

**TABLE S1. Diagnostic codes used to define infections**

Site of infection	ICD-8 codes	ICD-10 codes
Hepatitis	070	B15–B19
Sepsis	038	A40–A41
Gastrointestinal infection	000–009, 540	A00–A09, K35
Skin infection	035, 050–057, 110–111, 680–686	B00–B09, A46, L00–L08
Respiratory infection	460–486	J00–J18
Pregnancy-related infection	630, 635, 670	O23, O264, O85–O86, O98
Urogenital infection	612, 620, 622, 590, 59500–59501	N300, N518B, N70–N72, N76, N770D, N771B, N771L
CNS infection	013, 02701, 03609, 04000–04399, 045–046, 05201, 05302, 05403, 05501, 05601, 062–065, 07199, 07202, 07501, 07929, 09049, 0949, 320–324, 392, 47400	DA022C, DA066, DA17, DA229C, DA321, DA390, DA504, DA514B, DA521A–B, DA548A,D, DA80–DA89, DB003–DB004, DB010–DB011, DB020–DB021, DB050–DB051, DB060, DB261–DB262, DB375, DB451, DB582, DB602, DE236A, DG0, DI02, DP352A
Other types of infection	Remaining infections within the general chapters 000–136, 710	Remaining infections within the general chapters A, B, M00

**TABLE S2. Associations between infections and incident alcohol-induced psychosis**

	<b>Model 1</b>	<b>Model 2</b>
Any infection	2.15 (1.61-2.85), p<0.001	1.60 (1.20-2.14), p=0.001
Hepatitis	7.13 (1.77-28.77), p=0.006	2.61 (0.64-10.61), p=0.18
Sepsis	1.26 (0.40-3.94), p=0.69	1.04 (0.33-3.26), p=0.95
Gastrointestinal infection	1.47 (0.98-2.22), p=0.06	1.15 (0.76-1.73), p=0.51
Skin infection	2.44 (1.65-3.62), p<0.001	1.81 (1.22-2.68), p=0.003
Respiratory infection	1.58 (1.14-2.18), p=0.006	1.20 (0.87-1.66), p=0.28
Urogenital infection	2.33 (1.08-5.02), p=0.03	1.56 (0.72-3.40), p=0.26
CNS infection	1.94 (0.72-5.23), p=0.19	1.61 (0.60-4.34), p=0.35
Other infections	2.46 (1.68-3.60), p<0.001	1.89 (1.29-2.77), p=0.001

Each type of infection entered into the Cox regression models as a time-varying covariate. Model 1 adjusted for sex, birth year, and calendar year. Model 2 further adjusted for alcohol or substance use disorder as a time-varying covariate, as well as parental education, parental abuse, parental psychotic disorder, and other parental psychiatric disorders.

**TABLE S3. Associations between infections and incident opioid-induced psychosis**

	<b>Model 1</b>	<b>Model 2</b>
Any infection	3.59 (1.66-7.73), p=0.001	2.59 (1.19-5.63), p=0.02
Hepatitis	Inestimable	Inestimable
Sepsis	6.02 (1.43-25.36), p=0.01	5.11 (1.21-21.58), p=0.03
Gastrointestinal infection	2.96 (1.26-6.95), p=0.01	2.19 (0.93-5.15), p=0.07
Skin infection	4.52 (1.92-10.64), p=0.001	3.24 (1.37-7.68), p=0.008
Respiratory infection	2.82 (1.33-5.97), p=0.007	2.08 (0.98-4.45), p=0.06
Urogenital infection	7.01 (2.02-24.36), p=0.002	4.60 (1.27-16.58), p=0.02
CNS infection	15.57 (5.40-44.90), p<0.001	12.55 (4.34-36.34), p<0.001
Other infections	1.45 (0.44-4.80), p=0.55	1.05 (0.32-3.51), p=0.93

Each type of infection entered into the Cox regression models as a time-varying covariate. Model 1 adjusted for sex, birth year, and calendar year. Model 2 further adjusted for alcohol or substance use disorder as a time-varying covariate, as well as parental education, parental abuse, parental psychotic disorder, and other parental psychiatric disorders.

**TABLE S4. Associations between infections and incident cannabis-induced psychosis**

	<b>Model 1</b>	<b>Model 2</b>
Any infection	1.52 (1.38-1.67) p<0.001	1.21 (1.10-1.33), p<0.001
Hepatitis	1.73 (0.65-4.62), p=0.27	0.74 (0.28-1.97), p=0.55
Sepsis	1.66 (1.19-2.33), p=0.003	1.41 (1.01-1.98), p=0.04
Gastrointestinal infection	1.25 (1.08-1.45), p=0.003	1.04 (0.90-1.20), p=0.63
Skin infection	1.56 (1.33-1.82), p<0.001	1.23 (1.05-1.44), p=0.009
Respiratory infection	1.34 (1.20-1.50), p<0.001	1.08 (0.97-1.21), p=0.18
Urogenital infection	2.43 (1.86-3.17), p<0.001	1.81 (1.39-2.37), p<0.001
CNS infection	1.48 (1.00-2.19), p=0.05	1.26 (0.85-1.87), p=0.25
Other infections	1.50 (1.29-1.75), p<0.001	1.22 (1.05-1.42), p=0.009

Each type of infection entered into the Cox regression models as a time-varying covariate. Model 1 adjusted for sex, birth year, and calendar year. Model 2 further adjusted for alcohol or substance use disorder as a time-varying covariate, as well as parental education, parental abuse, parental psychotic disorder, and other parental psychiatric disorders.

**TABLE S5. Associations between infections and incident cocaine-induced psychosis**

	<b>Model 1</b>	<b>Model 2</b>
Any infection	2.59 (1.91-3.51), p<0.001	1.94 (1.42-2.64), p<0.001
Hepatitis	19.17 (7.86-46.75), p<0.001	6.92 (2.80-17.10), p<0.001
Sepsis	2.29 (0.94-5.57), p=0.07	1.90 (0.80-4.62), p=0.16
Gastrointestinal infection	2.20 (1.51-3.19), p<0.001	1.72 (1.18-2.49), p=0.005
Skin infection	3.04 (2.08-4.43), p<0.001	2.27 (1.55-3.32), p<0.001
Respiratory infection	1.92 (1.39-2.65), p<0.001	1.45 (1.05-2.02), p=0.02
Urogenital infection	2.13 (0.93-4.89), p=0.08	1.42 (0.62-3.28), p=0.41
CNS infection	1.06 (0.26-4.29), p=0.93	0.88 (0.22-3.55), p=0.86
Other infections	2.31 (1.55-3.45), p<0.001	1.77 (1.18-2.65), p=0.005

Each type of infection entered into the Cox regression models as a time-varying covariate. Model 1 adjusted for sex, birth year, and calendar year. Model 2 further adjusted for alcohol or substance use disorder as a time-varying covariate, as well as parental education, parental abuse, parental psychotic disorder, and other parental psychiatric disorders.

**TABLE S6. Associations between infections and incident amphetamine-induced psychosis**

	<b>Model 1</b>	<b>Model 2</b>
Any infection	1.64 (1.37-1.97), p<0.001	1.22 (1.02-1.47), p=0.03
Hepatitis	10.44 (4.94-22.04), p<0.001	3.78 (1.78-8.04), p=0.001
Sepsis	2.65 (1.58-4.43), p<0.001	2.13 (1.27-3.56), p=0.004
Gastrointestinal infection	1.33 (1.02-1.75), p=0.04	1.04 (0.80-1.37), p=0.75
Skin infection	1.80 (1.36-2.38), p<0.001	1.34 (1.01-1.77), p=0.04
Respiratory infection	1.42 (1.15-1.76), p=0.001	1.07 (0.86-1.32), p=0.55
Urogenital infection	1.76 (1.00-3.08), p=0.05	1.19 (0.70-2.09), p=0.54
CNS infection	0.40 (0.10-1.60), p=0.20	0.33 (0.08-1.31), p=0.11
Other infections	1.73 (1.31-2.28), p<0.001	1.34 (1.01-1.76), p=0.04

Each type of infection entered into the Cox regression models as a time-varying covariate. Model 1 adjusted for sex, birth year, and calendar year. Model 2 further adjusted for alcohol or substance use disorder as a time-varying covariate, as well as parental education, parental abuse, parental psychotic disorder, and other parental psychiatric disorders.

**TABLE S7. Associations between infections and incident hallucinogen-induced psychosis**

	<b>Model 1</b>	<b>Model 2</b>
Any infection	1.05 (0.69-1.59), p=0.84	0.80 (0.52-1.22), p=0.30
Hepatitis	8.16 (1.14-58.65), p=0.04	3.48 (0.48-25.32), p=0.22
Sepsis	2.63 (0.83-8.32), p=0.10	2.12 (0.67-6.72), p=0.20
Gastrointestinal infection	1.22 (0.65-2.29), p=0.54	0.99 (0.53-1.86), p=0.98
Skin infection	0.94 (0.41-2.15), p=0.88	0.71 (0.31-1.64), p=0.43
Respiratory infection	1.06 (0.63-1.77), p=0.84	0.82 (0.49-1.37), p=0.45
Urogenital infection	3.08 (1.11-8.55), p=0.03	2.23 (0.80-6.26), p=0.13
CNS infection	1.06 (0.15-7.58), p=0.96	0.84 (0.11-6.06), p=0.87
Other infections	0.99 (0.46-2.14), p=0.98	0.78 (0.36-1.69), p=0.53

Each type of infection entered into the Cox regression models as a time-varying covariate. Model 1 adjusted for sex, birth year, and calendar year. Model 2 further adjusted for alcohol or substance use disorder as a time-varying covariate, as well as parental education, parental abuse, parental psychotic disorder, and other parental psychiatric disorders.

**TABLE S8. Associations between infections and incident substance-induced psychosis induced by other or mixed substances**

	<b>Model 1</b>	<b>Model 2</b>
Any infection	1.75 (1.59-1.94), p<0.001	1.29 (1.16-1.43), p<0.001
Hepatitis	15.05 (10.54-21.48), p<0.001	5.88 (4.10-8.42), p<0.001
Sepsis	1.90 (1.36-2.64), p<0.001	1.53 (1.10-2.13), p=0.01
Gastrointestinal infection	1.44 (1.25-1.67), p<0.001	1.11 (0.96-1.29), p=0.15
Skin infection	1.75 (1.50-2.05), p<0.001	1.29 (1.10-1.51), p=0.002
Respiratory infection	1.51 (1.34-1.69), p<0.001	1.12 (1.00-1.26), p=0.05
Urogenital infection	2.43 (1.85-3.21), p<0.001	1.62 (1.23-2.15), p=0.001
CNS infection	0.68 (0.40-1.24), p=0.21	0.55 (0.30-0.99), p=0.05
Other infections	1.89 (1.63-2.19), p<0.001	1.44 (1.24-1.67), p<0.001

Each type of infection entered into the Cox regression models as a time-varying covariate. Model 1 adjusted for sex, birth year, and calendar year. Model 2 further adjusted for alcohol or substance use disorder as a time-varying covariate, as well as parental education, parental abuse, parental psychotic disorder, and other parental psychiatric disorders.