

## Attachment 16. Response Rate Calculations

The unweighted response rate calculations were done using the methods provided in the document “Standards and Guidelines for Statistical Surveys” distributed in September 2006 by OMB.

The response rate is represented by

C= number of cases

R= number of refused cases

NC= number of non-contacted sample units known to be eligible

O= number of eligible sample units not responding for reasons other than refusal

U = number of sample units of unknown eligibility, not completed

e= estimated proportion of sample units of unknown eligibility that are eligible.

Unweighted response rates are calculated by the formula:  $RR = C/[C+R+NC+O+e(U)]$ .

For NHBS-MSM, the response rate calculations based on 500 completed surveys and using the estimated outcomes noted in Section B3 are as follows:

C= 500 cases

R= 92 refusals (15% of 612 eligibles screened)

NC= 0

O= 5 who do not respond for reasons other than refusal (1% data loss)

U = 170 who refused approach (20% of 850)

e= 90% estimated proportion of sample units of unknown eligibility that are eligible.

The unweighted response rate is calculated by the formula:

$$\begin{aligned} RR &= C/[C+R+NC+O+e(U)] \\ &= 500/[500+92+0+5+0.9(170)] \\ &= 500/750 \\ &= \mathbf{67\%} \end{aligned}$$

For the IDU and HET cycles, the response rate calculations based on 500 completed surveys and using the estimated outcomes noted in section B3 are as follows:

C= 500 cases

R= 0 refusals

NC= 0

O= 5 who do not respond for reasons other than refusal (1% data loss)

U = 250 unknown eligibility, not completed (assuming 50% rate of presentation of peer-recruited individuals for eligibility screening.) or 165 (assuming 67% rate of presentation of peer-recruited individuals for eligibility screening.)

e= 90% estimated proportion of sample units of unknown eligibility that are eligible.

The unweighted response rate is calculated by the formula below, assuming 50% rate of presentation of peer-recruited individuals for eligibility screening:

$$\begin{aligned} RR &= C/[C+R+NC+O+e(U)] \\ &= 500/[500+0+0+5+0.9(250)] \\ &= 500/730 \\ &= \mathbf{68\%} \end{aligned}$$

The unweighted response rate is calculated by the formula below, assuming 67% rate of presentation of peer-recruited individuals for eligibility screening:

$$\begin{aligned} RR &= C/[C+R+NC+O+e(U)] \\ &= 500/[500+0+0+5+0.9(165)] \\ &= 500/654 \\ &= \mathbf{76\%} \end{aligned}$$