |                                  |   |  |
| Red blood cells                                  | 296                     | 16                               | 6   | 8  |
| Mean Corpuscular Hemoglobin (MCH)                | 293                     | 16                               | 6   | 8  |
| Mean Corpuscular Volume (MCV)                    | 1373                    | 71                               | 49  | 64   |
| Mean Corpuscular Hemoglobin Concentration (MCHC) | 292                     | 14                               | 6   | 8  |
| Blood Red cell Distribution Width (RDW)          | 295                     | 16                               | 6   | 8  |
| Blood Rapid Plasma Reagin (RPR)                  | 121                     | 48                               | 19  | 19   |
| Blood Neutrophil Percent                         | 1317                    | 70                               | 49  | 64   |
| Blood Lymphocyte Percent                         | 1356                    | 70                               | 49  | 64   |
| Blood Monocyte Percent                           | 1319                    | 70                               | 49  | 64   |
| Blood Eosinophil Percent                         | 1318                    | 70                               | 49  | 64   |
| Blood Basophil Percent                           | 1315                    | 70                               | 49  | 64   |
| Blood Mean Platelet Volume (MPV)                 | 241                     | 12                               | 6   | 8  |
| Blood CD3 Percent                                | 16                      | 5                                | 2   | 1  |
| Blood CD3 Absolute                               | 16                      | 5                                | 2   | 1  |
| Miscellaneous Serology & viral loads             |                         |                                  |   |  |
| Blood Hepatitis B Surface Antigens               | 124                     | 62                               | 36  | 29   |
| Blood Hepatitis B Surface Antibodies             | 121                     | 61                               | 32  | 27   |
| Blood Hepatitis B Core Antibodies                | 121                     | 64                               | 33  | 25   |
| Blood Hepatitis B Viral Load                     | 20                      | 10                               | 3   | 3  |
| Blood Hepatitis C Antibodies (HCV)               | 148                     | 62                               | 37  | 30   |
| Blood Hepatitis C Viral Load                     | 81                      | 36                               | 12  | 13   |
| Miscellaneous Serology & viral loads             |                         |                                  |   |  |
| COVID-19 Test Results (qualitative)              | 31                      | 13                               | 0   | 0  |



#### Ancillary Lab Measurements cont.

| Ancillary Lab                   | Total # records overall | % cohort with at least 1 measure | Total # cases<br>with baseline<br>measure | % cohort with baseline & one other measure |  |  |
|---------------------------------|-------------------------|----------------------------------|---|--|--|--|
| Miscellaneous Blood Chemistries |                         |                                  |   |  |  |  |
| Glucose                         | 1307                    | 70                               | 48  | 62   |  |  |
| Hemoglobin A1c                  | 224                     | 49                               | 10  | 13   |  |  |
| Sodium                          | 1237                    | 75                               | 48  | 62   |  |  |
| Calcium                         | 1170                    | 69                               | 46  | 60   |  |  |
| Chloride                        | 1203                    | 75                               | 46  | 60   |  |  |
| Potassium                       | 1219                    | 75                               | 46  | 60   |  |  |
| Total Protein                   | 1000                    | 74                               | 44  | 57   |  |  |
| Alkaline Phosphatase            | 1000                    | 70                               | 44  | 57   |  |  |
| AST                             | 982                     | 70                               | 42  | 55   |  |  |
| ALT                             | 1005                    | 70                               | 45  | 58   |  |  |
| Total Bilirubin                 | 1043                    | 77                               | 48  | 62   |  |  |
| Direct Bilirubin                | 84                      | 10                               | 1   | 1  |  |  |
| Creatinine                      | 1234                    | 74                               | 48  | 62   |  |  |
| BUN                             | 1226                    | 74                               | 46  | 60   |  |  |
| CO2                             | 1200                    | 70                               | 45  | 58   |  |  |
| PT                              | 611                     | 65                               | 43  | 56   |  |  |
| INR                             | 612                     | 65                               | 43  | 56   |  |  |
| Urate                           | 22                      | 8                                | 1   | 0  |  |  |
| Triglycerides                   | 361                     | 58                               | 18  | 22   |  |  |
| Cholesterol                     | 361                     | 60                               | 19  | 23   |  |  |
| LDL                             | 329                     | 57                               | 16  | 19   |  |  |
| HDL                             | 341                     | 60                               | 18  | 21   |  |  |
| Phosphorus                      | 122                     | 13                               | 3   | 3  |  |  |
| LDH                             | 28                      | 8                                | 2   | 1  |  |  |



#### Ancillary Lab Measurements cont.

| Ancillary Lab                     | Total # records overall | % cohort with at least 1 measure | Total # cases<br>with baseline<br>measure | % cohort with baseline & one other measure |  |  |
|-----------------------------------|-------------------------|----------------------------------|---|--|--|--|
| Miscellaneous CSF values          |                         |                                  |   |  |  |  |
| CSF-VDRL Test                     | 34                      | 5                                | 2   | 3  |  |  |
| Miscellaneous Urine values        |                         |                                  |   |  |  |  |
| Urinalysis: Glucose               | 485                     | 62                               | 41  | 51   |  |  |
| Urinalysis: Protein               | 490                     | 62                               | 41  | 51   |  |  |
| Urinalysis: pH                    | 486                     | 62                               | 41  | 51   |  |  |
| Urinalysis: Specific Gravity      | 485                     | 62                               | 41  | 51   |  |  |
| Urinalysis: Ketones               | 484                     | 61                               | 41  | 51   |  |  |
| Urinalysis: Bilirubin             | 485                     | 62                               | 41  | 51   |  |  |
| Urine Toxicology; Methamphetamine | 104                     | 16                               | 8   | 10   |  |  |
| Urinalysis: Red Blood Cells       | 273                     | 53                               | 23  | 27   |  |  |
| Urinalysis: White Blood Cells     | 270                     | 53                               | 23  | 27   |  |  |