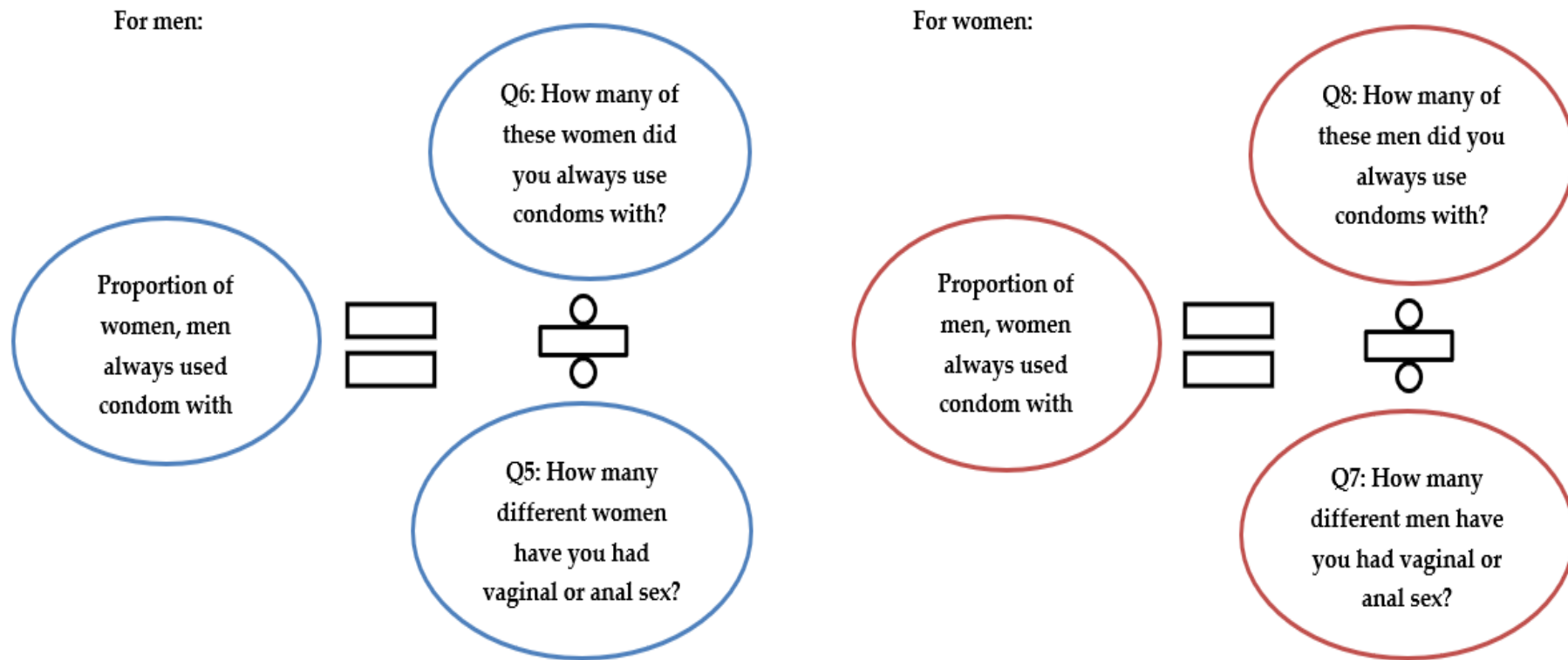


## Supplementary material

**Table S1:** Questionnaire used for the interviews in the Transmission Reduction Intervention Project.

All questionnaire items have reference to the period during the past six months of the interview.

Questionnaire items (Q) and Responses (R)	
Drug injection status	
Q1	Have you injected drugs, or had someone other than an accredited professional inject you with any drugs?
R1	a) Yes                                      b) No
Drug injection-related behaviors	
Q2	How many different people did you inject drugs with?
R2	Define number: .....
Q3	How often did you inject drugs? This includes occasions when someone else injected you.
R3	a) Never                                      b) Only a few times                                      c) 1-3 times/month d) About once/week                                      e) 2-5 times/week                                      f) About once/day g) 2 to 3 times/day, almost every day                                      h) 4 to 9 times/day, almost every day                                      i) 10+ times/day, almost every day
Q4	When you injected drugs, what proportion of the time did you:
R4	a) share a syringe that someone else had previously used to inject? b) give someone a syringe to use that you already injected with? c) share a cooker, filter or rinse water that someone else had previously used to inject? d) give someone a cooker, filter or rinse water that you had previously used to inject? e) backload (piggy-back) to share injection drugs? a) None of the time                                      b) Very little                                      c) Less than half d) About half                                      e) More than half                                      f) Almost all g) All                                      h) Not applicable                                      i) Not asked j) Does not know
Sexual behaviors	
<u>For men:</u>	
Q5	How many different women have you had vaginal or anal sex (total)?
R5	Define number: .....
Q6	How many of these women did you always use condoms with?
R6	Define number: .....
<u>For women:</u>	
Q7	How many different men have you had vaginal or anal sex with?
R7	Define number: .....
Q8	How many of these men (total) did you always use condoms with?
R8	Define number: .....



**Figure S1:** Combination of questions for proportions of heterosexual sex partners who the participants of TRIP (Transmission Reduction Intervention Project) had safe sex with during the past six months.

**Table S2:** Sociodemographic characteristics of the participants of Transmission Reduction Intervention Project (TRIP) (n=357) who were followed-up and lost to follow-up six months after their recruitment.

Sociodemographic characteristic		Followed-up [n (%)]	Lost to follow-up [n (%)]	P-value
Overall		292 (81.8)	65 (18.2)	-
Gender	Male	231 (79.1)	51 (78.5)	0.908
	Female	61 (20.9)	14 (21.5)	
Age	median (IQR)	35 (31-41)	35 (31-44)	0.751
Nationality	Greek	269 (92.1)	54 (83.1)	0.025
	Non-Greek	23 (7.9)	11 (16.9)	
Education	Up-to high school	249 (85.3)	60 (92.3)	0.133
	Post high School	43 (14.7)	5 (7.7)	
Employment	Employed	241 (82.5)	55 (84.6)	0.687
	Unemployed	51 (17.5)	10 (15.4)	
Homelessness	Homeless	56 (19.2)	25 (38.5)	0.001
	Non-homeless	235 (80.8)	40 (61.5)	
HIV status	Positive	122 (41.8)	28 (43.1)	0.848
	Negative	170 (58.2)	37 (56.9)	
Participant group	Recent Seeds (RS)	22 (7.5)	1 (1.5)	0.030
	Control Seeds with Long-term HIV infection (LCS)	17 (5.8)	2 (3.1)	
	Network of RS	136 (46.6)	35 (53.9)	
	Network of LCS	47 (16.1)	18 (27.7)	
	Negative controls	70 (24.0)	9 (13.9)	

The Chi-squared test was used to test the difference between frequencies and the Wilcoxon rank-sum (Mann-Whitney) test was used to test the difference in age distribution.

P-values in italics stand for statistically significant differences between groups ( $p < 0.05$ ).

Abbreviations: IQR, Interquartile range; SD, standard deviation; RS, recent seeds; LCS, control seeds with long-term HIV infection.

**Table S3:** Frequencies and percentages (in parentheses) of the responses to questionnaire item Q1 (Have you injected drugs, or had someone other than an accredited professional inject you with any drugs?) (n=292), at baseline and follow-up of Transmission Reduction Intervention Project (TRIP).

Sociodemographic characteristics		Drug injection status [n (%)]								P-value
		Baseline				Follow up				
		Injecting	Non-injecting	Started	Continued	Total	Stopped	Continued	Total	
Overall		270 (92.5)	22 (7.5)	6 (2.1)	205 (70.2)	211 (72.3)	65 (22.3)	16 (5.5)	81 (27.7)	<0.001
Gender	Male	217 (80.4)	14 (63.6)	6 (100)	168 (82.0)	174 (82.5)	49 (75.4)	8 (50.0)	57 (70.4)	<0.001
	Female	53 (19.6)	8 (36.4)	0 (0.0)	37 (18.0)	37 (17.5)	16 (24.6)	8 (50.0)	24 (29.6)	<0.001
Age	median (IQR)	35 (31-40)	37.5 (30-44)	38.5 (37-42)	35 (31-40)	35 (31-40)	35 (32-42)	35 (29.5-44.5)	35 (32-44)	0.279
Nationality	Greek	247 (91.5)	22 (100)	6 (100)	184 (89.8)	190 (90.1)	63 (96.9)	16 (100)	79 (97.5)	<0.001
	Non-Greek	23 (8.5)	0 (0.0)	0 (0.0)	21 (10.2)	9 (9.9)	2 (3.1)	0 (0.0)	2 (2.5)	0.500
Education	Up-to high school	234 (86.7)	16 (72.7)	6 (100)	178 (86.8)	184 (87.2)	56 (86.2)	10 (62.5)	66 (81.5)	<0.001
	Post high school	36 (13.3)	6 (27.3)	0 (0.0)	27 (13.2)	27 (12.8)	9 (13.8)	6 (37.5)	15 (18.5)	0.004
Employment <sup>1</sup>	Employed	47 (17.4)	13 (59.1)	1 (16.7)	28 (13.7)	29 (13.7)	19 (29.2)	12 (75.0)	31 (38.3)	<0.001
	Unemployed	223 (82.6)	9 (40.9)	5 (83.3)	177 (86.3)	182 (86.3)	46 (70.8)	4 (25.0)	50 (61.7)	<0.001
Homelessness <sup>1</sup>	Homeless	35 (13.0)	4 (18.2)	3 (50.0)	31 (15.2)	34 (16.2)	4 (6.1)	1 (6.3)	5 (6.2)	1.000
	Non-homeless	234 (87.0)	18 (81.8)	3 (50.0)	173 (84.8)	176 (83.8)	61 (93.9)	15 (93.8)	76 (93.8)	<0.001
HIV status	Positive	119 (44.1)	3 (13.6)	1 (16.7)	107 (52.2)	108 (48.8)	12 (18.5)	2 (12.5)	14 (17.3)	0.003
	Negative	151 (55.9)	19 (86.4)	5 (83.3)	98 (47.8)	103 (51.2)	53 (81.5)	14 (87.5)	67 (82.7)	<0.001
Participant group	RS	22 (8.2)	0 (0.0)	0 (0.0)	18 (8.8)	18 (8.5)	4 (6.2)	0 (0.0)	4 (4.9)	0.125
	LCS	17 (6.3)	0 (0.0)	0 (0.0)	13 (6.3)	13 (6.2)	4 (6.2)	0 (0.0)	4 (4.9)	0.125
	Network of RS	118 (43.7)	18 (81.8)	5 (83.3)	102 (49.8)	107 (50.7)	16 (24.6)	13 (81.3)	29 (35.8)	0.027
	Network of LCS	43 (15.9)	4 (18.2)	1 (16.7)	37 (18.0)	38 (18.0)	6 (9.2)	3 (18.7)	9 (11.1)	0.125
	Negative controls	70 (25.9)	0 (0.0)	0 (0.0)	35 (17.1)	35 (16.6)	35 (53.8)	0 (0.0)	35 (43.2)	<0.001

The Exact McNemar significance probability test was used to test the difference of the matched pairs in injecting *versus* non-injecting at baseline and follow-up and the Kruskal-Wallis equality-of-populations rank test was used to test a difference in the age distribution.

P-values in italics stand for statistically significant differences between groups (p<0.05).

<sup>1</sup> Employment and homelessness status at the time of follow-up.

Abbreviations: IQR, Interquartile range; RS, recent seeds; LCS, control seeds with long-term HIV infection.

**Table S4:** Sociodemographic characteristics of people who injected drug at baseline of Transmission Reduction Intervention Project (TRIP) (n=270). Comparison of those who stopped injecting and continued injecting drugs at follow-up.

Sociodemographic characteristics		Drug injection status at follow-up [n (%)]			P-value
		Continued	Stopped	Total	
Overall		205 (75.9)	65 (24.1)	270	
Gender	Male	168 (77.4)	49 (22.6)	217	0.245
	Female	37 (69.8)	16 (30.2)	53	
Age	Median (IQR)	35 (31-40)	35 (32-42)		0.056
Nationality	Greek	184 (74.5)	63 (25.5)	247	0.071
	Non-Greek	21 (91.3)	2 (8.7)	23	
Education	Up-to high school	178 (76.1)	56 (23.9)	234	0.889
	Post high School	27 (75.0)	9 (25.0)	36	
Employment	Employed	28 (59.6%)	19 (40.4%)	47	0.004
	Unemployed	177 (79.4)	46 (20.6)	223	
Homelessness	Homeless	31 (88.6)	4 (11.4)	35	0.059
	Non-homeless	173 (73.9)	61 (26.1)	234	
HIV status	Positive	107 (89.9)	12 (10.1)	119	<0.001
	Negative	98 (64.9)	53 (35.1)	151	
Participant group	RS	18 (81.8)	4 (18.2)	22	<0.001
	LCS	13 (76.5)	4 (23.5)	17	
	Network of RS	102 (86.4)	16 (13.6)	118	
	Network of LCS	37 (86.0)	6 (14.0)	43	
	Negative controls	35 (50.0)	35 (50.0)	70	

The Chi-squared test was used for the comparisons, except for age where a Wilcoxon rank-sum (Mann-Whitney) test was used to test the difference in age distribution.

P-values in italics stand for statistically significant differences between groups ( $p < 0.05$ ).

Abbreviations: IQR, Interquartile range; SD, standard deviation; RS, recent seeds; LCS, control seeds with long-term HIV infection.

**Table S5:** Odds ratios (OR) and 95% Confidence Intervals (CI) for injecting drug use at follow-up (A) (all participants) and (B) for stopping injecting drug use at follow-up (participant who injected at baseline) - Transmission Reduction Intervention Project (TRIP).

Factors	Q1: Have you injected drugs, or had someone other than an accredited professional inject you with any drugs?				
	A		B		
	Univariable	Multivariable	Univariable	Multivariable	
Response at baseline	<b>8.410 (3.160-22.383)</b>	<b>10.576 (3.346-33.433)</b>	-	-	
Gender (Females vs males)	<b>0.505 (0.279-0.915)</b>	<b>0.399 (0.195-0.819)</b>	1.482 (0.761-2.889)	-	
Age	<b>0.962 (0.933-0.993)</b>	0.966 (0.930-1.004)	<b>1.043 (1.006-1.081)</b>	1.032 (0.991-1.074)	
Education (Post vs up-to high School)	0.646 (0.324-1.289)	-	1.060 (0.470-2.386)	-	
Employment (Unemployed vs employed)	<b>3.891 (2.146-7.056)</b>	<b>2.706 (1.332-5.495)</b>	<b>0.383 (0.197-0.746)</b>	<b>0.475 (0.228-0.988)</b>	
Homelessness (Homeless vs non-homeless)	<b>2.936 (1.106-7.797)</b>	2.024 (0.659-6.218)	0.366 (0.124-1.079)	-	
HIV status <sup>1</sup> (Positive vs negative)	<b>5.018 (2.656-9.479)</b>	-	<b>0.207 (0.105-0.411)</b>	-	
Participant group (reference group: negative controls)	RS	4.500 (1.382-14.650)	<b>4.420 (1.298-15.052)</b>	<b>0.222 (0.068-0.723)</b>	<b>0.233 (0.070-0.778)</b>
	LCS	3.250 (0.965-10.950)	2.780 (0.791-9.773)	0.308 (0.091-1.037)	0.344 (0.100-1.175)
	Network of RS	<b>3.690 (1.979-6.878)</b>	<b>4.903 (2.348-10.239)</b>	<b>0.157 (0.077-0.318)</b>	<b>0.186 (0.090-0.382)</b>
	Network of LCS	<b>4.222 (1.779-10.023)</b>	<b>5.369 (1.965-14.671)</b>	<b>0.162 (0.061-0.433)</b>	<b>0.185 (0.068-0.502)</b>

Binary logistic regression used for the Odds Ratio (95% CI) of answering *yes* versus *no* at follow-up. Factors (except for participant group) non-significantly related to injecting drug use in univariable logistic regression analysis were excluded from multivariable analysis.

<sup>1</sup> HIV status was not included in the multivariable logistic regression analysis for participants who stopped injecting drug use in follow-up because of collinearity with participant group.

Odds ratios of variables whose confidence intervals do not include 1 are shown in bold.

Abbreviations: RS, recent seeds; LCS, control seeds with long-term HIV infection.

**Table S6:** Median values and interquartile ranges (IQR) of the number of different people who the participants injected drugs with, at baseline and follow-up of Transmission Reduction Intervention Project (TRIP).

<b>Q2: How many different people did you inject drugs with? (n=204)</b>				
		<b>Baseline</b>	<b>Follow-up</b>	<b>P-value</b>
		<b>[n (%)]</b>	<b>[n (%)]</b>	
Overall		4 (2-7.5)	3.5 (1-10)	0.896
HIV Status	Positive	4 (3-7)	4 (1-10)	0.947
	Negative	4 (2-10)	3 (1-10)	0.893
Participant group	Recent Seeds (RS)	3.5 (1-5)	4 (1-7)	0.230
	Control Seeds with Long-term HIV infection (LCS)	3 (3-7.5)	2.5 (0.5-5.5)	0.077
	Network of RS	4 (2-7)	3 (1-10)	0.611
	Network of LCS	6 (4-10)	6 (2-20)	0.826
	Negative controls	3 (1-10)	3 (1-10)	0.699

The Wilcoxon signed-rank test was used to test the difference of the matched pairs at baseline versus follow-up.

Abbreviations: RS, recent seeds; LCS, control seeds with long-term HIV infection.

**Table S7:** Frequencies and percentages (in parentheses) of the responses to questionnaire item Q4a: When you injected drugs, what proportion of the time did you share a syringe someone else had previously used to inject? (n=203) at baseline and at follow-up of Transmission Reduction Intervention Project (TRIP).

			Drug injection-related behavior (Q4a)		
			Safe [n, (%)]	Risky [n, (%)]	P-value
Overall		Baseline	133 (65.5)	70 (34.5)	<i>0.007</i>
		Follow-up	155 (76.4)	48 (23.7)	
HIV Status	Positive	Baseline	66 (62.3)	40 (37.7)	<i>0.029</i>
		Follow-up	80 (75.5)	26 (24.5)	
	Negative	Baseline	67 (69.1)	30 (30.9)	<i>0.169</i>
		Follow-up	75 (77.3)	22 (22.7)	
Participant group	Recent Seeds (RS)	Baseline	11 (61.1)	7 (38.9)	<i>0.250</i>
		Follow-up	14 (77.8)	4 (22.2)	
	Control Seeds with Long-term HIV infection (LCS)	Baseline	8 (66.7)	4 (33.3)	<i>1.000</i>
		Follow-up	9 (75.0)	3 (25.0)	
	Network of RS	Baseline	65 (64.4)	36 (35.6)	<i>0.007</i>
		Follow-up	81 (80.2)	20 (19.8)	
	Network of LCS	Baseline	21 (56.8)	16 (43.2)	<i>0.804</i>
		Follow-up	23 (62.2)	14 (37.8)	
Negative controls	Baseline	28 (80.0)	7 (20.0)	<i>1.000</i>	
	Follow-up	28 (80.0)	7 (20.0)		

The responses were collapsed into the categories, safe (none of the time) and risky (very little; less than half; about half; more than half; almost all; all) behavior. The Exact McNemar significance probability test was used to test the difference of the matched pairs in baseline versus follow-up.

P-values in italics stand for statistically significant differences between groups ( $p < 0.05$ ).

Abbreviations: RS, recent seeds; LCS, control seeds with long-term HIV infection.



**Table S8:** Frequencies and percentages (in parentheses) of the responses to questionnaire item Q4b: When you injected drugs, what proportion of the time did you give someone a syringe to use that you already injected with? (n=202), at baseline and at follow-up of Transmission Reduction Intervention Project (TRIP).

			Drug injection-related behavior (Q4b)		
			Safe [n, (%)]	Risky [n, (%)]	P-value
Overall		Baseline	127 (62.9)	75 (37.1)	<i>0.002</i>
		Follow-up	153 (75.7)	49 (24.3)	
HIV Status	Positive	Baseline	74 (70.5)	31 (29.5)	<i>0.035</i>
		Follow-up	87 (82.9)	18 (44.4)	
	Negative	Baseline	53 (54.6)	44 (45.4)	0.035
		Follow-up	66 (68.0)	31 (32.0)	
Participant group	Recent Seeds (RS)	Baseline	12 (66.7)	6 (33.3)	0.453
		Follow-up	15 (83.3)	3 (16.7)	
	Control Seeds with Long-term HIV infection (LCS)	Baseline	9 (81.8)	2 (18.2)	1.000
		Follow-up	9 (81.8)	2 (18.2)	
	Network of RS	Baseline	59 (58.4)	42 (41.6)	<i>0.005</i>
		Follow-up	76 (75.3)	25 (24.8)	
	Network of LCS	Baseline	24 (64.9)	13 (35.1)	0.791
		Follow-up	26 (70.3)	11 (29.7)	
	Negative controls	Baseline	23 (65.7)	12 (34.3)	0.344
		Follow-up	27 (77.1)	8 (22.9)	

The responses were collapsed into the categories, safe (none of the time) and risky (very little; less than half; about half; more than half; almost all; all) behavior.

The Exact McNemar significance probability test was used to test the difference of the matched pairs in baseline versus follow-up.

P-values in italics stand for statistically significant differences between groups ( $p < 0.05$ ).

Abbreviations: RS, recent seeds; LCS, control seeds with long-term HIV infection.

**Table S9:** Frequencies and percentages (in parentheses) of the responses to questionnaire item Q4(c): When you injected drugs, what proportion of the time did you share a cooker, filter or rinse water that someone else had previously used to inject? (n=202) at baseline and at follow-up of Transmission Reduction Intervention Project (TRIP).

			Drug injection-related behavior (Q4c)		
			Safe [n, (%)]	Risky [n, (%)]	P-value
Overall		Baseline	78 (38.6)	124 (61.4)	
		Follow-up	126 (62.4)	76 (37.6)	<i>&lt;0.001</i>
HIV Status	Positive	Baseline	37 (35.2)	68 (64.8)	
		Follow-up	65 (61.9)	40 (38.1)	<i>&lt;0.001</i>
	Negative	Baseline	41 (42.3)	56 (57.7)	
		Follow-up	61 (62.9)	36 (37.1)	<i>0.002</i>
Participant group	Recent seeds (RS)	Baseline	6 (33.3)	12 (66.7)	
		Follow-up	13 (72.2)	5 (27.8)	<i>0.065</i>
	Control Seeds with Long-term HIV infection (LCS)	Baseline	6 (54.6)	5 (45.5)	
		Follow-up	7 (63.6)	4 (36.4)	<i>1.000</i>
	Network of RS	Baseline	41 (40.6)	60 (59.4)	
		Follow-up	68 (67.3)	33 (32.7)	<i>&lt;0.001</i>
	Network of LCS	Baseline	9 (24.3)	28 (75.7)	
		Follow-up	17 (46.0)	20 (54.1)	<i>0.039</i>
	Negative controls	Baseline	16 (45.7)	19 (54.3)	
		Follow-up	21 (60.0)	14 (40.0)	<i>0.267</i>

The responses were collapsed into the categories, safe (none of the time) and risky (very little; less than half; about half; more than half; almost all; all) behavior.

The Exact McNemar significance probability test was used to test the difference of the matched pairs in baseline versus follow-up.

P-values in italics stand for statistically significant differences between groups ( $p < 0.05$ ).

Abbreviations: RS, recent seeds; LCS, control seeds with long-term HIV infection.

**Table S10:** Frequencies and percentages (in parentheses) of the responses to questionnaire item Q4(d): When you injected drugs, what proportion of the time did you give someone a cooker, filter or rinse water that you had previously used to inject? (n=202), at baseline and at follow-up of Transmission Reduction Intervention Project (TRIP).

		Drug injection-related behavior (Q4d)			
		Safe [n, (%)]	Risky [n, (%)]	P-value	
Overall		Baseline	93 (46.0)	109 (54.0)	<i>&lt;0.001</i>
		Follow-up	128 (63.4)	74 (36.6)	
HIV Status	Positive	Baseline	53 (50.5)	52 (49.5)	<i>0.002</i>
		Follow-up	74 (70.5)	31 (29.5)	
	Negative	Baseline	40 (41.2)	57 (58.8)	<i>0.020</i>
		Follow-up	54 (55.7)	43 (44.3)	
Participant group	Recent seeds (RS)	Baseline	8 (44.4)	10 (55.6)	0.070
		Follow-up	14 (77.8)	4 (22.2)	
	Control Seeds with Long-term HIV infection (LCS)	Baseline	8 (72.7)	3 (27.3)	1.000
		Follow-up	9 (81.8)	2 (18.2)	
	Network of RS	Baseline	48 (47.5)	53 (52.5)	<i>0.004</i>
		Follow-up	67 (66.3)	34 (33.7)	
	Network of LCS	Baseline	12 (32.4)	25 (67.6)	0.267
		Follow-up	17 (45.9)	20 (54.1)	
	Negative controls	Baseline	17 (48.6)	18 (51.4)	0.344
		Follow-up	21 (60.0)	14 (40.0)	

The responses were collapsed into the categories, safe (none of the time) and risky (very little; less than half; about half; more than half; almost all; all) behavior.

The Exact McNemar significance probability test was used to test the difference of the matched pairs in baseline versus follow-up.

P-values in italics stand for statistically significant differences between groups ( $p < 0.05$ ).

Abbreviations: RS, recent seeds; LCS, control seeds with long-term HIV infection.

**Table S11:** Frequencies and percentages (in parentheses) of the responses to questionnaire item Q4(e): When you injected drugs, what proportion of the time did you backload (piggy-back) to share injection drugs? (n=202), at baseline and at follow-up of Transmission Reduction Intervention Project (TRIP).

			Drug injection-related behavior (Q4e)		
			Safe [n, (%)]	Risky [n, (%)]	P-value
Overall		Baseline	150 (74.3)	52 (25.7)	<i>&lt;0.001</i>
		Follow-up	180 (89.1)	22 (10.9)	
HIV Status	Positive	Baseline	76 (72.4)	29 (27.6)	<i>0.004</i>
		Follow-up	92 (87.6)	13 (12.4)	
	Negative	Baseline	74 (76.3)	23 (23.7)	<i>0.003</i>
		Follow-up	88 (90.7)	9 (9.3)	
Participant group	Recent seeds (RS)	Baseline	11 (61.1)	7 (38.9)	<i>0.031</i>
		Follow-up	17 (94.4)	1 (5.6)	
	Control Seeds with Long-term HIV infection (LCS)	Baseline	8 (72.7)	3 (27.3)	0.250
		Follow-up	11 (100)	0 (0.0)	
	Network of RS	Baseline	78 (77.2)	23 (22.8)	<i>0.007</i>
		Follow-up	92 (91.1)	9 (8.9)	
	Network of LCS	Baseline	25 (67.6)	12 (32.4)	0.344
		Follow-up	29 (78.4)	8 (21.6)	
	Negative controls	Baseline	28 (80.0)	7 (20.0)	0.375
		Follow-up	31 (88.6)	4 (11.4)	

The responses were collapsed into the categories, safe (none of the time) and risky (very little; less than half; about half; more than half; almost all; all) behavior. The Exact McNemar significance probability test was used to test the difference of the matched pairs in baseline versus follow-up.

P-values in italics stand for statistically significant differences between groups ( $p < 0.05$ ).

Abbreviations: RS, recent seeds; LCS, control seeds with long-term HIV infection.

**Table S12:** Odds ratios (OR) and 95% confidence intervals (CI) of univariable and multivariable logistic regression models for participants responses to questionnaire items of drug injection-related behaviors (safe *versus* risky) at follow-up (Q4b, Q4d, Q4e).

		Drug injecting related behaviors in follow-up					
		Q4b		Q4d		Q4e	
Factors		Univariable	Multivariable	Univariable	Multivariable	Univariable	Multivariable
Baseline response		3.373 (1.732-6.567)	2.814 (1.403-5.647)	3.583 (1.926-6.669)	2.649 (1.358-5.168)	5.222 (2.079-13.116)	4.686 (1.723-12.743)
Gender (Females vs males)		1.705 (0.784-3.708)	-	1.435 (0.697-2.953)	-	3.133 (1.206-8.138)	2.934 (1.014-8.489)
Age		0.924 (0.879-0.971)	0.947 (0.898-0.999)	0.927 (0.888-0.968)	0.933 (0.888-0.980)	0.921 (0.859-0.988)	0.956 (0.884-1.033)
Education (Post vs up-to high School)		0.903 (0.343-2.378)	-	1.043 (0.451-2.409)	-	0.297 (0.038-2.301)	-
Employment (Unemployed vs employed)		2.029 (0.669-6.158)	-	2.942 (1.070-8.094)	4.247 (1.391-12.972)	1.605 (0.354-7.275)	-
Homelessness (Homeless vs non-homeless)		1.177 (0.509-2.721)	-	0.946 (0.439-2.038)	-	1.602 (0.548-4.685)	-
HIV status (Positive vs negative)		0.449 (0.233-0.865)	-	0.526 (0.297-0.931)	-	1.444 (0.589-3.541)	-
Participant group (Negative controls as reference group)	RS	0.675 (0.155-2.934)	0.590 (0.124-2.816)	0.429 (0.117-1.574)	0.256 (0.060-1.085)	0.456 (0.047-4.412)	0.291 (0.027-3.144)

LCS	0.675 (0.122-3.736)	0.830 (0.138-5.000)	0.300 (0.057-1.581)	0.283 (0.048-1.682)	-	-
Network of RS	1.083 (0.439-2.676)	0.906 (0.347-2.362)	0.729 (0.332-1.603)	0.472 (0.191-1.170)	0.712 (0.205-2.472)	0.656 (0.172-2.494)
Network of LCS	1.375 (0.479-3.951)	1.265 (0.415-3.857)	1.853 (0.731-4.700)	1.193 (0.429-3.317)	2.067 (0.563-7.591)	1.629 (0.392-6.778)

Q4: When you injected drugs, what proportion of the time did you (Q4b) give someone a syringe to use that you already injected with? (Q4d), give someone a cooker, filter or rinse water that you had previously used to inject? (Q4e), backload (piggy-back) to share injection drugs?

Factors (except for participant group) non-significantly related to injecting drug use in univariable logistic regression analysis were excluded from multivariable analysis.

Odds ratios of variables whose confidence intervals do not include 1 are shown in bold.

Abbreviations: RS, recent seeds; LCS, control seeds with long-term HIV infection.

**Table S13:** Odds ratios (OR) and 95% confidence intervals (CI) of univariable and multivariable logistic regression models for improvement in participants responses to questionnaire items of drug injection-related behaviors (safe *versus* risky) in follow-up (Q4a, Q4c, Q4e).

Factors	Improvement of drug injection-related behaviors at follow-up							
	Q4a		Q4c		Q4e			
	Univariable	Multivariable	Univariable	Multivariable	Univariable	Multivariable		
Gender (Females vs males)	0.728 (0.281-1.883)	-	<b>0.278</b> <b>(0.103-0.752)</b>	<b>0.273</b> <b>(0.100-0.745)</b>	0.626 (0.226-1.731)	-		
Age	0.965 (0.919-1.014)	-	0.968 (0.928-1.009)	-	<b>0.925</b> <b>(0.875-0.977)</b>	<b>0.923</b> <b>(0.871-0.976)</b>		
Education (Post vs up-to high School)	1.175 (0.440-3.140)	-	1.105 (0.464-2.631)	-	1.658 (0.643-4.276)	-		
Employment (Unemployed vs employed)	2.390 (0.685-8.336)	-	0.468 (0.206-1.063)	-	1.061 (0.375-3.004)	-		
Homelessness (Homeless vs non-homeless)	0.721 (0.259-2.010)	-	0.969 (0.428-2.197)	-	1.560 (0.638-3.812)	-		
HIV status (Positive vs negative)	1.452 (0.729-2.894)	-	1.165 (0.646-2.101)	-	1.247 (0.617-2.521)	-		
Participant group (Reference group: Negative controls)		RS	2.133 (0.384-11.840)	2.133 (0.384-11.840)	2.889 (0.874-9.544)	2.997 (0.884-10.164)	3.875 (0.927-16.191)	4.013 (0.912-17.659)
		LCS	3.556 (0.610-20.727)	3.556 (0.610-20.727)	1.083 (0.235-4.994)	1.098 (0.233-5.176)	2.906 (0.538-15.698)	2.776 (0.499-15.436)

Network of RS	3.325 (0.935-11.827)	3.325 (0.935-11.827)	1.532 (0.647-3.627)	1.565 (0.653-3.753)	1.796 (0.566-5.698)	1.509 (0.464-4.912)
Network of LCS	3.429 (0.844-13.926)	3.429 (0.844-13.926)	1.070 (0.375-3.055)	1.092 (0.377-3.167)	1.808 (0.480-6.817)	1.483 (0.382-5.751)

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Q4: When you injected drugs, what proportion of the time did you share a syringe that someone else had previously used to inject? (Q4a), share a cooker, filter or rinse water that someone else had previously used to inject? (Q4c), backload (piggy-back) to share injection drugs? (Q4e).

Factors (except for participant group) non-significantly related to injecting drug use in univariable analysis were excluded from multivariable analysis.

Odds ratios of variables whose confidence intervals do not include 1 are shown in bold.

Abbreviations: RS, recent seeds; LCS, control seeds with long-term HIV infection.



**Table S14:** Proportions of women sex partners, men had *safe* sex with during the past six months.

Sociodemographic characteristics		Women, men always used condom with [median (%); (IQR) / mean $\pm$ SD]								
		Continued injecting in follow-up (n=86)			Stopped injecting in follow-up (n=30)			Not injecting at baseline (n=10)		
		Baseline	Follow-up	P-value	Baseline	Follow-up	P-value	Baseline	Follow-up	P-value
Overall		50 (0-100) /	100 (0-100) /	0.053	67 (0-100) /	95 (0-100) /	0.837	0 (0-0) /	58 (0-100) /	0.094
		49 $\pm$ 47	59 $\pm$ 47	0.054	60 $\pm$ 43	61 $\pm$ 46	0.933	10 $\pm$ 32	49 $\pm$ 45	0.086
HIV Status	Positive	58 (0-100) /	100 (46-100) /	0.025	100 (100-100) /	100 (100-100) /	-	0 (0-0) /	0 (0-0) /	-
		53 $\pm$ 47	75 $\pm$ 43	0.035	100 $\pm$ 0	100 $\pm$ 0	-	0 $\pm$ .	0 $\pm$ .	-
	Negative	42 (0-100) /	50 (0-100) /	0.607	67 (0-100) /	80 (0-100) /	0.845	0 (0-0) /	67 (0-100) /	0.104
		46 $\pm$ 47	50 $\pm$ 48	0.543	55 $\pm$ 43	56 $\pm$ 47	0.934	11 $\pm$ 33	55 $\pm$ 44	0.086
Participant group	Recent seeds (RS)	48 (0-100) /	100 (100-100) /	0.050	100 (100-100) /	100 (100-100) /	-	-	-	-
		49 $\pm$ 54	100 $\pm$ 0	0.071	100 $\pm$ .	100 $\pm$ .	-	-	-	-
	Control seeds with long-term HIV infection (LCS)	0 (0-50) /	0 (0-50) /	1.000	100 (100-100) /	100 (100-100) /	-	-	-	-
		25 $\pm$ 50	25 $\pm$ 50	1.000	100 $\pm$ .	100 $\pm$ .	-	-	-	-
	Network of RS	50 (0-100) /	100 (0-100) /	0.078	0 (0-100) /	100 (0-100) /	0.085	0 (0-0) /	50 (0-75) /	0.161
		44 $\pm$ 44	60 $\pm$ 47	0.066	29 $\pm$ 49	62 $\pm$ 49	0.111	11 $\pm$ 33	44 $\pm$ 44	0.169
	Network of LCS	100 (0-100) /	100 (0-100) /	0.883	75 (25-100) /	75 (25-100) /	1.000	0 (0-0) /	100 (100-100) /	0.317
		68 $\pm$ 45	63 $\pm$ 48	0.649	63 $\pm$ 48	63 $\pm$ 48	1.000	0 $\pm$ .	100 $\pm$ .	-
	Negative controls	33 (0-100) /	33 (0-100) /	1.000	67 (67-100) /	80 (0-100) /	0.326	-	-	-
		49 $\pm$ 50	49 $\pm$ 48	0.981	68 $\pm$ 37	55 $\pm$ 48	0.168			

The Wilcoxon signed-rank test was used to test the difference of the matched pairs at baseline versus follow-up.

Abbreviations: IQR, Interquartile range; SD, standard deviation; RS, recent seeds; LCS, control seeds with long-term HIV infection.