

Legend to Supplemental figure 1.

Workflow for contact tracing.

Legend to Supplemental Figure 2

Data from the North Denmark Region during the 55-week study period are presented, including A) number of SARS-CoV-2 tests performed in the Region, B) number of confirmed SARS-CoV-2 positives individuals, C) number of hospitalized patients with COVID-19, and D) number for each contact tracing performed at the hospitals in the Region.

Supplemental table 1. Data sources are shown in the left column with the corresponding data variables to the right.

Data source	Data content (variables)
Contact tracing reports	Hospital Ward Index case: <ul style="list-style-type: none">- Patient- Employee Reason for SARS-CoV-2 testing e.g.: <ul style="list-style-type: none">- Symptoms- Screening at admission- Systematic screening Geographical location (source of transmission): <ul style="list-style-type: none">- Community acquired- Hospital acquired- Acquired by work at the hospital- Unknown Status at the time of contact tracing: <ul style="list-style-type: none">- Symptomatic index case vs. asymptomatic index case or unknown- Number of close contacts- Number of close contacts that tested SARS-CoV-2 positive- Number of close contacts tested positive at day 0, 4 or 6- Number of staff and patients tested positive at testing at day 0 or 7
The North Denmark Region Business Intelligence Unit	Number of patients admitted to the each of three hospitals during the project period <ul style="list-style-type: none">- Psychiatry- North Denmark Regional Hospital

	Contact tracings with no CC (n=120)	Contact tracings and one or more CC (n=171)	Contact tracings with additional cases (Outbreak) but no CC (n=9)	Contact tracings with additional cases (Outbreak) and CC (n=24)	Contact tracings with additional cases (Outbreak) with SARS-CoV-2 positive CC (n=38)
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	- Aalborg University hospital
The North Denmark Region Human resources department	Number of employees working in the three hospitals, respectively: <ul style="list-style-type: none"> - Psychiatry - North Denmark Regional Hospital - Aalborg University hospital Including employees paid by the hour
Statens Serum Institut National COVID-19 Surveillance data	Total number of confirmed cases: <ul style="list-style-type: none"> - Denmark - The North Denmark Region Total number of SARS-Co-2 tested in: <ul style="list-style-type: none"> - Denmark - The North Denmark Region Total number of admissions with COVID-19, at the hospitals in The North Denmark Region during the project period

Supplemental table 2. 362 contact tracings divided into 5 groups depending on, number of cases (1 vs. ≥ 2 = Outbreak), number of close contacts (CC) (0 vs. ≥ 1), and if any CC tested positive for SARS-CoV-2.

Cases					
Patients	24	67	2	22	56
Staff members	96	104	18	79	105
Total	120	171	20	101	161
Reasons for testing	-				
Screening at admission	11	37	0	6	9
Symptoms at the time of testing	38	57	10	37	50
Close contact – community	26	24	0	5	5
Close contact - work	0	1	0	1	1
Outbreak testing	1	4	3	30	78
Systematic screening	19	25	3	8	3
Screened at return to hospital after leave	0	0	0	1	1
Tested due to intra/inter-hospital transfer	0	1	0	2	1
Discharge to nursing home	1	5	0	2	4
Random find	6	9	2	9	2
Contact tracing APP	1	0	0	0	0
Test at nursing home	2	0	0	0	0
Low risk contacts	0	0	0	0	5
Unknown	15	8	2	0	2
Total	120	171	20	101	161
Status at the time of contact tracing					
Symptoms	48	77	11	51	72
Asymptomatic	56	62	7	47	84
Unknown	16	32	2	3	5
Total	120	171	20	101	161
Geographical location for transmission					
Community	63	86	6	17	13
Hospital	1	1	0	17	26
Work at hospital	3	1	0	9	36
Unknown	53	83	14	58	86
Total	120	171	20	0	161
Close contacts					
Patients	-	94	-	11	120
Employees	-	626	-	123	601
Total	-	720	-	134	721