

Supplemental Table A: Infectious disease categories and associated ICD-10 codes

Category:	Group:	ICD-10 codes:
Enteric infections	Enteric infections	A00, A01, A020, A029, A03, A04, A05, A06, A07,A08
	Enteric symptoms	A09, I880, K528, K529, R11
Respiratory infections	Upper RTI	J00, J01, J02, J03, J04, J05, J06, J32, J340, J36, J37, J390, J391
	Ear infections	H600, H601, H602, H603, H608, H609, H62, H65, H66, H67, H680, H70, H730, H750, H830, H940
	Acute lower RTI	A481, A482, B59, J09, J10, J11, J12, J13, J14, J15, J16, J17, J18, J20, J21, J22
	Chronic lower RTI	J40, J41, J42, J440, J47, J85, J86, J988
Other infections	Tuberculosis	A15, A16, A17, A18, A19, N740, N741, J65
	Kidney infections	N00, N05, N10, N136, N151
	Urinary tract infections	N300, N341, N351, N37, N390
	Reproductive system infections, male	N410, N411, N412, N413, N431, N45, N481, N482, N490, N49, N51
	Reproductive system infections, female	N70, N71, N72, N73, N74, N751, N764, N87
	Sepsis	A391, A392, A393, A394, A395, A398, A399 A40, A41, A483, A021, A327
	HIV/AIDS	B20, B21. B22, B23, B24
	Sexually transmitted infections	A50, A51, A52, A53, A54, A55, A56, A57, A58, A59, A60, A63, A64, N290
	CNS viral infections	A801, A802, A803, A804, A809, A811, A812, A818, A819, A82, A83, A84, A85, A86, A87, A88, A89
	CNS general infections	G00, G01, G02, G030, G039, G04, G05, G06, G07, G08, G09, G610, A321, A390
	Eye infections	B30, H000, H03, H043, H050, H100, H102, H103, H109, H130, H131, H160, H190, H191, H192, H220, H440, H451
	Oral infections	K02, K044, K046, K050, K052, K053, K113, K122
	Heart and Circulatory infections	B332, I00, I01, I02, I05, I06, I07, I08, I09, I301, I33, I38, I39, I400, I410, I411, I412, I430, I716, I790, I791
Gastrointestinal tract infections	K230, K231, K25, K26, K27, K28, K293, K294, K295, K35, K36, K37, K61, K630, K632, K650, K678, K908, K930	

Hepatic infections	K750, K770, K830
Viral Hepatitis	B15, B16, B17, B18, B19
Skin infections, typical	A46, L00, L01, L02, L03, L04, L050, L08
Skin infections, other	B86, T009, T633, T634, T793
Breast infections	N61
Osteomyelitis	M462, M463, M464, M465
Joint infections	M00, M01
Connective tissue infections	M021, M023, M03, M600, M630, M631, M632, M650, M651, M680, M710, M711, M896
Neoplasms from infection	C11, C161, C162, C163, C164, C165, C166, C168, C169, C210, C211, C220, C46, C53, D002, D013, D06
Postoperative infections	T802, T814, T826, T827, T835, T836, T845, T846, T847, T857, T874
Adverse effect of infectious disease treatment	R761, R762, T36, T37, T485, T487, T490, T495, T496, T499, T788, T789, T880, T881, T887
Other Bacterial infections	A20, A21, A22, A23, A24, A25, A26, A27, A28, A30, A31, A320, A328, A329, A33, A34, A35, A36, A37, A38, A42, A43, A44, A480, A484, A488, A49, A65, A66, A67, A68, A69, A70, A71, A74, A75, A77, A78, A79, B95, B96
Other Viral infections	A90, A91, A92, A93, A94, A95, A96, A98, A99, B00, B01, B02, B03, B04, B05, B06, B07, A08, B09, B25, B26, B27, B33, B34, B97
Other Mycoses	B35, B36, B37, B38, B39, B40, B41, B42, B43, B44, B45, B46, B47, B48, B49
Other Protozoan infections	B50, B51, B52, B53, B54, B55, B56, B57, B58, B60, B64
Other infections	B65, B66, B67, B68, B69, B70, B71, B72, B73, B74, B75, B76, B77, B78, B79, B80, B81, B82, B83, B85, B87, B88, B89, B94, B99, E033, E321, F024, F071, I88, T64
Perinatal infections	P002, P027, P23, P35, P36, P37, P38, P39

ICD-10, International Classification of Disease, Tenth Revision. RTI, respiratory tract infections. CNS, central nervous system.

Supplemental Table B: Sensitivity analysis presenting the total and decomposed effects on overall pediatric infections due to counterfactual changes in maternal education level restricted to first born children (model S1) and excluding children born to mothers in the two lowest household income quintiles (model S2)

	S1	S2
Maternal education level: 13–14 vs ≥15 years		
PNDE*	1.05 (0.90–1.22)	1.08 (0.96–1.22)
PNIE*	1.03 (1.01–1.05)	1.03 (1.01–1.05)
MIE†	-0.02 (-0.21–0.16)	-0.01 (-0.13–0.10)
TE*	1.05 (0.90–1.20)	1.10 (0.98–1.22)
Total percentage mediated‡	-	20
Maternal education level: 10–12 vs ≥15 years		
PNDE*	1.03 (0.92–1.17)	1.03 (0.94–1.12)
PNIE*	1.10 (0.99–1.21)	1.07 (1.02–1.13)
MIE†	-0.04 (-0.16–0.07)	-0.02 (-0.11–0.07)
TE*	1.09 (0.97–1.21)	1.08 (0.99–1.17)
Total percentage mediated‡	67	63
Maternal education level: ≤9 vs ≥15 years		
PNDE*	1.14 (0.92–1.40)	1.16 (0.96–1.41)
PNIE*	1.18 (0.91–1.52)	1.12 (0.98–1.27)
MIE†	0.01 (-0.18–0.19)	0.08 (-0.08–0.24)
TE*	1.32 (1.13–1.50)	1.37 (1.20–1.53)
Total percentage mediated‡	59	54

All models were adjusted for maternal age, maternal country of birth and year of birth. Model S1 included all 27 244 children. Model S2 included 37 922 children.

\*PNDE, PNIE and TE presented as IRR with 95% CI.

†MIE estimated as excess risk due to interaction =  $IRR^{TE} - IRR^{PNDE} - IRR^{PNIE} + 1$ .

‡Total percentage mediated estimated as  $((IRR^{PNIE} - 1)/(IRR^{TE} - 1) + RER^{MIE}/(IRR^{TE} - 1)) * 100$ .

CI, confidence intervals; IRR, incidence rates ratios; MIE, mediated interactive effect; PNDE, pure natural direct effect; PNIE, pure natural indirect effect; TE, total causal effect.