

S8 Table. Economic Analyses for Seven Intervention Bundles of Interest

Tables S8.1–S8.7 present the cost-breakdown for the seven key intervention bundles of interest. Intervention bundles involving either no interventions or pharmaceutical measures only produced estimates of economic burden dominated by mortality and healthcare utilization. Meanwhile, lost school and work days were responsible for much of the economic burden associated with non-pharmaceutical measures such as voluntary isolation and school closure.

Table S8.1. Economic analysis for “No Intervention” scenario

Category	Total	Unit Cost	Cost
Total hospital bed days	2,472	1,042	10,303,296
Total ICU bed days	580	2,084	12,087,200
Total deaths (Infant)	4	2,355,172	9,420,688
Total deaths (child)	4	2,207,744	8,830,976
Total deaths (young adult)	27	1,956,694	52,830,738
Total deaths (adult)	179	1,374,086	245,961,394
Total deaths (seniors)	150	424,296	63,644,400
Total lost school days	786	92	72,194
Total lost work days (YA + Adults)	9,448	193	1,819,212
Total lost work days (Senior)	435	193	83,759
Total vaccinations	0	20	0
Total antivirals	0	25	0
Total masks	0	4	0
Total			405,053,858

Table S8.2. Economic analysis for “Vaccination and Antiviral Therapy” scenario

Category	Total	Unit Cost	Cost
Total hospital bed days	815	1,042	3,396,920
Total ICU bed days	192	2,084	4,001,280
Total deaths (Infant)	1	2,355,172	2,355,172
Total deaths (child)	1	2,207,744	2,207,744
Total deaths (young adult)	9	1,956,694	17,610,246
Total deaths (adult)	58	1,374,086	79,696,988
Total deaths (seniors)	49	424,296	20,790,504
Total lost school days	256	92	23,514
Total lost work days (YA + Adults)	3,118	193	600,371
Total lost work days (Senior)	133	193	25,609
Total vaccinations	436,212	20	8,724,240
Total antivirals	311,341	25	7,783,530
Total masks	0	4	0
Total			147,216,118

Table S8.3. Economic analysis for “Vaccination, Antiviral Therapy, and Antiviral Prophylaxis” scenario

Category	Total	Unit Cost	Cost
Total hospital bed days	765	1,042	3,188,520
Total ICU bed days	180	2,084	3,751,200
Total deaths (Infant)	1	2,355,172	2,355,172
Total deaths (child)	1	2,207,744	2,207,744
Total deaths (young adult)	8	1,956,694	15,653,552
Total deaths (adult)	54	1,374,086	74,200,644
Total deaths (seniors)	45	424,296	19,093,320
Total lost school days	238	92	21,860
Total lost work days (YA + Adults)	2,942	193	566,482
Total lost work days (Senior)	124	193	23,876
Total vaccinations	436,212	20	8,724,240
Total antivirals	361,935	25	9,048,375
Total masks	0	4	0
Total			138,834,986

Table S8.4. Economic analysis for “Community-Contact Reduction, Personal Protective Measures, and Voluntary Isolation” scenario

Category	Total	Unit Cost	Cost
Total hospital bed days	634	1,042	2,642,512
Total ICU bed days	151	2,084	3,146,840
Total deaths (Infant)	1	2,355,172	2,355,172
Total deaths (child)	1	2,207,744	2,207,744
Total deaths (young adult)	4	1,956,694	7,826,776
Total deaths (adult)	35	1,374,086	48,093,010
Total deaths (seniors)	25	424,296	10,607,400
Total lost school days	54,921	92	5,044,494
Total lost work days (YA + Adults)	197,799	193	38,086,197
Total lost work days (Senior)	3,032	193	583,812
Total vaccinations	0	20	0
Total antivirals	0	25	0
Total masks	186,948	4	747,792
Total			121,341,749

Table S8.5. Economic analysis for “Community-Contact Reduction, Personal Protective Measures, Voluntary Isolation and Antiviral Therapy” scenario

Category	Total	Unit Cost	Cost
Total hospital bed days	560	1,042	2,334,080
Total ICU bed days	133	2,084	2,771,720
Total deaths (Infant)	1	2,355,172	2,355,172
Total deaths (child)	1	2,207,744	2,207,744
Total deaths (young adult)	4	1,956,694	7,826,776
Total deaths (adult)	31	1,374,086	42,596,666
Total deaths (seniors)	22	424,296	9,334,512
Total lost school days	54,024	92	4,962,104
Total lost work days (YA + Adults)	194,391	193	37,429,987
Total lost work days (Senior)	2,972	193	572,259
Total vaccinations	0	20	0
Total antivirals	100,264	25	2,506,608
Total masks	186,948	4	747,792
Total			115,645,420

Table S8.6 Economic analysis for “School Closure, Community Contact Reduction, Personal Protective Measures, Voluntary Isolation and Quarantine” scenario

Category	Total	Unit Cost	Cost
Total hospital bed days	550	1,042	2,292,400
Total ICU bed days	132	2,084	2,750,880
Total deaths (Infant)	1	2,355,172	2,355,172
Total deaths (child)	1	2,207,744	2,207,744
Total deaths (young adult)	4	1,956,694	7,826,776
Total deaths (adult)	24	1,374,086	32,978,064
Total deaths (seniors)	25	424,296	10,607,400
Total lost school days	9,916,572	92	910,837,138
Total lost work days (YA + Adults)	6,125,219	193	1,179,410,918
Total lost work days (Senior)	3,114	193	599,601
Total vaccinations	0	20	0
Total antivirals	0	25	0
Total masks	186,948	4	747,792
Total			2,152,613,885

Table S8.7. Economic analysis for “School Closure, Community Contact Reduction, Personal Protective Measures, Voluntary Isolation, Quarantine, Vaccination, Antiviral Therapy and Antiviral Prophylaxis” scenario

Category	Total	Unit Cost	Cost
Total hospital bed days	108	1,042	450,144
Total ICU bed days	26	2,084	541,840
Total deaths (Infant)	0	2,355,172	0
Total deaths (child)	0	2,207,744	0
Total deaths (young adult)	1	1,956,694	1,956,694
Total deaths (adult)	5	1,374,086	6,870,430
Total deaths (seniors)	5	424,296	2,121,480
Total lost school days	8,649,572	92	794,463,188
Total lost work days (YA + Adults)	5,313,083	193	1,023,034,132
Total lost work days (Senior)	1,632	193	314,242
Total vaccinations	436,212	20	8,724,240
Total antivirals	103,725	25	2,593,125
Total masks	186,948	4	747,792
Total			1,841,817,306