## Attachment 13. 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
$\mathrm{C}=$ number of cases
$\mathrm{R}=\quad$ number of refused cases
$\mathrm{NC}=$ number of non-contacted sample units known to be eligible
$\mathrm{O}=\quad$ number of eligible sample units not responding for reasons other than refusal
$\mathrm{U}=\quad$ number of sample units of unknown eligibility, not completed
$\mathrm{e}=\quad$ estimated proportion of sample units of unknown eligibility that are eligible.
Unweighted response rates are calculated by the formula: $R R=C /[C+R+N C+O+e(U)]$.
For NHBS-MSM, the response rate calculations based on 500 completed surveys and using the estimated outcomes noted in Section B3 are as follows:
$\mathrm{C}=\quad 500$ cases
$\mathrm{R}=\quad 92$ refusals ( $15 \%$ of 612 eligibles screened)
$\mathrm{NC}=0$
$\mathrm{O}=\quad 5$ who do not respond for reasons other than refusal ( $1 \%$ data loss)
$\mathrm{U}=170$ who refused approach ( $20 \%$ of 850 )
$\mathrm{e}=\quad 90 \%$ estimated proportion of sample units of unknown eligibility that are eligible.
The unweighted response rate is calculated by the formula:

```
RR =C/[C+R+NC+O+e(U)]
    =500/[500+92+0+5+0.9(170)]
    =500/750
    =67%
```

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
$\mathrm{R}=0$ refusals
NC= 0
$\mathrm{O}=\quad 5$ who do not respond for reasons other than refusal ( $1 \%$ data loss)
$\mathrm{U}=250$ unknown eligibility, not completed (assuming 50\% coupon return rate) or 165 (assuming 67\% coupon return rate)
$\mathrm{e}=\quad 90 \%$ estimated proportion of sample units of unknown eligibility that are eligible.
The unweighted response rate is calculated by the formula below, assuming $50 \%$ coupon return rate:

$$
\begin{aligned}
\mathrm{RR} \quad & =\mathrm{C} /[\mathrm{C}+\mathrm{R}+\mathrm{NC}+\mathrm{O}+\mathrm{e}(\mathrm{U})] \\
& =500 /[500+0+0+5+0.9(250)] \\
& =500 / 730 \\
& =\mathbf{6 8 \%}
\end{aligned}
$$

The unweighted response rate is calculated by the formula below, assuming $67 \%$ coupon return rate:

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

