

Supplemental Table S1: RDS measures for sociodemographic characteristics; among Seattle participants in the 2011 NHBS-IDU3 survey: First randomization, **Group 1**

	N	RDS- Adjusted Estimate	Standard Error	Design Effect	Sample Population Proportion	Equilibrium Estimate	Unadjusted Network Size	Homophily
Age								
18 - 29	53	.171	.053	5.73	.190	.150	24.02	.494
30 - 39	79	.247	.043	2.87	.278	.267	40.70	.130
40 - 49	79	.220	.038	2.43	.268	.290	46.00	.172
50 +	78	.362	.062	4.81	.264	.292	36.23	.226
Race								
White	186	.595	.058	4.03	.647	.631	39.21	.170
Black	29	.217	.061	6.33	.098	.115	38.97	.270
Hispanic	24	.048	.013	1.07	.081	.083	36.96	.060
Native American	9	.018	.007	0.80	.031	.029	47.67	-1.00
Multiple races	41	.122	.028	2.12	.142	.142	29.45	-.088
Sex								
Male	166	.518	.057	3.76	.589	.586	37.60	.268
Female	116	.482	.057	3.76	.411	.414	38.70	.034
Area of residence								
North Seattle	62	.196	.042	3.24	.224	.228	35.40	.262
Downtown Seattle	104	.316	.055	4.04	.367	.365	43.12	.381
South Seattle	75	.346	.062	4.91	.273	.276	33.71	.235
South King County	27	.108	.047	6.63	.101	.094	37.45	.277
East King County	10	.033	.016	2.32	.035	.036	32.8	.195
Education								
< High school grad.	70	.262	.051	3.89	.237	.25	29.11	.112
High school grad.	110	.395	.049	2.90	.383	.379	37.05	-.063
Post high school	109	.343	.050	3.21	.380	.371	44.25	.110
Drug most frequently injected^a								
Heroin	240	.857	.037	3.23	.848	.829	36.40	.208
Speedballs	9	.014	.005	0.52	.031	.030	42.89	-1.00
Cocaine	5	.025	.014	2.32	.017	.017	14.00	-1.00
Amphetamines	29	.104	.035	3.80	.103	.124	48.76	.488
Shared syringe^a								
No	189	.706	.040	2.23	.653	.661	42.68	-.036
Yes	99	.294	.040	2.23	.347	.339	28.90	.119
Shared cooker^a								
No	125	.542	.050	2.91	.432	.442	41.30	-.052
Yes	163	.458	.050	2.91	.568	.558	35.37	.288
Backloaded^a								
No	206	.772	.034	1.90	.714	.715	39.13	-.067
Yes	82	.228	.034	1.90	.286	.285	34.97	.090

^a Previous 12 months.

Supplemental Table S2: RDS measures for sexual, drug-associated and HIV- and HCV-related variables in the Seattle area NHBS-IDU2 population: First randomization, **Group 1**

	N	RDS- Adjusted Estimate	Standard Error	Design Effect	Sample Population Proportion	Equilibrium Estimate	Unadjusted Network Size	Homophily
Male-to-male sex								
No	256	.911	.023	1.89	.901	.910	38.66	.248
Yes	26	.089	.023	1.89	.099	.090	32.39	.255
Number sex partners								
0	38	.196	.050	4.58	.135	.138	46.90	.021
1	93	.387	.053	3.42	.336	.337	27.17	-.049
2 – 4	95	.279	.038	2.07	.349	.345	47.84	.021
5 – 9	27	.082	.022	1.86	.093	.097	27.00	.010
10 +	24	.056	.017	1.58	.087	.084	41.33	.068
Unprotected, non-concordant sex								
None	182	.733	.040	2.36	.669	.662	38.40	-.085
Any	93	.267	.040	2.36	.331	.338	37.34	.118
HIV test, 12 months								
No	116	.487	.055	3.50	.463	.473	36.22	.009
Yes	129	.513	.055	3.50	.537	.527	39.65	.062
HIV test, 3 months								
No	190	.829	.034	2.36	.770	.776	38.12	-.068
Yes	55	.171	.034	2.36	.230	.224	37.77	.054
Serologic HIV status								
Negative	273	.964	.021	3.67	.949	.953	37.43	.286
Positive	15	.036	.021	3.67	.051	.047	46.20	.451
Serologic HCV status								
Negative	86	.29	.045	2.84	.307	.305	35.66	.227
Positive	199	.71	.045	2.84	.693	.695	38.64	.169

Supplemental Table S3: RDS measures for sociodemographic characteristics; among Seattle participants in the 2011 NHBS-IDU3 survey: First randomization, **Group 2**

	N	RDS- Adjusted Estimate	Standard Error	Design Effect	Sample Population Proportion	Equilibrium Estimate	Unadjusted Network Size	Homophily
Age								
18 - 29	44	.100	.023	2.27	.115	.115	48.9	.034
30 - 39	89	.205	.032	2.43	.234	.229	44.4	.068
40 - 49	107	.288	.043	3.49	.275	.278	57.8	-.132
50 +	147	.407	.044	3.10	.377	.378	41.0	.169
Race								
White	200	.468	.054	4.53	.519	.515	55.5	.393
Black	89	.278	.051	5.01	.226	.235	30.2	.411
Hispanic	38	.097	.024	2.54	.102	.096	35.9	.073
Native American	19	.056	.020	2.93	.048	.048	30.8	.099
Multiple races	41	.101	.022	2.06	.104	.107	63.2	-.172
Sex								
Male	256	.669	.041	2.94	.670	.667	46.7	.138
Female	127	.331	.041	2.94	.330	.333	49.4	.144
Area of residence								
North Seattle	59	.173	.035	3.31	.161	.173	43.7	.270
Downtown Seattle	153	.438	.052	4.25	.414	.413	44.5	.313
South Seattle	87	.220	.036	2.92	.240	.235	53.8	.207
South King County	52	.139	.034	3.74	.145	.134	47.6	.348
East King County	15	.029	.012	1.98	.040	.044	47.5	.338
Education								
< High school grad.	107	.228	.030	1.98	.276	.275	49.0	.109
High school grad.	155	.405	.043	2.97	.406	.401	49.1	-.054
Post high school	124	.367	.041	2.80	.319	.324	43.8	.012
Drug most frequently injected^a								
Heroin	326	.777	.053	6.27	.849	.868	50.2	.609
Speedballs	22	.051	.015	1.80	.056	.055	39.1	.141
Cocaine	4	.019	.012	2.99	.010	.010	19.3	-.999
Amphetamines	29	.153	.052	8.08	.085	.067	21.1	.373
Shared syringe^a								
No	266	.763	.031	2.06	.691	.690	48.2	-.059
Yes	120	.237	.031	2.06	.309	.310	45.5	.175
Shared cooker^a								
No	155	.487	.045	3.14	.404	.407	45.8	-.075
Yes	228	.513	.045	3.14	.596	.593	48.6	.225
Backloaded^a								
No	269	.770	.031	2.10	.699	.698	46.5	-.070
Yes	117	.230	.031	2.10	.301	.302	49.3	.144

^a Previous 12 months.

Supplemental Table S4: RDS measures for sexual, drug-associated and HIV- and HCV-related variables in the Seattle area NHBS-IDU2 population: First randomization, **Group 2**

	N	RDS- Adjusted Estimate	Standard Error	Design Effect	Sample Population Proportion	Equilibrium Estimate	Unadjusted Network Size	Homophily
Male-to-male sex								
No	349	.856	.052	8.49	.908	.925	49.3	.717
Yes	33	.144	.052	8.49	.092	.075	29.7	.416
Number sex partners								
0	71	.165	.027	2.05	.185	.190	54.6	.128
1	146	.409	.044	3.10	.378	.382	50.4	.030
2 – 4	103	.299	.037	2.53	.270	.269	34.0	-.070
5 – 9	26	.064	.018	2.09	.072	.072	40.9	-.348
10 +	33	.064	.016	1.65	.095	.087	68.9	.041
Unprotected, non-concordant sex								
None	279	.774	.031	2.13	.728	.740	49.7	-.019
Any	100	.226	.031	2.13	.272	.260	42.0	.117
HIV test, 12 months								
No	178	.621	.040	2.63	.576	.584	45.9	-.065
Yes	127	.379	.040	2.63	.424	.416	54.6	.051
HIV test, 3 months								
No	258	.842	.031	2.80	.847	.847	48.6	.000
Yes	47	.158	.031	2.80	.153	.153	55.3	-.210
Serologic HIV status								
Negative	346	.818	.063	10.32	.893	.910	49.7	.791
Positive	40	.182	.063	10.32	.107	.090	22.3	.528
Serologic HCV status								
Negative	89	.315	.044	3.47	.240	.237	38.6	.205
Positive	285	.685	.044	3.47	.760	.763	49.8	.463

Table S5: Details of Randomization by recruitment chain procedure:
 Seattle area participants in the 2011 NBHS IDU3 survey: **Second randomization**

Recruitment chain	N participants	N waves	Random number	Cumulative number group 1	Cumulative number group 2	Difference group1:group2	
2	156	13	.17	156	532	376	Group 1
8	152	14	.19	308	380	72	
9	42	8	.24	350	338	12	
6	229	15	.71	579	109	470	Group 2
7	6	2	.74	585	103	482	
4	10	3	.74	595	93	502	
1	65	12	.81	660	28	632	
3	27	7	.83	687	1	686	
5	1	0	.86	688	0	688	

Figure S1: Random groups defined by recruitment chains among Seattle-area participants in the 2012 NBHS IDU survey, **Second randomization**: Yellow = Group 1; Blue = Group 2; Enlarged circles = seeds; Numbers = Recruitment chain

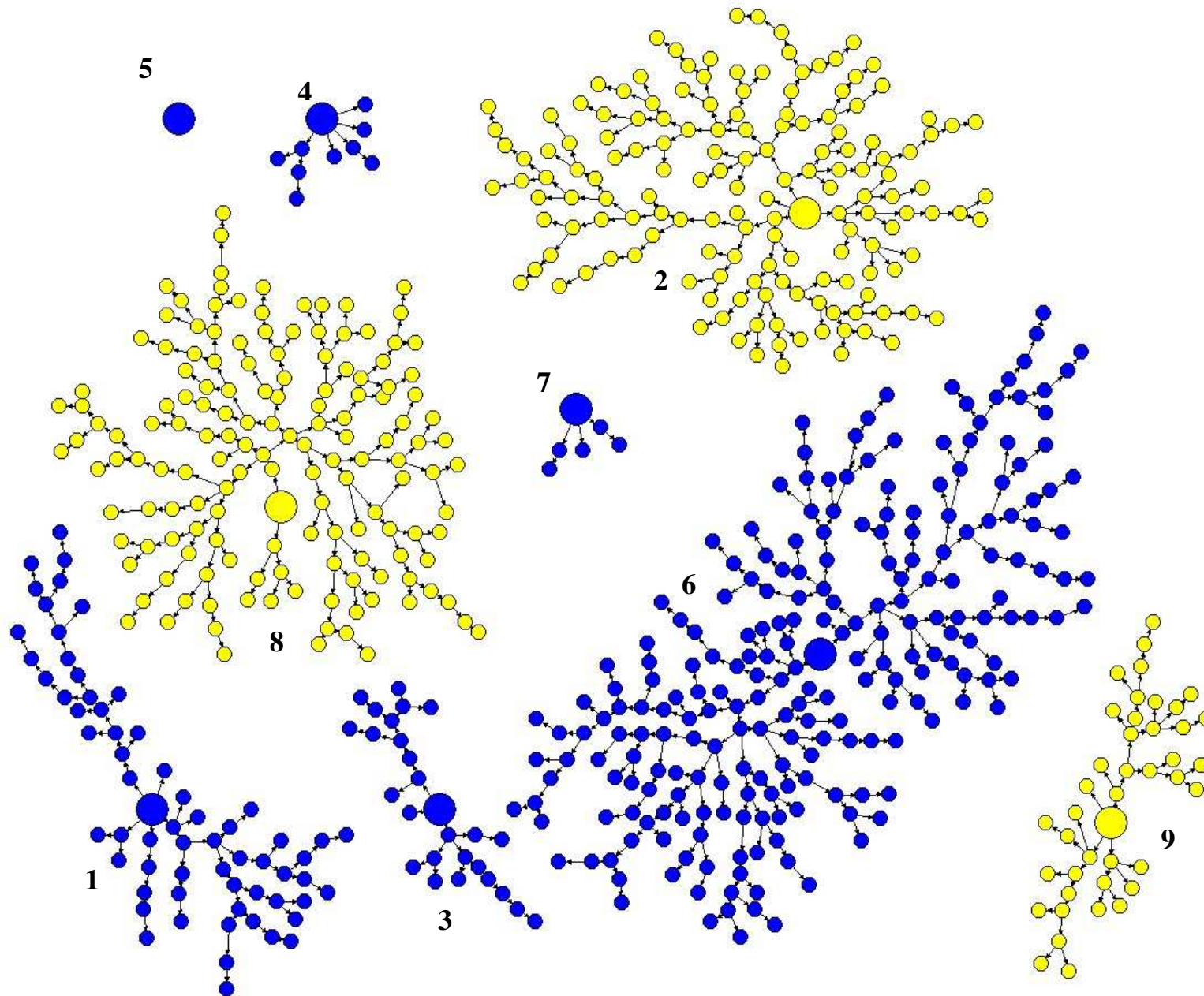


Table S6: Comparing sociodemographics and drug related variables between groups defined by recruitment chain among Seattle-area participants in the 2011 NHBS-IDU3 survey: **Second Randomization**

	Group 1 (Chains 2,8,9)		Group 2 (Chains 1,3,4,5,6,7)		Statistical tests	
	RDS- adjusted estimate	95% C.I.	RDS- adjusted estimate	95% C.I.	p-value	Non- overlapping 95% C.I. ^a
Age	(Percentages)					
18 – 29	10	(5 - 15)	17	(9 - 26)	.004	
30 – 39	19	(14 - 26)	24	(17 - 33)		
40 – 49	28	(21 - 35)	23	(16 - 33)		
≥ 50	43	(34 - 52)	35	(25 - 47)		
Race					5 x 10 ⁻⁹	yes
White	39	(30 - 49)	63	(51 - 73)		
Black	33	(23 - 44)	19	(9 - 31)		
Hispanic	11	(6 - 17)	4	(3 - 7)		
Other race	5	(2 - 9)	3	(1 - 6)		
Multiple races	11	(7 - 17)	11	(7 - 17)		
Sex					2 x 10 ⁻⁴	
Male	67	(59 - 75)	54	(43 - 64)		
Female	33	(25 - 41)	47	(36 - 57)		
Area of residence					.08	
North Seattle	19	(12 - 27)	19	(12 - 26)		
Downtown Seattle	43	(33 - 52)	34	(23 - 46)		
South Seattle	26	(19 - 34)	30	(20 - 42)		
South King County	9	(5 - 15)	14	(6 - 25)		
East King County	3	(1 - 5)	3	(1 - 7)		
Education					.38	
< High school grad.	24	(19 - 31)	25	(17 - 35)		
High school grad.	37	(30 - 45)	42	(32 - 51)		
Post high school	39	(30 - 46)	34	(24 - 43)		
Primary injection drug					.003	yes
Heroin	80	(71 - 88)	81	(69 - 91)		
Speedballs	6	(3 - 10)	1	(0 - 2)		
Cocaine	2	(0 - 5)	2	(0 - 5)		
Amphetamines	12	(5 - 20)	15	(6 - 28)		
Shared Needle^b					.60	
No	75	(68 - 81)	73	(65 - 80)		
Yes	25	(20 - 32)	27	(20 - 35)		
Shared Cooker^b					.006	
No	45	(37 - 53)	56	(46 - 65)		
Yes	55	(47 - 63)	44	(35 - 54)		
Backloaded^b					.30	
No	75	(68 - 81)	79	(73 - 85)		
Yes	26	(19 - 33)	21	(15 - 27)		
N (total)	280		408			

^a Variable categories in which the 95% confidence intervals of the two groups had no overlap are indicated with 'yes'.

^b Previous 12 months.

Table S7: Comparing sexual, HIV and HCV- related variables between randomly assigned groups defined by recruitment chain among Seattle-area participants in the 2011 NHBS-IDU3 survey: **Second randomization**

	Group 1 (Chains 2,8,9)		Group 2 (Chains 1,3,4,5,6,7)		Statistical tests	
	RDS- adjusted estimate	95% C.I.	RDS- adjusted estimate	95% C.I.	p-value	Non- overlapping 95% C.I.
Male-to-male sex^a	(Percentages)					
No	90	(82 - 96)	87	(77 - 95)	.26	
Yes	10	(5 - 18)	13	(5 - 23)		
Number sex partners^a					.43	
0	17	(11 - 22)	19	(11 - 28)		
1	38	(31 - 47)	41	(32 - 52)		
2 - 4	31	(24 - 38)	27	(20 - 34)		
5 - 9	7	(4 - 12)	7	(4 - 11)		
10 +	8	(4 - 11)	5	(3 - 8)		
Unprotected, non- concordant sex^{a,b}					.82	
No	76	(69 - 82)	75	(67 - 82)		
Yes	24	(18 - 31)	25	(18 - 33)		
HIV test, 12 months					.008	
No	61	(54 - 70)	51	(40 - 61)		
Yes	39	(30 - 47)	49	(39 - 60)		
HIV test, 3 months					.64	
No	84	(77 - 91)	83	(76 - 88)		
Yes	16	(10 - 23)	17	(12 - 24)		
Serologic HIV status					.007	
Negative	85	(74 - 95)	92	(82 - 99)		
Positive	15	(5 - 26)	8	(1 - 18)		
Serologic HCV status					.77	
Negative	31	(22 - 40)	30	(22 - 38)		
Positive	69	(60 - 78)	70	(62 - 79)		
N (total)	280		408			

^a Previous 12 months

^b Vaginal or anal sex without a condom with a partner of unknown HIV status or a status opposite to that of the participant.

Table S8: Details of Randomization by recruitment chain procedure:
 Seattle area participants in the 2011 NBHS IDU3 survey: **Third randomization**

Recruitment chain	N participants	N waves	Random number	Cumulative number group 1	Cumulative number group 2	Difference group1:group2	
6	229	15	.09	229	459	230	Group 1
3	27	7	.17	256	432	176	
2	156	13	.21	412	276	136	
9	42	8	.27	454	234	220	Group 2
1	65	12	.48	519	169	350	
8	152	14	.48	671	17	654	
4	10	3	.51	681	7	674	
7	6	2	.72	687	1	686	
5	1	0	.77	688	0	688	

Figure S2: Random groups defined by recruitment chains among Seattle-area participants in the 2011 NBHS IDU survey, **Third randomization:**
Yellow = Group 1; Blue = Group 2; Enlarged circles = seeds; Numbers = Recruitment chain

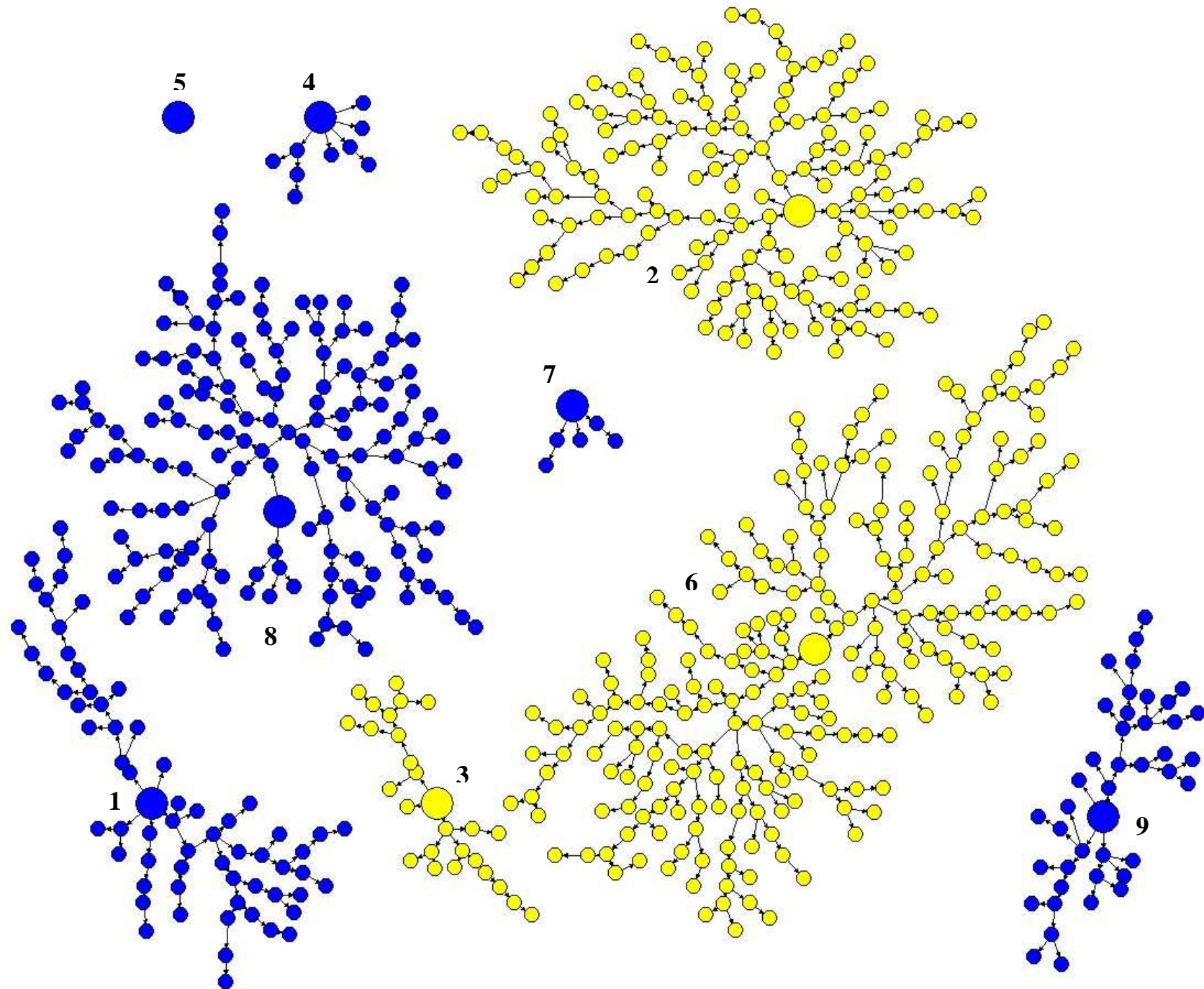


Table S9: Comparing sociodemographics and drug related variables between groups defined by recruitment chain among Seattle-area participants in the 2011 NHBS-IDU3 survey: **Third randomization**

	Group 1		Group 2		Statistical tests	
	RDS- adjusted estimate	95% C.I.	RDS- adjusted estimate	95% C.I.	p-value	Non- overlapping 95% C.I.
Age	(Percentages)					
18 – 29	15	(8 - 23)	14	(8 - 22)	.04	
30 – 39	23	(17 - 30)	22	(15 - 30)		
40 – 49	21	(16 - 28)	31	(21 - 42)		
≥ 50	41	(32 - 51)	34	(24 - 44)		
Race					7 x 10 ⁻⁹	
White	58	(47 - 68)	43	(31 - 55)		
Black	27	(16 - 38)	23	(14 - 35)		
Hispanic	6	(3 - 9)	10	(6 - 17)		
Other race	1	(0 - 2)	9	(4 - 15)		yes
Multiple races	9	(5 - 14)	14	(9 - 20)		
Sex					.002	
Male	55	(46 - 64)	67	(58 - 76)		
Female	45	(36 - 54)	33	(24 - 43)		
Area of residence					8 x 10 ⁻⁴	
North Seattle	18	(11 - 25)	19	(12 - 28)		
Downtown Seattle	33	(25 - 42)	48	(35 - 60)		
South Seattle	31	(22 - 41)	23	(14 - 32)		
South King County	15	(7 - 23)	10	(3 - 18)		
East King County	4	(1 - 8)	2	(0 - 4)		
Education					.19	
< High school grad.	24	(17 - 33)	25	(17 - 33)		
High school grad.	43	(35 - 51)	36	(26 - 47)		
Post high school	33	(25 - 41)	39	(30 - 49)		
Primary injection drug					.04	
Heroin	85	(78 - 91)	76	(63 - 88)		
Speedballs	3	(1 - 5)	4	(1 - 8)		
Cocaine	2	(0 - 4)	3	(0 - 7)		
Amphetamines	11	(5 - 17)	17	(6 - 30)		
Shared Needle^a					.03	
No	71	(64 - 77)	78	(71 - 86)		
Yes	29	(23 - 36)	22	(15 - 29)		
Shared Cooker^a					.90	
No	52	(43 - 60)	50	(40 - 61)		
Yes	48	(40 - 57)	50	(39 - 60)		
Backloaded^a					.23	
No	75	(69 - 81)	80	(73 - 86)		
Yes	25	(19 - 31)	20	(14 - 27)		
N (total)	412		276			

^a Previous 12 months.

Table S10: Comparing sexual, HIV and HCV- related variables between randomly assigned groups defined by recruitment chain among Seattle-area participants in the 2011 NHBS-IDU3 survey: **Third randomization**

	Group 1		Group 2		Statistical tests	
	RDS- adjusted estimate	95% C.I.	RDS- adjusted estimate	95% C.I.	p-value	Non- overlapping 95% C.I.
Male-to-male sex^a	(Percentages)					
No	92	(89 - 97)	82	(68 - 94)	3 x 10 ⁻⁵	
Yes	8	(4 - 11)	18	(6 - 32)		
Number sex partners^a						
0	21	(13 - 28)	14	(9 - 21)	.03	
1	41	(34 - 51)	37	(27 - 47)		
2 - 4	26	(20 - 32)	34	(25 - 43)		
5 - 9	6	(4 - 10)	8	(4 - 14)		
10 +	5	(3 - 8)	7	(3 - 11)		
Unprotected, non-concordant sex^{a,b}						
No	72	(65 - 79)	81	(74 - 87)	.009	
Yes	28	(22 - 35)	19	(13 - 26)		
HIV test, 12 months						
No	51	(41 - 60)	65	(57 - 74)	5 x 10 ⁻⁴	
Yes	49	(40 - 59)	35	(26 - 43)		
HIV test, 3 months						
No	84	(78 - 89)	83	(74 - 89)	.69	
Yes	16	(11 - 22)	17	(11 - 26)		
Serologic HIV status						
Negative	97	(93 - 100)	75	(59 - 91)	< 10 ⁻¹⁶	yes
Positive	3	(1 - 7)	25	(9 - 42)		yes
Serologic HCV status						
Negative	29	(22 - 37)	32	(22 - 42)	.52	
Positive	71	(63 - 78)	68	(58 - 78)		
N (total)	412		276			

^a Previous 12 months

^b Vaginal or anal sex without a condom with a partner of unknown HIV status or a status opposite to that of the participant.

Table S11: Details of Randomization by recruitment chain procedure:
 Seattle area participants in the 2011 NBHS IDU3 survey: **Fourth randomization**

Recruitment chain	N participants	N waves	Random number	Cumulative number group 1	Cumulative number group 2	Difference group1:group2	
4	10	3	.18	10	678	668	Group 1
7	6	2	.26	16	672	656	
6	229	15	.32	245	443	198	
8	152	14	.33	397	291	106	
1	65	12	.65	462	226	236	Group 2
2	156	13	.83	618	70	548	
9	42	8	.85	660	28	632	
5	1	0	.88	661	27	634	
3	27	7	.96	688	0	688	

Figure S3: Random groups defined by recruitment chains among Seattle-area participants in the 2012 NBHS IDU survey, **Fourth randomization**: Yellow = Group 1; Blue = Group 2; Enlarged circles = seeds; Numbers = Recruitment chain

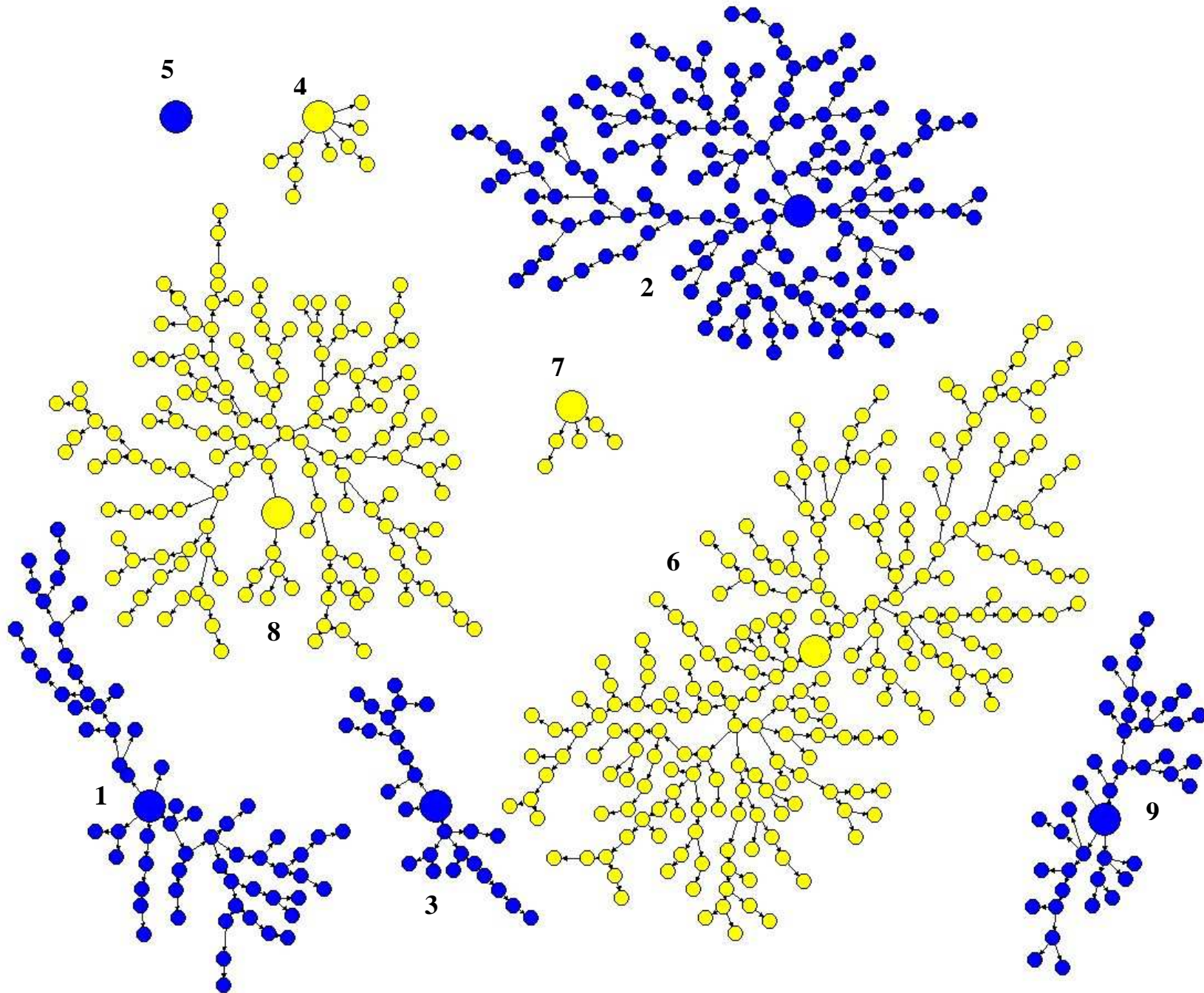


Table S12: Comparing sociodemographics and drug related variables between groups defined by recruitment chain among Seattle-area participants in the 2011 NHBS-IDU3 survey: **Fourth randomization**

	Group 1		Group 2		Statistical tests	
	RDS- adjusted estimate	95% C.I.	RDS- adjusted estimate	95% C.I.	p-value	Non- overlapping 95% C.I. ^a
Age	(Percentages)					
18 – 29	14	(7 - 23)	14	(8 - 21)	.81	
30 – 39	22	(15 - 29)	23	(16 - 31)		
40 – 49	26	(19 - 35)	23	(16 - 30)		
≥ 50	38	(28 - 48)	40	(31 - 49)		
Race					.36	
White	55	(44 - 65)	48	(38 - 59)		
Black	24	(14 - 34)	27	(17 - 39)		
Hispanic	6	(3 - 11)	9	(5 - 13)		
Other race	4	(1 - 7)	4	(2 - 8)		
Multiple races	11	(7 - 16)	11	(7 - 17)		
Sex					.85	
Male	60	(49 - 70)	59	(50 - 68)		
Female	40	(31 - 51)	41	(32 - 50)		
Area of residence					.004	
North Seattle	14	(8 - 21)	26	(17 - 35)		
Downtown Seattle	40	(29 - 50)	35	(25 - 45)		
South Seattle	31	(21 - 41)	24	(17 - 33)		
South King County	12	(5 - 22)	13	(6 - 20)		
East King County	3	(1 - 6)	3	(1 - 6)		
Education					.76	
< High school grad.	24	(16 - 32)	26	(19 - 33)		
High school grad.	41	(32 - 50)	39	(31 - 46)		
Post high school	35	(27 - 44)	36	(28 - 44)		
Primary injection drug					.01	
Heroin	79	(67 - 88)	85	(75 - 92)		
Speedballs	2	(1 - 4)	5	(2 - 8)		
Cocaine	2	(0 - 5)	2	(0 - 5)		
Amphetamines	17	(8 - 29)	9	(3 - 17)		
Shared Needle^b					.004	
No	77	(71 - 83)	67	(60 - 75)		
Yes	23	(17 - 29)	33	(25 - 40)		
Shared Cooker^b					.001	
No	56	(46 - 64)	45	(36 - 54)		
Yes	45	(36 - 54)	55	(46 - 64)		
Backloaded^b					.06	
No	81	(75 - 86)	71	(63 - 78)		
Yes	19	(14 - 25)	29	(22 - 37)		
N (total)	397		291			

^a There were no overlapping 95% confidence intervals between groups in the 4th randomization.

^b Previous 12 months.

Table S13: Comparing sexual, HIV and HCV- related variables between randomly assigned groups defined by recruitment chain among Seattle-area participants in the 2011 NHBS-IDU3 survey: **Fourth randomization**

	Group 1		Group 2		Statistical tests	
	RDS- adjusted estimate	95% C.I.	RDS- adjusted estimate	95% C.I.	p-value	Non- overlapping 95% C.I.
Male-to-male sex^a	(Percentages)					
No	85	(76 - 93)	93	(87 - 98)	5 x 10 ⁻⁴	
Yes	15	(7 - 24)	7	(2 - 13)		
Number sex partners^a						
0	20	(12 - 28)	15	(9 - 20)	.48	
1	40	(33 - 51)	39	(31 - 49)		
2 - 4	27	(20 - 33)	32	(24 - 40)		
5 - 9	7	(4 - 11)	8	(5 - 12)		
10 +	6	(3 - 9)	6	(3 - 10)		
Unprotected, non-concordant sex^{a,b}						
No	75	(68 - 82)	76	(69 - 82)	.76	
Yes	25	(19 - 33)	24	(18 - 31)		
HIV test, 12 months						
No	51	(42 - 61)	62	(52 - 70)	.01	
Yes	49	(39 - 58)	39	(30 - 48)		
HIV test, 3 months						
No	82	(75 - 87)	87	(80 - 92)	.10	
Yes	18	(13 - 25)	13	(8 - 20)		
Serologic HIV status						
Negative	90	(80 - 98)	87	(77 - 97)	.35	
Positive	10	(2 - 20)	13	(3 - 23)		
Serologic HCV status						
Negative	29	(21 - 37)	32	(22 - 42)	.45	
Positive	71	(63 - 79)	68	(58 - 78)		
N (total)	397		291			

^a Previous 12 months

^b Vaginal or anal sex without a condom with a partner of unknown HIV status or a status opposite to that of the participant.

Table S14: Details of Randomization by recruitment chain procedure:
 Seattle area participants in the 2011 NBHS IDU3 survey: **Fifth randomization**

Recruitment chain	N participants	N Waves	Random number	Cumulative number group 1	Cumulative number group 2	Difference group1:group2	
6	229	15	.11	229	459	230	Group 1
8	152	14	.15	381	307	74	
2	156	13	.42	537	151	386	Group 2
9	42	8	.43	579	109	470	
1	65	12	.50	644	44	600	
7	6	2	.60	650	38	612	
4	10	3	.60	660	28	632	
5	1	0	.77	661	27	634	
3	27	7	.99	688	0	688	

Figure S4: Random groups defined by recruitment chains among Seattle-area participants in the 2012 NBHS IDU survey, **Fifth randomization:**
Yellow = Group 1; Blue = Group 2; Enlarged circles = seeds; Numbers = Recruitment chain

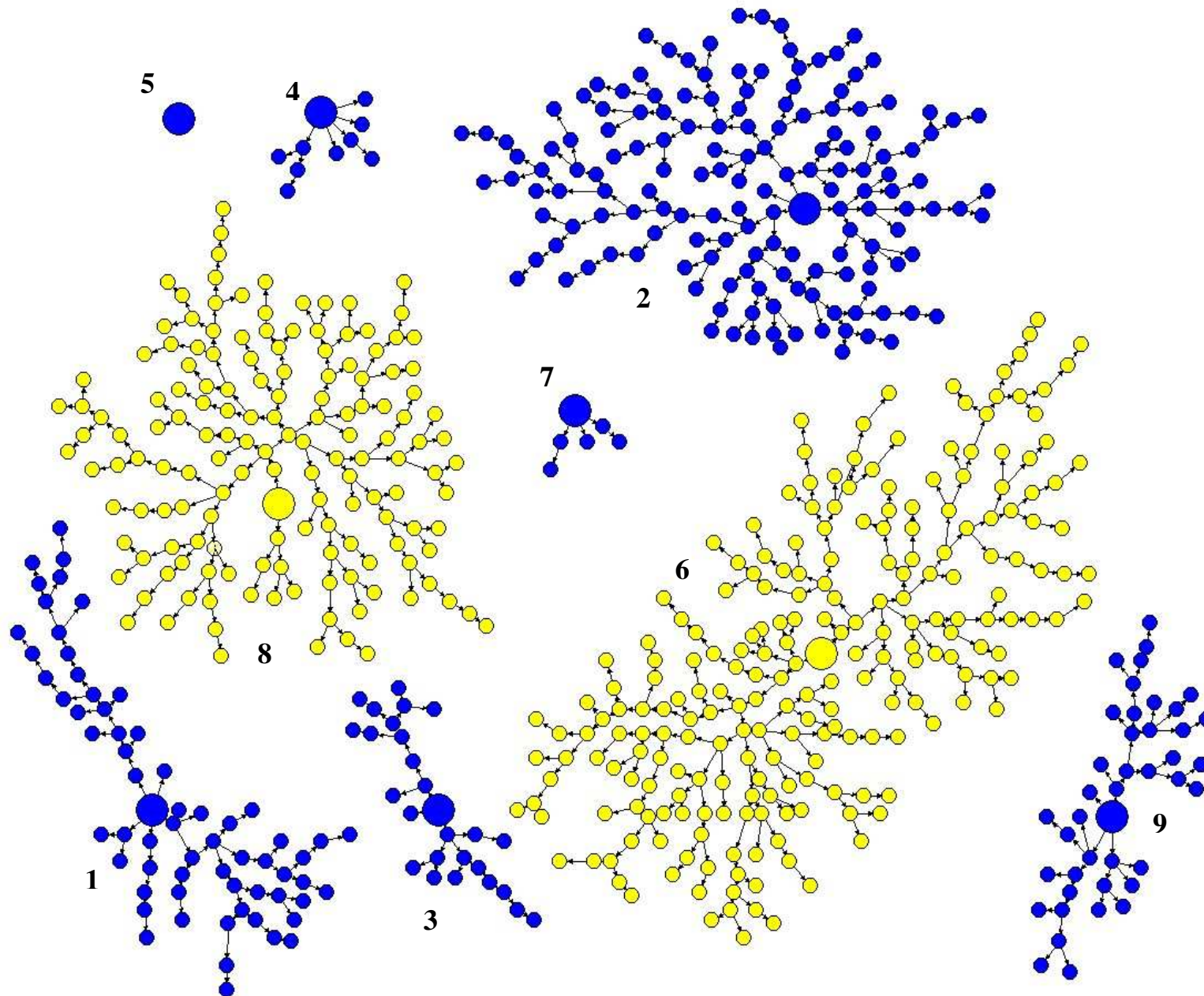


Table S15: Comparing sociodemographics and drug related variables between groups defined by recruitment chain among Seattle-area participants in the 2011 NHBS-IDU3 survey: **Fifth randomization**

	Group 1		Group 2		Statistical tests	
	RDS- adjusted estimate	95% C.I.	RDS- adjusted estimate	95% C.I.	p-value	Non- overlapping 95% C.I. ^a
Age	(Percentages)					
18 – 29	14	(7 - 23)	14	(8 - 21)	.94	
30 – 39	22	(16 - 30)	22	(15 - 30)		
40 – 49	24	(18 - 31)	26	(17 - 36)		
≥ 50	40	(29 - 50)	38	(29 - 48)		
Race					.34	
White	54	(43 - 64)	51	(39 - 62)		
Black	25	(15 - 36)	25	(15 - 37)		
Hispanic	6	(4 - 11)	8	(5 - 12)		
Other race	3	(1 - 5)	5	(2 - 10)		
Multiple races	12	(8 - 17)	10	(6 - 16)		
Sex					.61	
Male	59	(48 - 69)	61	(51 - 70)		
Female	41	(32 - 52)	40	(30 - 49)		
Area of residence					.004	
North Seattle	15	(9 - 23)	23	(15 - 33)		
Downtown Seattle	37	(28 - 48)	39	(27 - 51)		
South Seattle	33	(23 - 44)	22	(15 - 31)		
South King County	11	(4 - 21)	14	(7 - 22)		
East King County	4	(1 - 7)	3	(1 - 5)		
Education					.63	
< High school grad.	25	(17 - 34)	24	(17 - 31)		
High school grad.	39	(30 - 47)	42	(33 - 52)		
Post high school	37	(28 - 45)	34	(26 - 43)		
Primary injection drug^b					.51	
Heroin	83	(76 - 90)	80	(68 - 91)		
Speedballs	3	(1 - 5)	4	(2 - 7)		
Cocaine	2	(0 - 5)	2	(0 - 5)		
Amphetamines	12	(6 - 19)	14	(5 - 26)		
Shared Needle^b					.07	
No	76	(70 - 82)	70	(62 - 78)		
Yes	24	(18 - 31)	30	(22 - 38)		
Shared Cooker^b					.06	
No	54	(45 - 62)	48	(38 - 59)		
Yes	46	(38 - 55)	52	(41 - 62)		
Backloaded^b					.08	
No	80	(74 - 85)	73	(65 - 80)		
Yes	20	(15 - 26)	27	(20 - 35)		
N (total)	381		307			

^a There were no overlapping 95% confidence intervals between groups in the 5th randomization.

^b Previous 12 months.

Table S16: Comparing sexual, HIV and HCV- related variables between randomly assigned groups defined by recruitment chain among Seattle-area participants in the 2011 NHBS-IDU3 survey: **Fifth randomization**

	Group 1		Group 2		Statistical tests		
	RDS- adjusted estimate	95% C.I.	RDS- adjusted estimate	95% C.I.	p-value	Non- overlapping 95% C.I.	
Male-to-male sex^a	(Percentages)						
No	89	(84 - 94)	88	(75 - 97)	.80		
Yes	11	(6 - 16)	12	(3 - 25)			
Number sex partners							
0	21	(13 - 30)	14	(8 - 19)	.12		
1	39	(31 - 49)	41	(32 - 52)			
2 - 4	27	(20 - 33)	32	(24 - 41)			
5 - 9	7	(4 - 12)	7	(4 - 11)			
10 +	6	(3 - 10)	6	(3 - 9)			
Unprotected, non-concordant sex^{a,b}							
No	74	(66 - 80)	78	(71 - 84)	.19		
Yes	26	(20 - 34)	22	(16 - 29)			
HIV test, 12 months							
No	51	(42 - 61)	62	(53 - 71)	.005		
Yes	49	(39 - 58)	38	(30 - 47)			
HIV test, 3 months							
No	82	(74 - 87)	87	(80 - 92)	.09		
Yes	19	(13 - 26)	13	(8 - 20)			
Serologic HIV status							
Negative	94	(88 - 98)	83	(69 - 96)	3 x 10 ⁻⁶		
Positive	6	(2 - 12)	17	(5 - 31)			
Serologic HCV status							
Negative	30	(22 - 38)	31	(22 - 40)	.83		
Positive	70	(62 - 79)	70	(60 - 78)			
N (total)	381		307				

^a Previous 12 months

^b Vaginal or anal sex without a condom with a partner of unknown HIV status or a status opposite to that of the participant.