Online Appendix for:

HIV prevalence among people who inject drugs in Greater Kuala Lumpur recruited using respondent-driven sampling

Supplementary data on HIV prevalence estimates.

Figure A1: HIV prevalence estimates for each site from the sample mean, RDS-I, RDS-II, and RDS-SS estimators. Shaded areas represent bootstrapped 95% confidence intervals.



One of the inputs for the RDS-SS estimator is a population size estimate. We divided the only available estimate of the number of PWID in Malaysia (170,000) by four, since one fourth of Malaysia's population resides in Greater Kuala Lumpur, yielding an estimate of 42,500 PWID (Malaysia Country Responses to HIV/AIDS. Reporting period: January 2013 - December 2013. AIDS/STD Section, Diseases Control Division, Ministry of Health, Government of Malaysia, 2014). Varying this population size estimate by 20% in either direction did not shift point prevalence estimates or confidence bounds by more than a tenth of a percent, so we present in the main manuscript only prevalence estimates using this population size. The full range of estimates is shown in Table A1.

	KAMPUNG BARU	SHAH ALAM	KAJANG	ALL SITES
Reactive HIV test	47/127	13/208	13/126	71/461
Sample mean (95% CI)	37.0% (28.6-45.4)	6.3%~(3.0-9.5)	$10.3\% \ (5.0\text{-}15.6)$	15.8% (12.5-19.2)
RDS-I estimator $(95\% \text{ CI})$	38.8% (25.0-52.6)	7.2% (2.6-11.8)	$9.5\% \ (0.0-22.1)$	20.0% (13.0-27.0)
RDS-II estimator (95% CI)	40.8% (26.9-54.6)	7.1% (2.6-11.7)	$8.0\% \ (0.0-21.0)$	20.4% (13.6-27.3)
RDS-SS estimator $(95\% \text{ CI})$				
Population size est. 34000	40.8% (26.7-54.8)	7.1% (2.6-11.6)	8.1% (0.0-17.6)	20.5% (13.1-27.7)
Population size est. 42500	40.8% (26.7-54.9)	7.1% (2.5-11.7)	8.1% (0.0-17.7)	20.4% (13.1-27.7)
Population size est. 51000	40.8% (26.7-54.8)	7.1% (2.5-11.7)	8.1% (0.0-17.7)	20.4% (13.1-17.7)

Table A1: HIV prevalence estimates with variation in population size estimates.

Supplementary data on recruitment across geographic regions.

Figure A2: Recruitment events between neighborhoods, shaded by frequency of recruitment between neighborhoods. Recruitment events are treated as undirected, hence the figure's symmetry. Counts are truncated at 10 recruitment events. Neighborhoods are grouped by closest recruitment site.



4

Table A2: Interview site vs. closest interview site to residence.

	Closest Interview Site to Residence			
Interview Site	Kampung Baru	Shah Alam	Kajang	
Kampung Baru	124	3	0	
Shah Alam	130	69	9	
Kajang	20	0	105	

Table A3: Recruitment events across coarsened geographic regions.

	Closest Site to Recruit			
Closest Site to Recruiter	Kampung Baru	Shah Alam	Kajang	
Kampung Baru	214 (78%, 214/274)	34~(12%, 34/274)	$19 \ (7\%, \ 19/274)$	
Shah Alam	41 (57%, 41/72)	34~(47%, 34/72)	1 (1%, 1/72)	
Kajang	16 (14%, 16/115)	4(3%, 4/115)	$92 \ (80\%, \ 92/115)$	