

Table 1: Secondary Attack Rates (SARs) within households

Study ID	Date of investigation	Country	Context	n contacts	n cases	SAR (%)	95 % confidence interval
Cheng-2020	Jan-Feb 2020	Taiwan	Household - Living in the same house with index case	36	7	19	7, 32
Bi-2020	Jan - Feb 2020	China	Household - Living in the same house with index case	686	77	11	9, 14
Burke-2020	Jan - Feb 2020	USA	Household, defined as family or friends spending at least one night in the same residence as case during presumed infectious period	15	2	13	0, 31
Chaw-2020	March - April 2020	Brunei	Household transmission	264	28	11	7, 14
Pooled estimate				1001	114	11	9, 13

Table 2: Secondary Attack Rates among residents in communal or assisted living contexts

Study ID	Date of investigation	Country	Context	n contacts	n cases	SAR (%)	95 % confidence interval	Comments
McMichael-2020	Feb-20	USA	Care home for long-term residents requiring skilled nursing care	130	81	62.3	54.0, 70.6	Number of residents given is "approximately 130"
Roxby-2020	Mar-20	USA	Sheltered housing for the elderly. Comprises 83 separate apartments and multiple corridors and communal dining, library and activity areas. 45 of the apartments are for independent living, 38 for assisted living (people having a daily home help for assistance with activities of daily living/medication). This is not a nursing home.	80	3	3.8	0.0, 7.9	A high proportion of both residents and staff reported symptoms but tested negative. This may have been due to recall bias, given the high levels of anxiety about COVID-19, but it may also indicate false negative test results
Tobolowski-2020	March - April 2020	USA	3 affiliated overnight and day centres for homeless people (comprising a 24-hour shelter serving up to 40 men and 10 women (A); an overnight shelter housing up to 110 men in 2 main rooms (B); an overnight shelter housing up to 100 men in 2 main rooms (C). Shelters have onsite indoor bathrooms with sinks and soap. Residents from shelters B and C used shelter A's day centre services.	195	35	18.0	12.6, 23.3	
Xu-2020	Feb-20	Japan	Cruise ship - passengers of Diamond Princess cruise ship - quarantined off Japan due to outbreak	2666	522	19.6	17.6, 20.3	Figures are as of 5 March 2020; however some cases developed later

Table 3: Secondary attack rates in workplaces

Study ID	Date of investigation	Country	Context	n contacts	n cases	SAR (%)	95 % confidence interval	Comments
McMichael-2020	Feb-20	USA	Care home for long-term residents requiring skilled nursing care - staff	170	34	20.0	14.0, 26.0	
Roxby-2020	Mar-20	USA	Sheltered housing for the elderly - staff. Comprises 83 separate apartments and multiple corridors and communal dining, library and activity areas for assisted and independent living. This is not a nursing home.	62	2	3.2	0.0, 7.6	A high proportion of both residents and staff reported symptoms but tested negative. This may have been due to recall bias, given the high levels of anxiety about COVID-19, but it may also indicate false negative test results
Tobolowski-2020	March - April 2020	USA	Homeless shelter - staff	38	8	21.0	8.1, 34.0	
Xu-2020	Feb-20	Japan	Cruise ship - crew of Diamond Princess cruise ship - quarantined off Japan due to outbreak	1045	144	13.8	11.7, 15.9	Figures are as of 5 March 2020; however some cases developed later
Burke-2020	Jan - Feb 2020	USA	Workplaces of cases (various unspecified non-healthcare workplaces)	25	0	0.00	0	Burke-2020

Figure 1: PRISMA Diagram

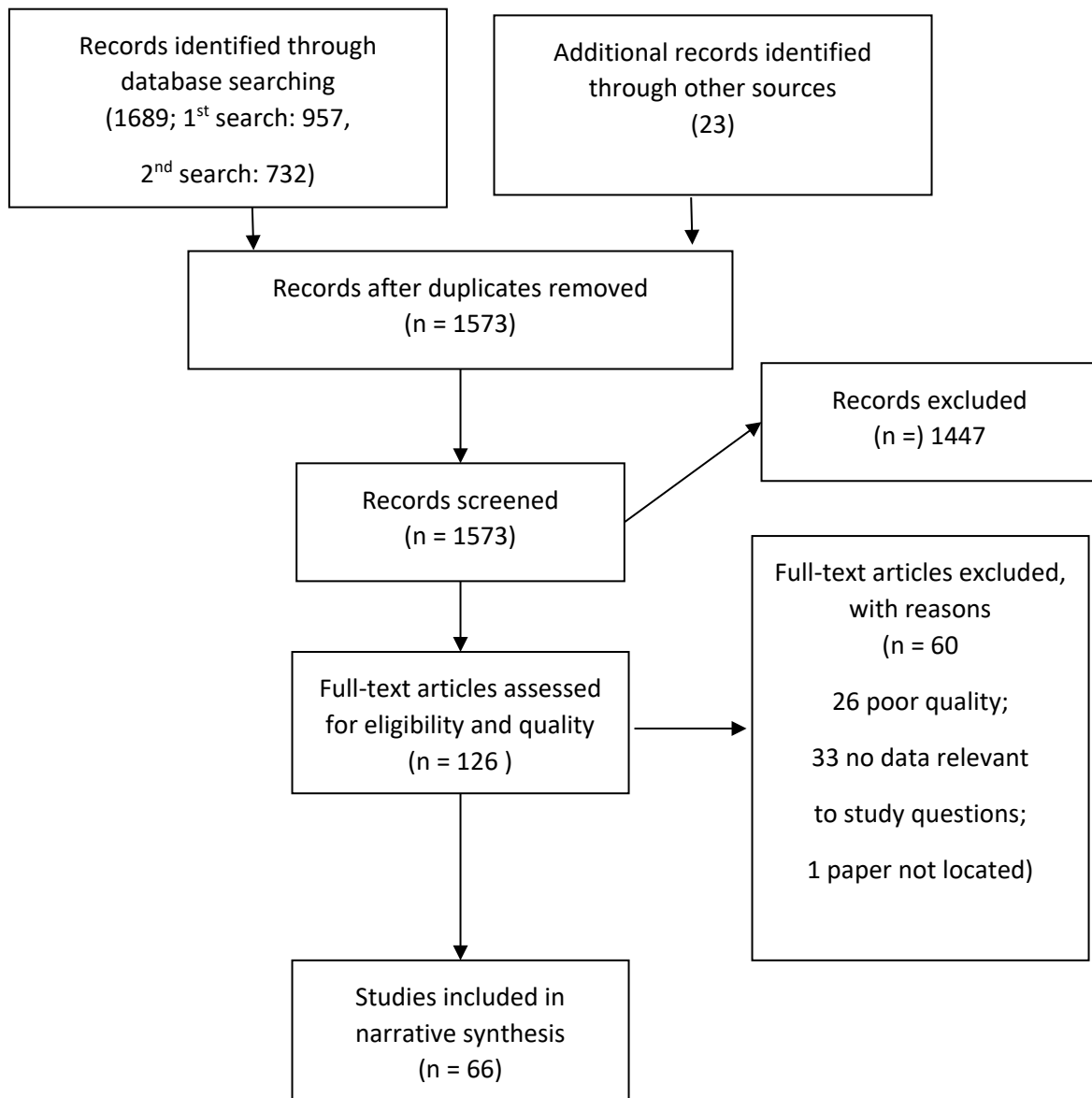
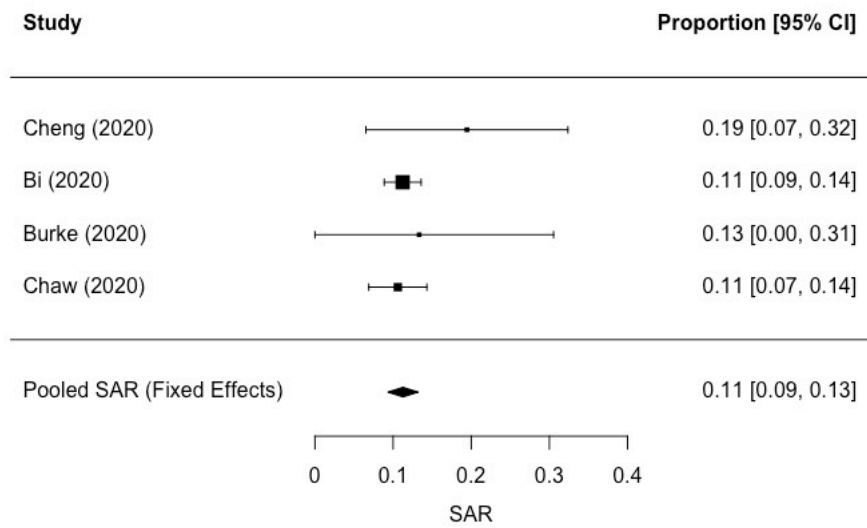


Figure 2: Forest plot – Pooled estimate of Household SAR



$I^2 = 0.00\%$; $Q(df = 3) = 1.72$, $p\text{-val} = 0.63$

Figure 3: Timings of included epidemiological studies

December 2019	January 2020	February 2020	March 2020	April 2020	Country
					China (Chan et al, 2020)
					China (Hu et al, 2020)
					China (Bi et al, 2020)
					Singapore (Pung et al, 2020)
					Singapore (Yong et al, 2020)
					Taiwan (Cheng et al, 2020)
					USA (Burke et al, 2020)
					South Korea (Kim et al, 2020)
					Japan (Kakimoto et al, 2020)
					Japan (Xu et al, 2020)
					USA (McMichael et al, 2020)
					Iran/China (Fan et al, 2020)
					USA (Hamner et al, 2020)
					USA (Roxby et al, 2020)
					Brunei (Chaw et al, 2020)
					USA (Tobolowski et al, 2020)
					USA (Dyal et al, 2020)