New York City Department of Health and Mental Hygiene

2015 – 2017 Community Health Survey

Participation Rates per AAPOR Standard Definitions 9th edition (2016)

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To describe CHS survey participation rates, NYC DOHMH typically reports AAPOR Response Rate #3 and Cooperation Rate #3. More information about AAPOR's Standard Definitions can be found here:
http://www.aapor.org/Standards-Ethics/Standard-Definitions-(1).aspx

2015 CHS Landline sample – AAPOR 9th edition

Interview (Category 1)			TOTAL
Complete	1.1	I	5133
Partial	1.2	P	386
Partial (complete removed from analysis)	1.25	P	3

Eligible, non-interview (Category 2)			
Refusal and breakoff	2.1	R	15
Refusal	2.11	R	810
Break off	2.12	R	34
Non-contact	2.2	NC	754
Physically or mentally unable/incompetent	2.32	O	76
Language	2.33	O	54

Unknown eligibility, non-interview (Category 3)			
Always busy	3.12	UH	694
No answer	3.13	UH	6720
No Answer All Attempts	3.131	UH	15268
Answering machine-don't know if household	3.14	UH	7992
Call blocking	3.15	UH	40
No screener completed	3.21	UO	26801
Other	3.9	UO	517

Not eligible (Category 4)			
Screen-outs	4.1	SO	219
Fax/data line	4.2	NWC	5311
Non-working/disconnect	4.3	NWC	170163
No Answer All Attempts	4.31	NWC	0
Temporarily out of service	4.33	NWC	116
Cell phone	4.45	NWC	2344
Business, government office, other organizations	4.51	NWC	27892
No eligible Respondent (Child/teen phone)	4.7	NWC	137
Quota filled	4.8	NWC	1119
Other	4.9	NWC	5

Total phone numbers used			**272603**

Sample Disposition Report

2015 CHS Landline sample – AAPOR 9th edition

Completes (1.0)	I	5133
Partial Interviews (1.2)	P	389
Refusal and break off (2.11, 2.12)	R	859
Non Contact (2.20)	NC	754
Other (2.320)	O	130
Unknown household (3.12-3.15) - No Contact Made	UH	30714
Unknown other (3.21, 3.9) - Contact Made	UO	27318
Not Eligible: Nonworking, Nonresidential, or Ported (4.2-4.51, 4.7)	NWC	207087
Screen Out: Working and Residential but Not Eligible (4.1)	SO	219

e1=(I+P+R+NC+O)/(I+P+R+NC+O+SO)   **0.971**

e2=(I+P+R+NC+O+UO+SO)/(I+P+R+NC+O+UO+SO+NWC)   **0.144**

AAPOR RR1 =I/(I+P+R+NC+O+UH+UO)	7.86%
AAPOR RR2 =(I+P)/(I+P+R+NC+O+UH+UO)	8.46%
AAPOR RR3 = I / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	13.48%
AAPOR RR4 = (I+P) / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	14.50%
AAPOR COOP1 = I / (I+P+R+O+[e1*UO])	15.54%
AAPOR COOP2 = (I+P) / (I+P+R+O+[e1*UO])	16.72%
AAPOR COOP3 = I/((I+P)+R))	80.44%
AAPOR COOP4 = (I+P)/((I+P)+R))	86.54%
AAPOR CON1 = (I+P)+R+O / (I+P+R+O+NC+UH+UO)	9.97%
AAPOR CON2 = (I+P+R+O+[e1*UO]) / I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	86.75%
AAPOR CON3 = (I+P)+R+O / (I+P)+R+O+NC	89.62%

2015 CHS Cell phone sample – AAPOR 9th edition

Interview (Category 1)			TOTAL
Complete	1.1	I	5039
Partial	1.2	P	351
Partial (complete removed from analysis)	1.25	P	4
Eligible, non-interview (Category 2)			
Refusal and breakoff	2.1	R	18
Refusal	2.11	R	274
Break off	2.12	R	31
Non-contact	2.2	NC	550
Physically or mentally unable/incompetent	2.32	O	22
Language	2.33	O	29
Unknown eligibility, non-interview (Category 3)			
Always busy	3.12	UH	1896
No answer	3.13	UH	1480
No Answer All Attempts	3.131	UH	660
Answering machine-don't know if household	3.14	UH	10226
Call blocking	3.15	UH	208
No screener completed	3.21	UO	21057
Not eligible (Category 4)			
Screen-outs	4.1	SO	4588
Fax/data line	4.2	NWC	69
Non-working/disconnect	4.3	NWC	18678
Temporarily out of service	4.33	NWC	662
Business, government office, other organizations	4.51	NWC	1973
No eligible Respondent (Child/teen phone)	4.7	NWC	1093
Other	4.9	NWC	13
Total phone numbers used			**68921**

Completes (1.0)	I	5039
Partial Interviews (1.2)	P	355
Refusal and break off (2.11, 2.12)	R	323
Non Contact (2.20)	NC	550
Other (2.320)	O	51
Unknown household (3.12-3.15) - No Contact Made	UH	14470
Unknown other (3.21, 3.9) - Contact Made	UO	21057
Not Eligible: Nonworking, Nonresidential, or Ported (4.2-4.51, 4.7)	NWC	22488
Screen Out: Working and Residential but Not Eligible (4.1)	SO	4588

e1=(I+P+R+NC+O)/(I+P+R+NC+O+SO)   **0.579**
e2=(I+P+R+NC+O+UO+SO)/(I+P+R+NC+O+UO+SO+NWC)   **0.587**

AAPOR RR1 =I/(I+P+R+NC+O+UH+UO)	12.0%
AAPOR RR2 =(I+P)/(I+P+R+NC+O+UH+UO)	12.9%
AAPOR RR3 = I / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	21.5%
AAPOR RR4 = (I+P) / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	23.0%
AAPOR COOP1 = I / (I+P+R+O+[e1*UO])	28.0%
AAPOR COOP2 = (I+P) / (I+P+R+O+[e1*UO])	30.0%
AAPOR COOP3 = I/((I+P)+R))	88.1%
AAPOR COOP4 = (I+P)/((I+P)+R))	94.4%
AAPOR CON1 = (I+P)+R+O / (I+P+R+O+NC+UH+UO)	13.8%
AAPOR CON2 = (I+P+R+O+[e1*UO]) / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	76.7%
AAPOR CON3 = (I+P)+R+O / (I+P)+R+O+NC	91.3%

2015 CHS Combined frame participation rates - AAPOR's 9th edition (2016)

Full and partial completes by frame:

Landline interviews + partials	5,522
Cell interviews + partials	5,394
Total	10,916

Combining factor	50.6%	Landline
	49.4%	Cell

Version response rates:

		Landline	Cell
Response Rate 1	I/(I+P) + (R+NC+O) + (UH+UO)	7.9%	12.0%
Response Rate 2	(I+P)/(I+P) + (R+NC+O) + (UH+UO)	8.5%	12.9%
Response Rate 3	I / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	13.5%	21.5%
Response Rate 4	(I+P) / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	14.5%	23.0%
Coop Rate 1	I / (I+P+R+O+[e1*UO])	15.5%	28.0%
Coop Rate 2	(I+P) / (I+P+R+O+[e1*UO])	16.7%	30.0%
Coop Rate 3	I/((I+P)+R))	80.4%	88.1%
Coop Rate 4	(I+P)/((I+P)+R))	86.5%	94.4%

Combined response rates:

	Combined
Response Rate 1	9.9%
Response Rate 2	10.6%
Response Rate 3	17.4%
Response Rate 4	18.7%
Coop Rate 1	21.7%
Coop Rate 2	23.3%
Coop Rate 3	84.2%
Coop Rate 4	90.4%

Calculations of Response Rates #1-#4 and Cooperation Rates #1-#2 follow AAPOR's Standard Definitions Report (9th edition, 2016) and its accompanying Outcome Rate Calculator for dual-frame RDD surveys ("DFRDD"). Calculation of Cooperation Rates #3 and #4 use the general Version 4.0 formula ("all").

Interview (Category 1)			TOTAL
Complete	1.100	I	4987
Partial	1.200	P	375
Partial (complete removed from analysis)	1.250	P	0

Eligible, non-interview (Category 2)			
Refusal and breakoff	2.100	R	34
Refusal	2.110	R	690
Break off	2.120	R	43
Non-contact	2.200	NC	674
Physically or mentally unable/incompetent	2.320	O	114
Language	2.330	O	63

Unknown eligibility, non-interview (Category 3)			
Always busy	3.120	UH	734
No answer	3.130	UH	10342
No Answer All Attempts	3.131	UH	17672
Answering machine-don't know if household	3.140	UH	7182
Call blocking	3.150	UH	45
No screener completed	3.210	UO	28607

Not eligible (Category 4)			
Screen-outs	4.100	SO	247
Fax/data line	4.200	NWC	4924
Non-working/disconnect	4.300	NWC	147524
Temporarily out of service	4.330	NWC	175
Cell phone	4.450	NWC	2051
Business, government office, other organizations	4.510	NWC	24125
Quota filled	4.800	NWC	769
Other	4.900	NWC	98

Total phone numbers used			251475

2016 CHS Landline sample – AAPOR 9th edition

Completes (1.0)	I	4987
Partial Interviews (1.2)	P	375
Refusal and break off (2.1, 2.11, 2.12)	R	767
Non Contact (2.20)	NC	674
Other (2.320)	O	177
Unknown household (3.12-3.15) - No Contact Made	UH	35975
Unknown other (3.21, 3.9) - Contact Made	UO	28607
Not Eligible: Nonworking, Nonresidential, or Ported (4.2-4.51, 4.7)	NWC	179666
Screen Out: Working and Residential but Not Eligible (4.1)	SO	247

e1=(I+P+R+NC+O)/(I+P+R+NC+O+SO) 0.966
e2=(I+P+R+NC+O+UO+SO)/(I+P+R+NC+O+UO+SO+NWC) 0.166

AAPOR RR1 =I/(I+P+R+NC+O+UH+UO)	7.0%
AAPOR RR2 =(I+P)/(I+P+R+NC+O+UH+UO)	7.5%
AAPOR RR3 = I / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	12.3%
AAPOR RR4 = (I+P) / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	13.3%
AAPOR COOP1 = I / (I+P+R+O+[e1*UO])	14.7%
AAPOR COOP2 = (I+P) / (I+P+R+O+[e1*UO])	15.8%
AAPOR COOP3 = I/((I+P)+R))	81.4%
AAPOR COOP4 = (I+P)/((I+P)+R))	87.5%
AAPOR CON1 = (I+P)+R+O / (I+P+R+O+NC+UH+UO)	8.8%
AAPOR CON2 = (I+P+R+O+[e1*UO]) / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	84.0%
AAPOR CON3 = (I+P)+R+O / (I+P)+R+O+NC	90.3%

<u>Sample Disposition Report</u>
2016 CHS Cell phone sample – AAPOR 9th edition

Interview (Category 1)			TOTAL
Complete	1.1	I	5013
Partial	1.2	P	348
Partial (complete removed from analysis)	1.25	P	1
Eligible, non-interview (Category 2)			
Refusal and breakoff	2.1	R	16
Refusal	2.11	R	193
Break off	2.12	R	43
Non-contact	2.2	NC	525
Physically or mentally unable/incompetent	2.32	O	22
Language	2.33	O	49
Unknown eligibility, non-interview (Category 3)			
Always busy	3.12	UH	1257
No answer	3.13	UH	1693
No Answer All Attempts	3.131	UH	808
Answering machine-don't know if household	3.14	UH	8912
Call blocking	3.15	UH	272
No screener completed	3.21	UO	19594
Not eligible (Category 4)			
Screen-outs	4.1	SO	4326
Fax/data line	4.2	NWC	60
Non-working/disconnect	4.3	NWC	13846
Temporarily out of service	4.33	NWC	657
Business, government office, other organizations	4.51	NWC	1592
No eligible Respondent (Child/teen phone)	4.7	NWC	927
Other	4.9	NWC	8
Total phone numbers used			**60162**

Completes (1.0)	I	5013
Partial Interviews (1.2)	P	349
Refusal and break off (2.11, 2.12)	R	252
Non Contact (2.20)	NC	525
Other (2.320)	O	71
Unknown household (3.12-3.15) - No Contact Made	UH	12942
Unknown other (3.21, 3.9) - Contact Made	UO	19594
Not Eligible: Nonworking, Nonresidential, or Ported (4.2-4.51, 4.7)	NWC	17090
Screen Out: Working and Residential but Not Eligible (4.1)	SO	4326

e1=(I+P+R+NC+O)/(I+P+R+NC+O+SO) **58.9%**

e2=(I+P+R+NC+O+UO+SO)/(I+P+R+NC+O+UO+SO+NWC) **63.8%**

AAPOR RR1 =I/(I+P+R+NC+O+UH+UO)	12.9%
AAPOR RR2 =(I+P)/(I+P+R+NC+O+UH+UO)	13.8%
AAPOR RR3 = I / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	22.2%
AAPOR RR4 = (I+P) / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	23.7%
AAPOR COOP1 = I / (I+P+R+O+[e1*UO])	29.1%
AAPOR COOP2 = (I+P) / (I+P+R+O+[e1*UO])	31.1%
AAPOR COOP3 = I/((I+P)+R))	89.3%
AAPOR COOP4 = (I+P)/((I+P)+R))	95.5%
AAPOR CON1 = (I+P)+R+O / (I+P+R+O+NC+UH+UO)	14.7%
AAPOR CON2 = (I+P+R+O+[e1*UO]) / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	76.2%
AAPOR CON3 = (I+P)+R+O / (I+P)+R+O+NC	91.5%

2016 CHS Combined frame participation rates - AAPOR's 9th edition

Full and partial completes by frame:

Landline interviews + partials	5,362
Cell interviews + partials	5,362
Total	10,724

Combining factor   50.0% Landline
                                    50.0% Cell

Version response rates:		Landline	Cell
Response Rate 1	I/(I+P) + (R+NC+O) + (UH+UO)	7.0%	12.9%
Response Rate 2	(I+P)/(I+P) + (R+NC+O) + (UH+UO)	7.5%	13.8%
Response Rate 3	I / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	12.3%	22.2%
Response Rate 4	(I+P) / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	13.3%	23.7%
Coop Rate 1	I / (I+P+R+O+[e1*UO])	14.7%	29.1%
Coop Rate 2	(I+P) / (I+P+R+O+[e1*UO])	15.8%	31.1%
Coop Rate 3	I/((I+P)+R))	81.4%	89.3%
Coop Rate 4	(I+P)/((I+P)+R))	87.5%	95.5%

Combined response rates:	Combined
Response Rate 1	10.0%
Response Rate 2	10.7%
Response Rate 3	17.3%
Response Rate 4	18.5%
Coop Rate 1	21.9%
Coop Rate 2	23.5%
Coop Rate 3	85.3%
Coop Rate 4	91.5%

Calculations of Response Rates #1-#4 and Cooperation Rates #1-#2 follow AAPOR's Standard Definitions Report (9th edition, 2016) and its accompanying Outcome Rate Calculator for dual-frame RDD surveys ("DFRDD"). Calculation of Cooperation Rates #3 and #4 use the general Version 4.0 formula ("all").

			TOTAL	
Interview (Category 1)			**Landline**	**Cell**
Complete	1	I	4,042	5,963
Partial	1.2	P	438	505
Partial (complete removed from analysis)	1.25	P	2	4
Eligible, non-interview (Category 2)				
Refusal and breakoff	2.1	R	59	25
Refusal	2.11	R	390	169
Break off	2.12	R	39	70
Non-contact	2.2	NC	600	419
Physically or mentally unable/incompetent	2.32	O	111	18
Language	2.33	O	45	50
Unknown eligibility, non-interview (Category 3)				
Always busy	3.12	UH	663	3,675
No answer	3.13	UH	26,312	3,751
No Answer All Attempts	3.131	UH	9,218	2,364
Answering machine-don't know if household	3.14	UH	11,581	19,849
Call blocking	3.15	UH	80	578
No screener completed	3.21	UO	32,351	35,676
Not eligible (Category 4)				
Screen-outs	4.1	SO	290	6,836
Fax/data line	4.2	NWC	6,857	209
Non-working/disconnect	4.3	NWC	169,348	22,233
Temporarily out of service	4.33	NWC	2,363	1,808
Cell phone	4.45	NWC	2,263	-
Business, government office, other organizations	4.51	NWC	22,812	2,631
Quota filled	4.8	NWC	334	253
Other	4.9	NWC	114	-
Total phone numbers used			**290312**	**107086**

Sample Disposition Report

		TOTAL	
		Landline	**Cell**
Completes (1.0)	I	4042	5963
Partial Interviews (1.2)	P	440	509
Refusal and break off (2.11, 2.12)	R	488	264
Non Contact (2.20)	NC	600	419
Other (2.320)	O	156	68
Unknown household (3.12-3.15) - No Contact Made	UH	47854	30217
Unknown other (3.21, 3.9) - Contact Made	UO	32351	35676
Not Eligible: Nonworking, Nonresidential, or Ported (4.2-4.51, 4.7)	NWC	204091	27134
Screen Out: Working and Residential but Not Eligible (4.1)	SO	290	6836
e1=(I+P+R+NC+O)/(I+P+R+NC+O+SO)		**0.952**	**0.514**
e2=(I+P+R+NC+O+UO+SO)/(I+P+R+NC+O+UO+SO+NWC)		**0.158**	**0.647**
AAPOR RR1 =I/(I+P+R+NC+O+UH+UO)		4.7%	8.2%
AAPOR RR2 =(I+P)/(I+P+R+NC+O+UH+UO)		5.2%	8.9%
AAPOR RR3 = I / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])		9.2%	16.8%
AAPOR RR4 = (I+P) / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])		10.3%	18.2%
AAPOR COOP1 = I / (I+P+R+O+[e1*UO])		11.3%	23.7%
AAPOR COOP2 = (I+P) / (I+P+R+O+[e1*UO])		12.5%	25.8%
AAPOR COOP3 = I/((I+P)+R))		81.3%	88.5%
AAPOR COOP4 = (I+P)/((I+P)+R))		90.2%	96.1%
AAPOR CON1 = (I+P)+R+O / (I+P+R+O+NC+UH+UO)		6.0%	9.3%
AAPOR CON2 = (I+P+R+O+[e1*UO]) / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])		82.1%	70.6%
AAPOR CON3 = (I+P)+R+O / (I+P)+R+O+NC		89.5%	94.2%

2017 CHS Combined frame participation rates - AAPOR's 9th edition

Completed interviews/partials by frame:

Landline interviews + partials	4,482
Cell interviews + partials	6,472
Total	10,954

Combining factor	40.9%	Landline
	59.1%	Cell

Version response rates:

		Landline	Cell
Response Rate 1	I/(I+P) + (R+NC+O) + (UH+UO)	4.7%	8.2%
Response Rate 2	(I+P)/(I+P) + (R+NC+O) + (UH+UO)	5.2%	8.9%
Response Rate 3	I / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	9.2%	16.8%
Response Rate 4	(I+P) / (I+P+R+NC+O+[e1*e2*UH]+[e1*(UO)])	10.3%	18.2%
Coop Rate 1	I / (I+P+R+O+[e1*UO])	11.3%	23.7%
Coop Rate 2	(I+P) / (I+P+R+O+[e1*UO])	12.5%	25.8%
Coop Rate 3	I/((I+P)+R))	81.3%	88.5%
Coop Rate 4	(I+P)/((I+P)+R))	90.2%	96.1%

Combined response rates:

	Combined
Response Rate 1	6.7%
Response Rate 2	7.4%
Response Rate 3	13.7%
Response Rate 4	14.9%
Coop Rate 1	18.6%
Coop Rate 2	20.3%
Coop Rate 3	85.6%
Coop Rate 4	93.7%

Calculations of Response Rates #1-#4 and Cooperation Rates #1-#2 follow AAPOR's Standard Definitions Report (9th edition, 2016) and its accompanying Outcome Rate Calculator for dual-frame RDD surveys ("DFRDD"). Calculation of Cooperation Rates #3 and #4 use the general Version 4.0 formula ("all").