

The data presented in the following reports reflect the NNTC central database as of
March 15, 2019

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 and NINDS.

Questions regarding these data should be directed to the Data Coordinating Center
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Suppressed Cohort Overview: HIV+

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 (%)

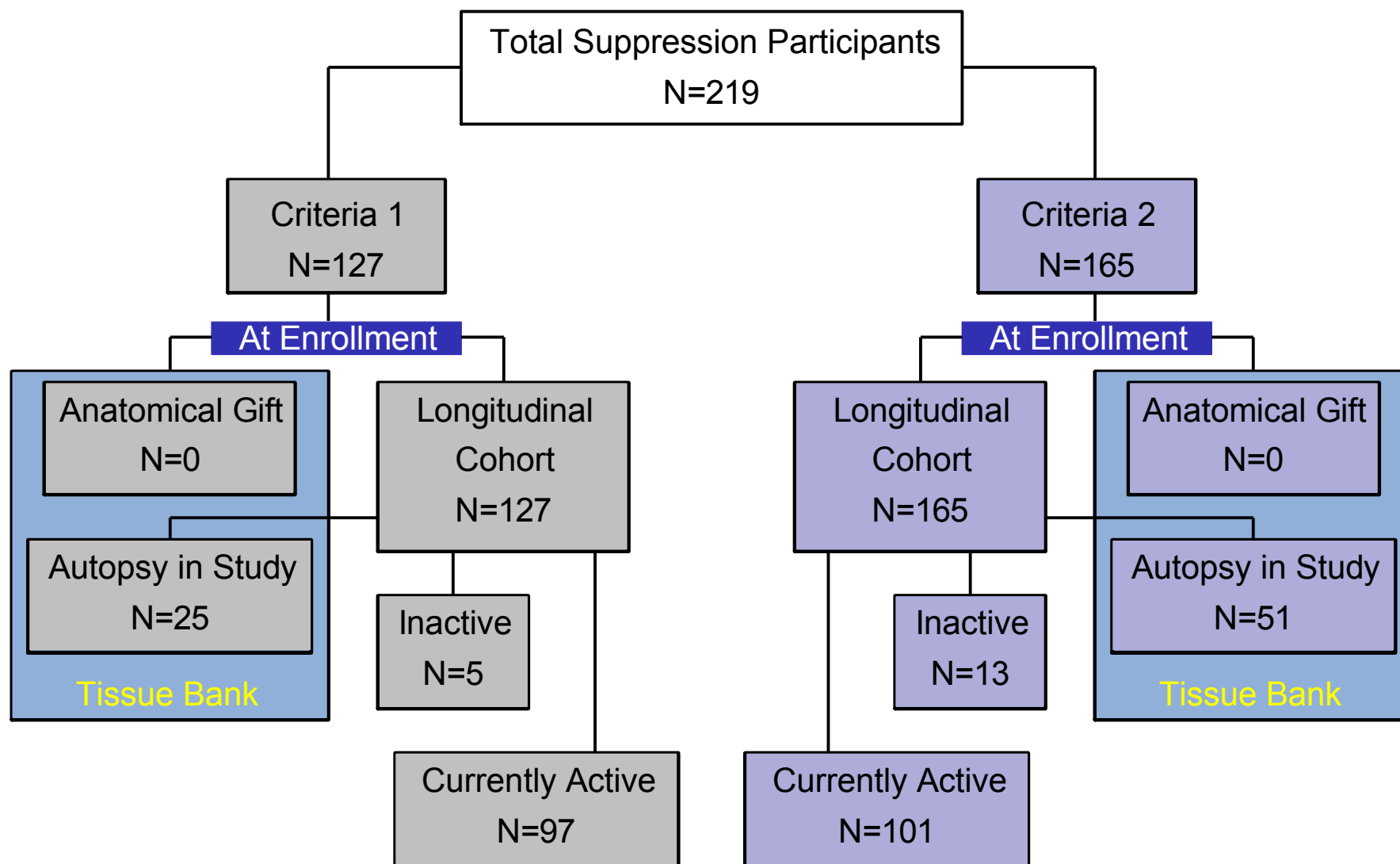
Change in Cognitive Diagnosis

Neurologic Diagnoses

Concomitant Medications

Ancillary Lab Measurements

Suppression Cohort Overview



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 measurable time in study.

Tissue Bank: Participants deceased with autopsy.

a. 73 cases meet both criteria.

b. HIV+ inactive cases are either lost to follow-up/administratively censored/withdrawn (N=0) or deceased without autopsy (N=15).

CNS Specimens Available

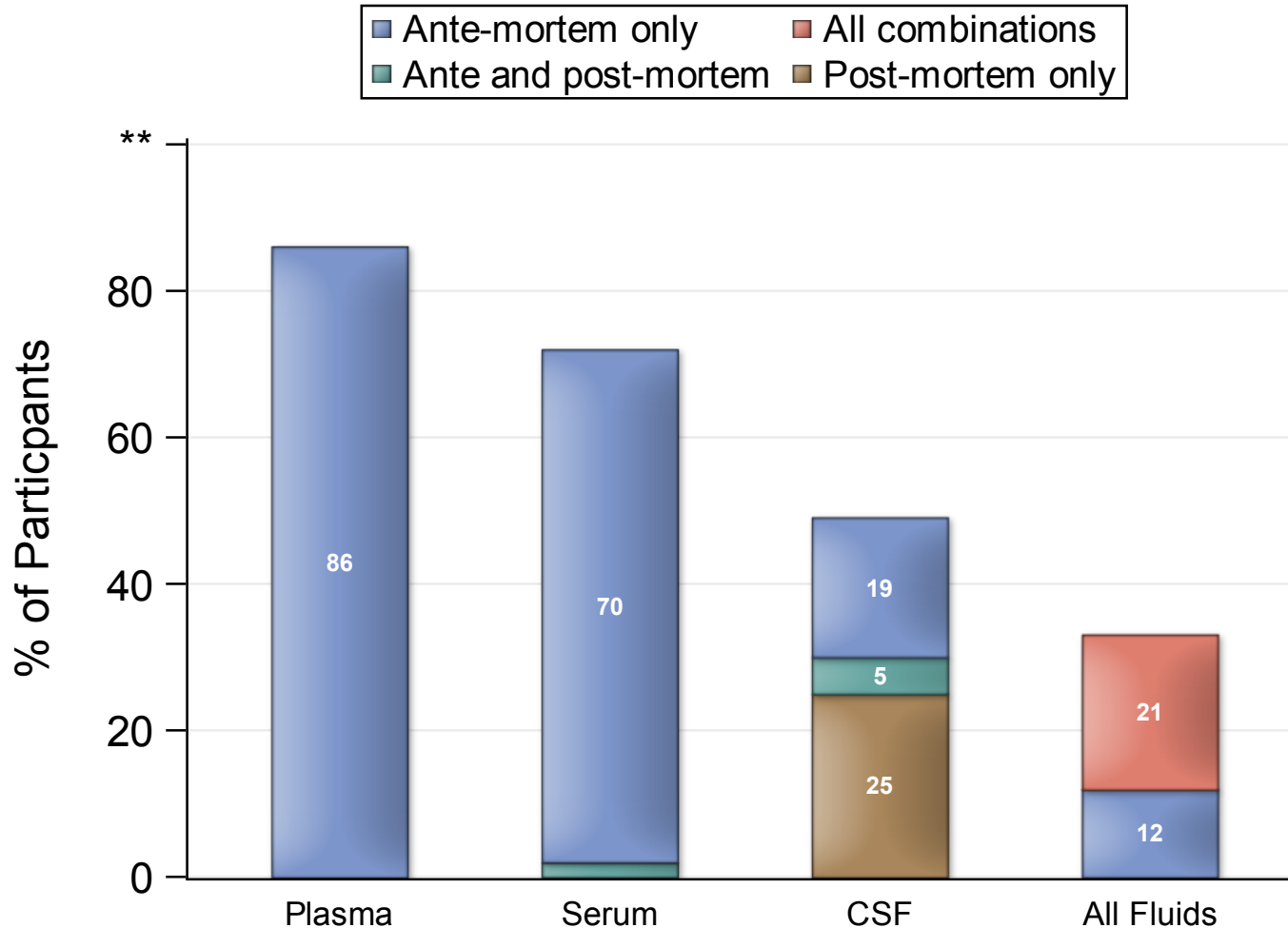
Type:	HIV +
Fixed Brain	57
Frozen Brain	54
Spinal Cord	54
Dorsal Root Ganglia	35
Trigeminal Ganglia	18
Frontal Lobe*	15
Parietal Lobe*	15
Occipital Lobe*	15
Temporal Lobe*	15
Thalamus*	15
Cerebellum*	14
Brain Stem*	14
Hippocampus*	12
Basal Ganglia*	12

*Several of the smaller brain categories listed here are newly added, and thus currently underreported in the central inventory. Sites were asked to record the presence of these specimen types prospectively. The addition of these specimen types to the inventory was approved by the Steering Committee on 01/27/2017.

Peripheral Organ Specimens Available

Type:	HIV +
Liver	45
Heart	45
Kidney	45
Spleen	42
Peripheral Nerve	41
Lung	39
Adipose Tissue	38
Bone Marrow	37
Muscle	36
Lymph Node	34
Pituitary Gland	24
Bowel	23
Testes	19
Hair	2
Thymus	1

Available Fluids



*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.

Demographics*

<u>N</u>	<u>57</u>
<u>Age</u>	
Mean	57.4
SD	7.8
25th Percentile	52
Median	59
75th Percentile	62

*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>
<u>Gender</u>		
Male	44	77
Female	13	23
<u>Ethnicity</u>		
Hispanic origin	14	25
<u>Race</u>		
White	29	51
Black	24	42
Other	4	7

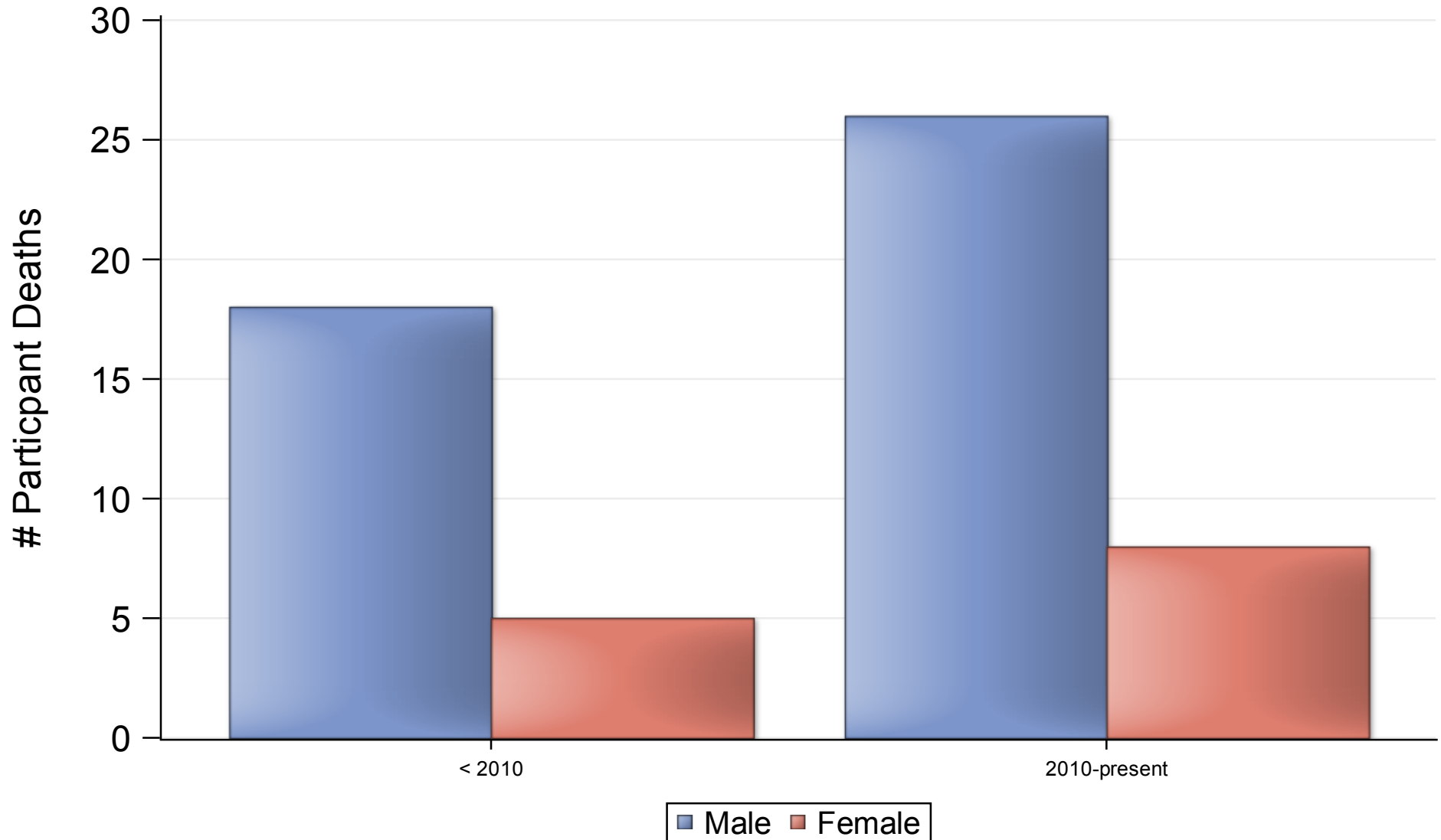
*Cases with a fixed brain specimen available.

Demographics cont.*

	<u>N</u>	<u>%</u>
<u>Furthest Education</u>		
8th grade or less	4	7
Some High School	13	23
High School Gradudate	10	18
Some College/Associate's Degree	21	37
College Graduate	4	7
Advanced Degree work	5	9

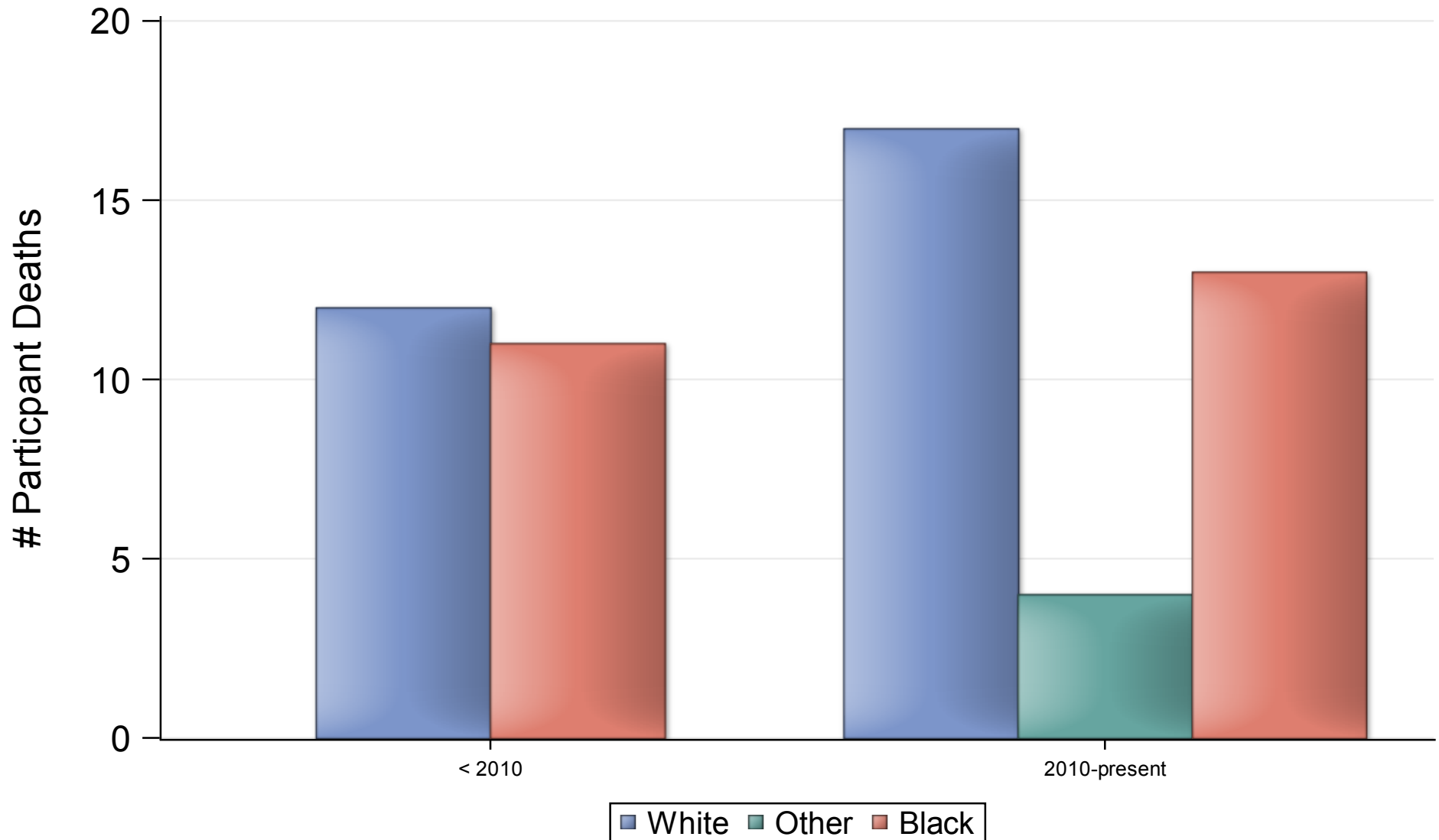
*Cases with a fixed brain specimen available.

cART Era Demographics - Gender



*The NNTC did not collect data before 1998.

cART Era Demographics - Race



*The NNTC did not collect data before 1998.

HIV Characteristics of autopsy cases*

	<u>N</u>	<u>%</u>
<u>Baseline HIV risk</u>		
IV drug use	20	35
Male to male sex	26	46
Heterosexual sex	11	19
<u>On ART</u>		
at baseline:	53	93
at last visit:	51	89

*Cases with a fixed brain specimen available.

*HIV Characteristics at time of death**

CD4 Count (N=52)

25th Percentile	166.5
Median	368
75th Percentile	554.5

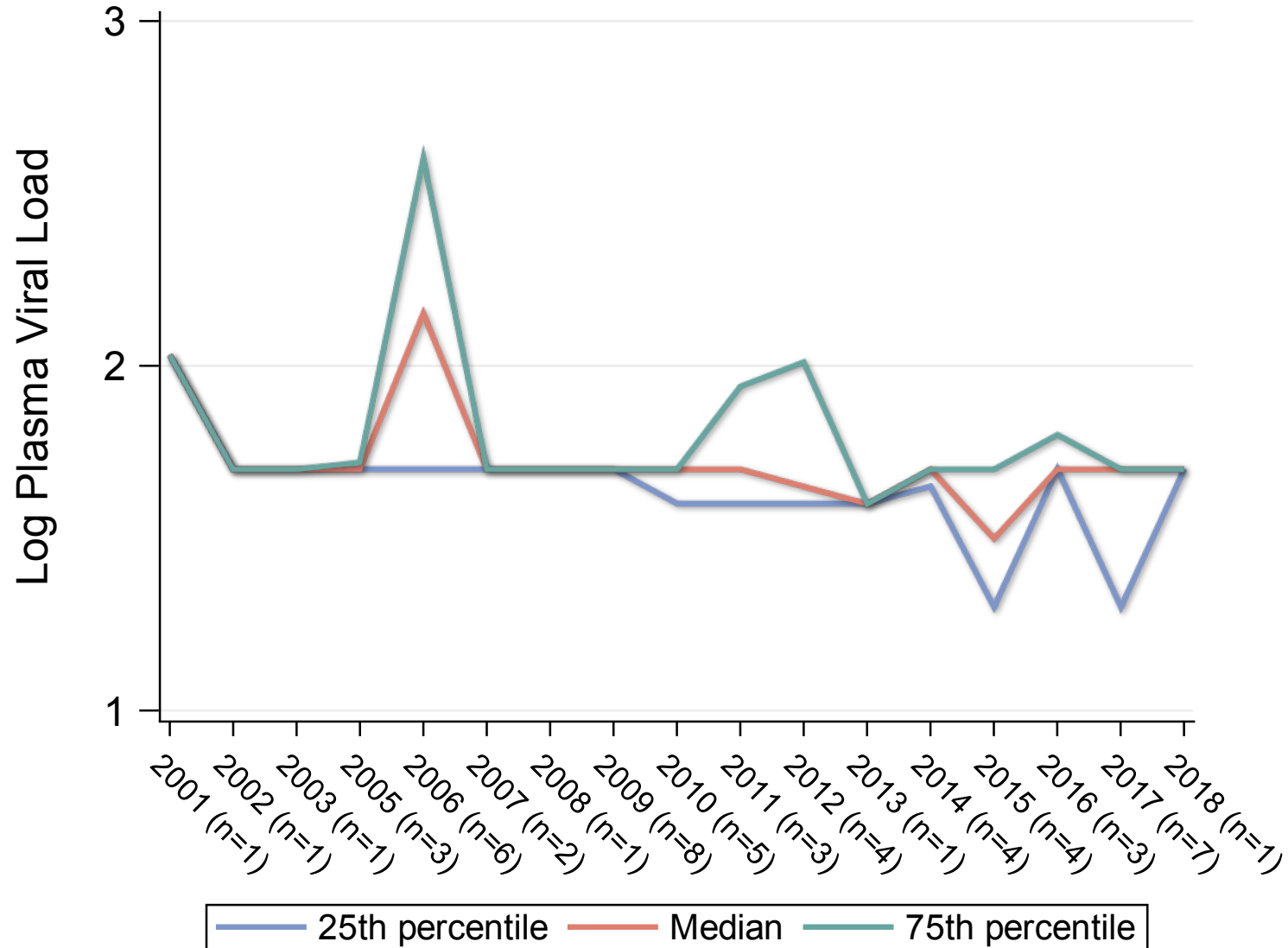
Log Plasma Viral Load** (N=54)

25th Percentile	1.70
Median	1.70
75th Percentile	1.70

*Cases with a fixed brain specimen available with a measurement at baseline and within 1 year of death.

**Among those with known ARV medication status.

cART Era Viral Load

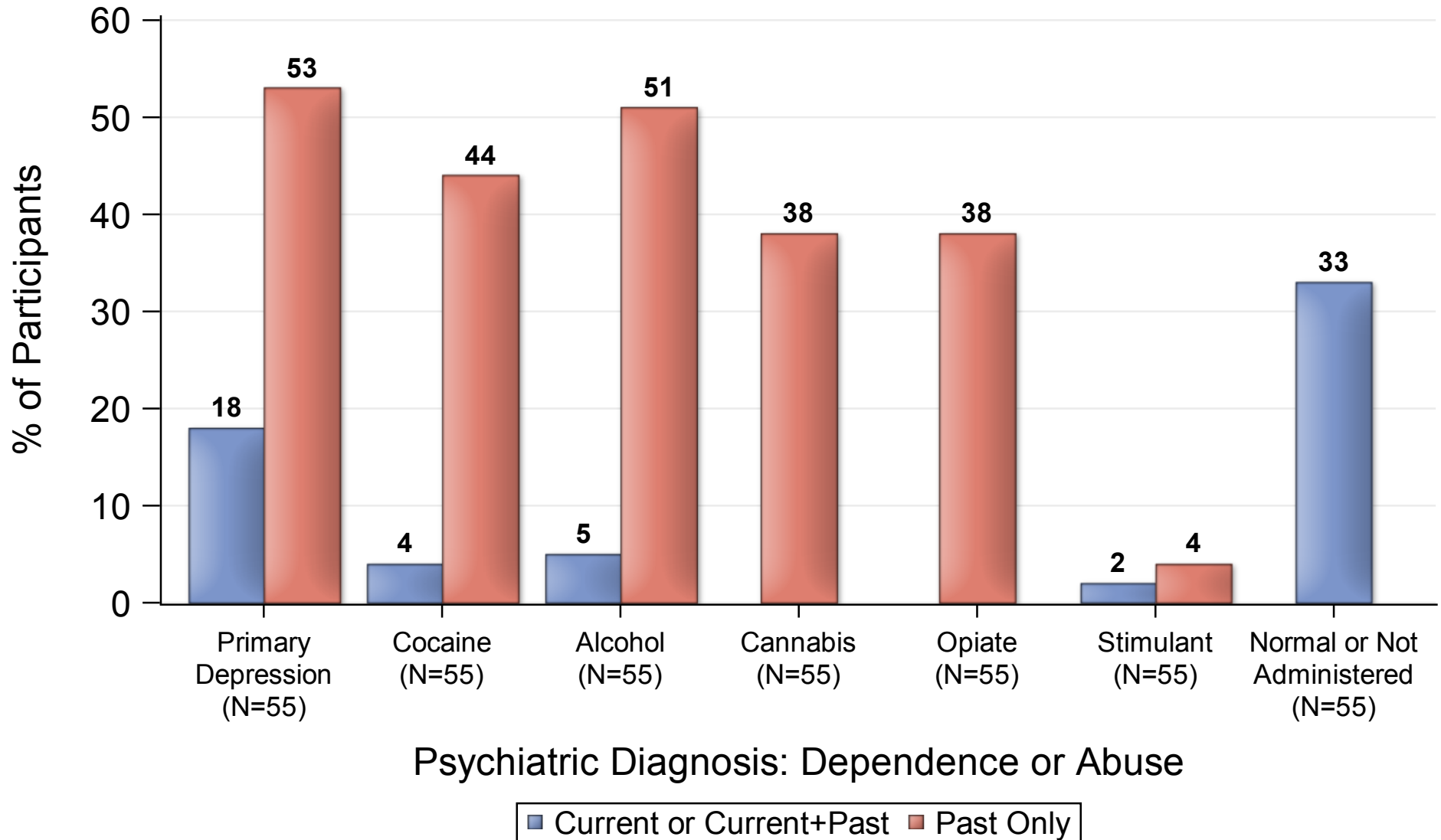


*Among those who have died during the cART era.

Pathological Conditions: Year of Autopsy

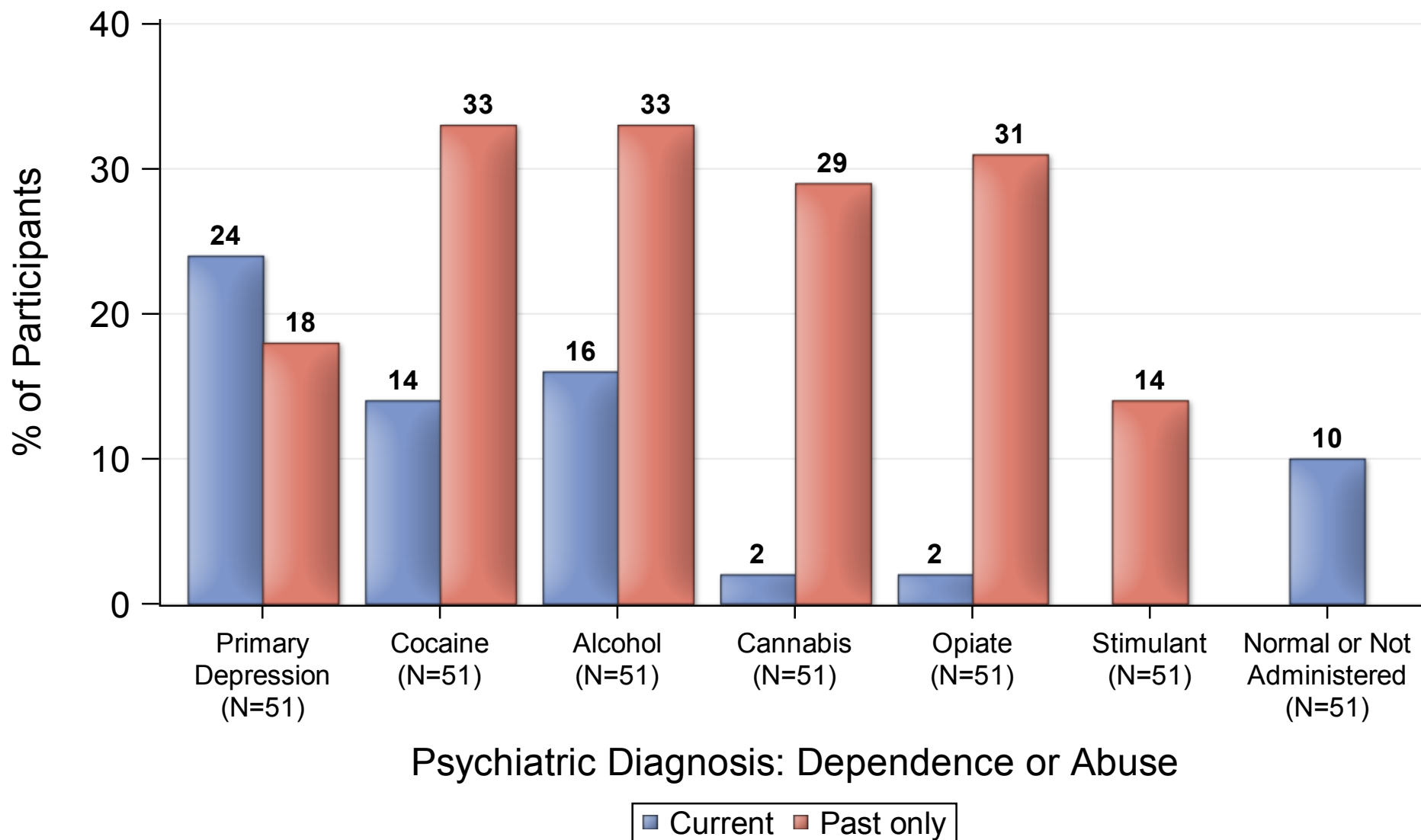
Type:	Year of Autopsy		
	< 2010	2010-present	Total Cases
<i>Total Fixed Specimens</i>	23	34	57
Normal/minor neuropath changes	7 (30)	4 (12)	11 (19)
Other non-infectious pathology	8 (35)	19 (56)	27 (47)
Alzheimer's type 2 gliosis	1 (4)	4 (12)	5 (9)
Focal infarct	8 (35)	12 (35)	20 (35)
Hypoxic/ischemic damage	5 (22)	10 (29)	15 (26)
Aseptic Leptomeningitis	2 (9)	7 (21)	9 (16)
Microglial nodule encephalitis	0	1 (3)	1 (2)
Hemorrhage-parenchymal	0	3 (9)	3 (5)
Progressive Multifocal Leukoencephalopathy	0	1 (3)	1 (2)
Other infections	0	2 (6)	2 (4)

Last Psychiatric Diagnosis



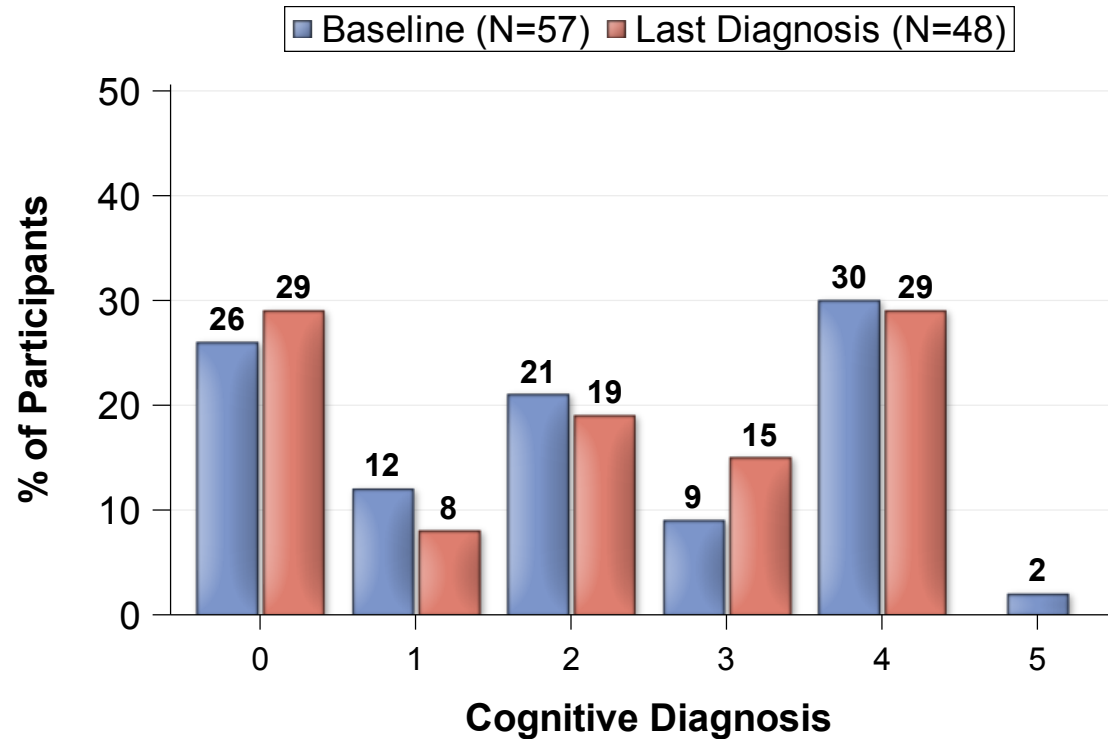
*Please note the totals listed above reflect only those cases who have a fixed brain specimen available and data from the PRISM/CIDI evaluation before death.

Baseline Psychiatric Diagnosis



*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.

Cognitive Diagnosis(%)



ANI = Asymptomatic Neurocognitive Impairment

MCMD = Minor Cognitive Motor Disorder

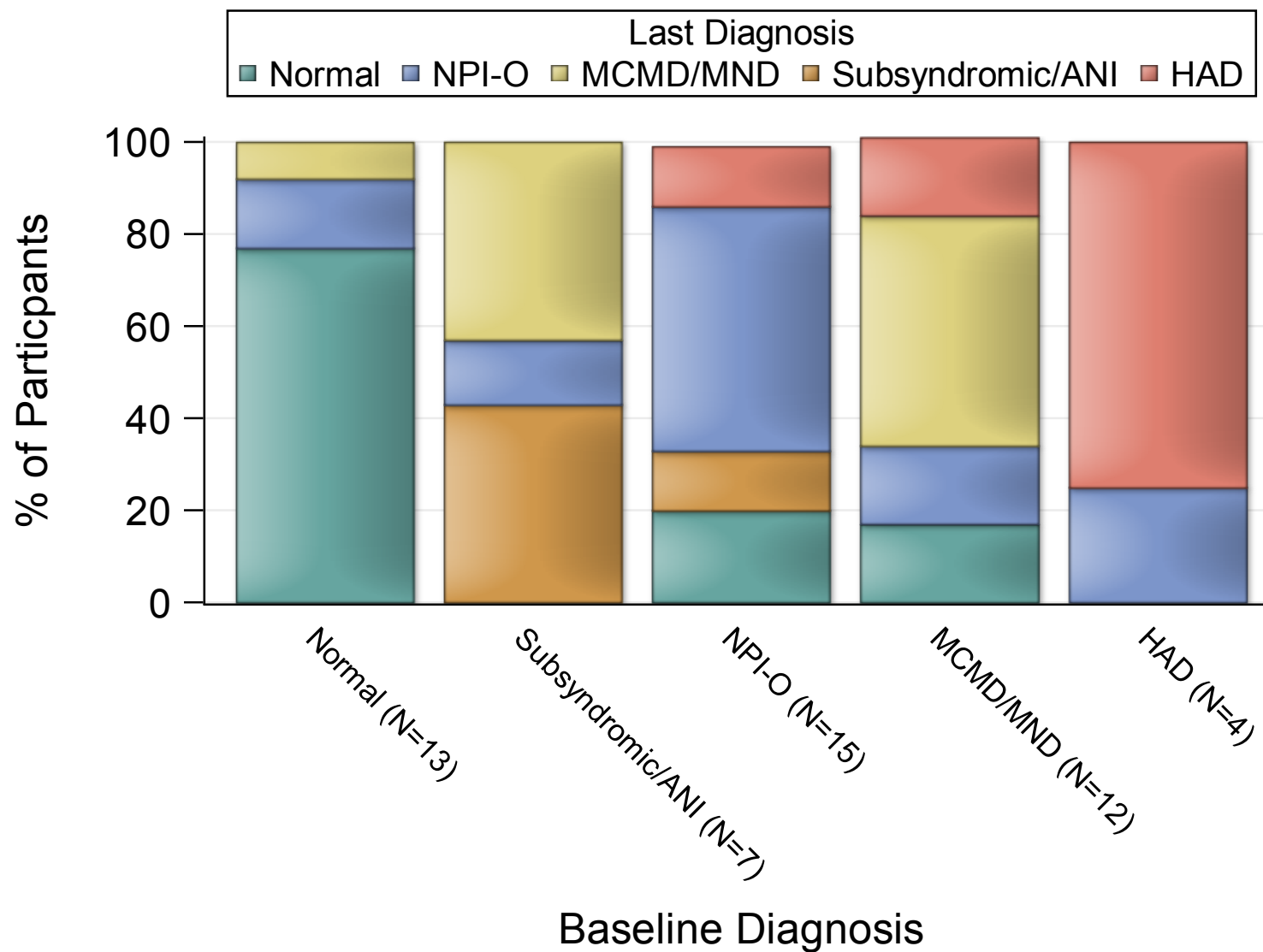
MND = Minor Neurocognitive Disorder

HAD = HIV-Associated Dementia

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

*Please note the totals listed above reflect only those cases who have a fixed brain specimen available.

Change in Cognitive Diagnosis



Neurologic Diagnoses*

	<u>Last Dx</u>		<u>Baseline</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<u>Clinical Myelopathy</u>	<u>(N=47)</u>		<u>(N=57)</u>	
HIV associated	4	9	4	7
Other	.	.	2	4
None	43	91	51	89
<u>Neuropathy</u>	<u>(N=42)</u>		<u>(N=52)</u>	
HIV associated DSP	28	67	24	46
HIV/nucleoside	3	7	3	6
None	11	26	25	48

*Cases with a fixed brain specimen available.

Participants Reporting Concomitant Medications

Medication	# of Pts (N=56)	%
Central Nervous System Agents	55	98.2
Cardiovascular Drugs	49	87.5
Gastrointestinal Drugs	46	82.1
Anti-infective Agents	44	78.6
Vitamins	44	78.6
Hormones and Synthetic Substitutes	38	67.9
Electrolytic, Caloric, and Water Balance	37	66.1
Autonomic Drugs	30	53.6
Blood Formation, Coagulation, and Thrombosis Agents	30	53.6
Skin and Mucous Membrane Agents	24	42.9
Antihistamine Drugs	19	33.9
Miscellaneous Therapeutic Agents	19	33.9
Eye, Ear, Nose, and Throat (EENT) Preparations	14	25
Respiratory Tract Agents	13	23.2
Antineoplastic Agents	12	21.4
Local Anesthetics	7	12.5
Pharmaceutical Aids	6	10.7
Smooth Muscle Relaxants	5	8.9
No medication use reported on at least one occasion	4	7.1
Serums, Toxoids, and Vaccines	4	7.1

Ancillary Lab Measurements

Ancillary Lab	Total # records overall	% cohort with at least 1 measure	Total # cases with baseline measure	% cohort with baseline & one other measure
<u>Miscellaneous Hematology</u>				
BLDRBC	148	19	8	14
BLDMCH	148	19	8	14
BLDMCV	898	75	40	70
BLDMCHC	148	19	8	14
BLDRDW	118	16	3	5
BLDRPR	84	54	19	19
BLDNEUTPCT	836	70	35	61
BLDLYMPHPCT	871	74	40	70
BLDMONOPCT	865	74	40	70
BLDEOSPCT	862	74	40	70
BLDBASOPCT	854	74	39	68
BLDMPV	89	14	3	5
BLDCD3PCT	52	11	6	11
BLDCD3ABS	18	7	1	2
<u>Miscellaneous Serology & viral loads</u>				
BLDHBSAG	98	63	28	32
BLDHBSAB	83	56	22	25
BLDHBCAB	85	58	22	23
BLDHBVLOAD	18	11	2	4
BLDHCVAB	120	82	32	33
BLDHCVLOAD	48	40	8	14

Ancillary Lab Measurements cont.

Ancillary Lab	Total # records overall	% cohort with at least 1 measure	Total # cases with baseline measure	% cohort with baseline & one other measure
<u>Miscellaneous Blood Chemistries</u>				
BLDGLUCOSE	814	79	40	70
BLDHBA1C	93	42	6	9
BLDNA	776	79	40	70
BLDCA	742	77	39	68
BLDCHLORIDE	739	75	38	67
BLDK	754	75	38	67
BLDTPROTEIN	640	74	37	65
BLDALKPHOS	649	75	37	65
BLDAST	624	75	33	58
BLDALT	641	75	36	63
BLDBILI	666	79	39	68
BLDDBILI	83	14	6	11
BLDCREAT	835	95	45	75
BLDBUN	777	79	39	68
BLDCO2	757	75	37	65
BLDPT	427	61	31	54
BLDINR	426	61	31	54
BLDURATE	41	11	5	7
BLDTRIG	180	63	16	25
BLDCHOL	186	65	18	28
BLDCLDL	141	56	13	18
BLDCHDL	139	58	13	18
BLDPHOS	81	16	7	11
BLDCLDH	46	12	6	9

Ancillary Lab Measurements cont.

Ancillary Lab	Total # records overall	% cohort with at least 1 measure	Total # cases with baseline measure	% cohort with baseline & one other measure
<u>Miscellaneous CSF values</u>				
CSFVDRL	18	9	2	4
<u>Miscellaneous Urine values</u>				
UGLUPOSE	308	58	30	49
UPROTEIN	313	58	30	49
UPH	307	58	30	49
USPECGRAV	308	58	30	49
UKETONE	308	58	30	49
UBILI	308	58	30	49
UMETHAM	104	23	11	19
URBC	204	51	20	32
UWBC	201	51	20	32