

Current Epidemiology situation of COVID-19 in Myanmar

Dr. Toe Thiri Aung
Director(Epidemiology)
Central Epidemiology Unit
Department of Public Health

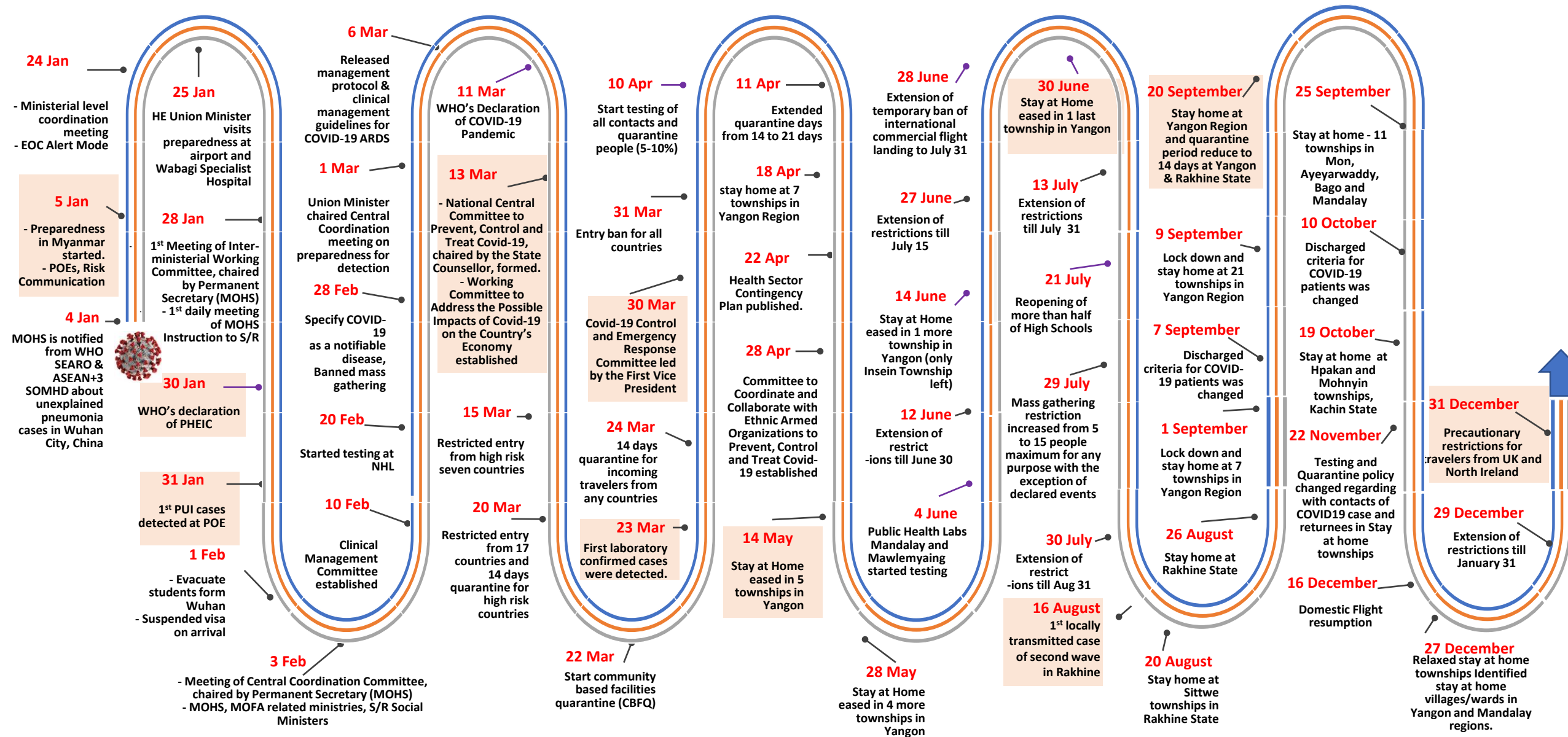
Friday Health Talk (15.1.2021)



Snapshot of COVID-19 in Myanmar (15-1-2021, 8am)

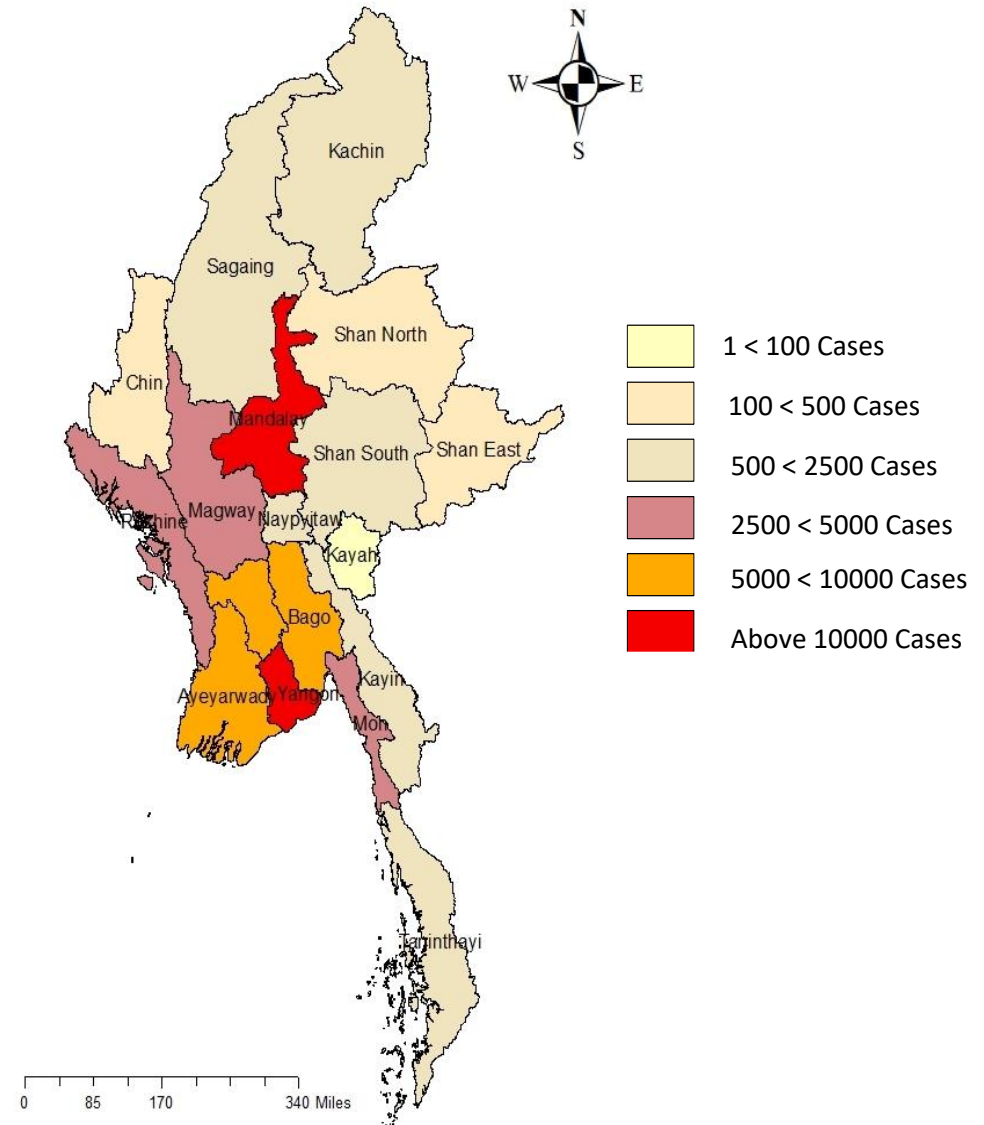
Cumulative # of confirmed cases	132,865	
Recovered patients	116,100	87.3%
# of patients currently under ICU care	94	
# of patients currently under ventilator care	16	
# of patients currently under oxygen therapy	753	
Cumulative # of patients under ICU care	328	0.25%
Cumulative # of patients under ventilator care	154	0.12%
Total deaths (Case Fatality Rate %)	2,912	2.19%

Timeline of Preparedness and Response to COVID-19 in Myanmar (as of 15-1-2020)



COVID-19 confirmed cases by State and Region (23.3.2020-13.1.2021), n=132,260

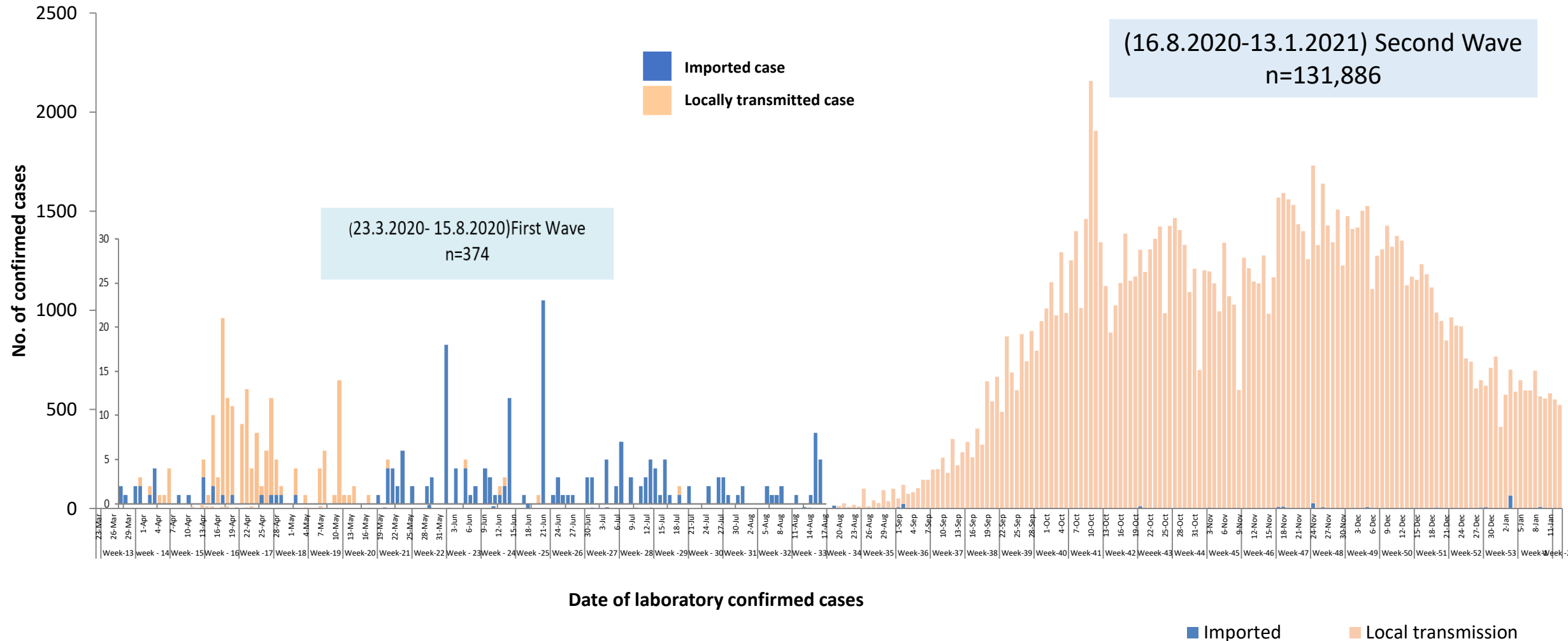
No.	State/Region	Population	Population Density(/km2)	Total confirmed Cases	Confirmed cases/ 10000 population	# of Deaths	CFR %
1	Yangon	7,360,703	716.3	85,548	116	2491	2.9%
2	Mandalay	6,165,723	199.6	15,429	25	251	1.6%
3	Bago	4,867,373	123.5	8,637	18	24	0.3%
4	Mon	2,054,393	170	2,735	13	24	0.9%
5	Rakhine	3,188,807	86.7	4,218	13	31	0.7%
6	Naypyitaw	1,160,242	131.1	1,136	10	4	0.4%
7	Ayeyarwaddy	6,184,829	176.5	5,407	9	39	0.7%
8	Magway	3,917,055	87	3,146	8	4	0.1%
9	Kayin	1,574,079	52	1,229	8	16	1.3%
10	Chin	478,801	13	301	6	1	0.3%
11	Tanintharyi	1,408,401	32	597	4		
12	Sagaing	5,325,347	56.8	2,217	4	13	0.6%
13	Kachin	1,689,441	18.9	673	4		
14	Kayah	286,627	24	64	2	1	1.6%
15	Shan (East)	5,824,432	37.4	140	2		
16	Shan (North)			247		2	0.8%
17	Shan (South)			536		1	0.2%
Total		51,486,253	83	132,260	26	2902	2.2%



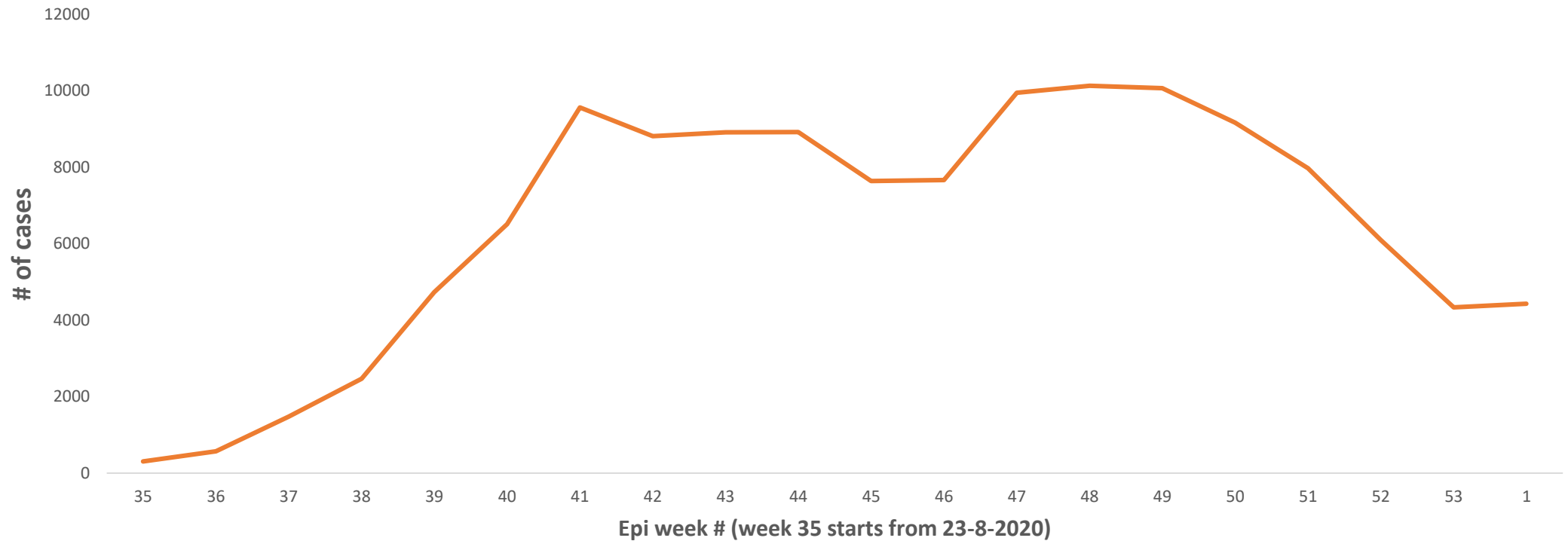
*Source of population and population density- Census 2014, Order of confirmed cases by case per 10,000 population

Epidemic curve of the COVID-19 cases in Myanmar

(23-3-2020 to 13-1-2021) (n=132,260)

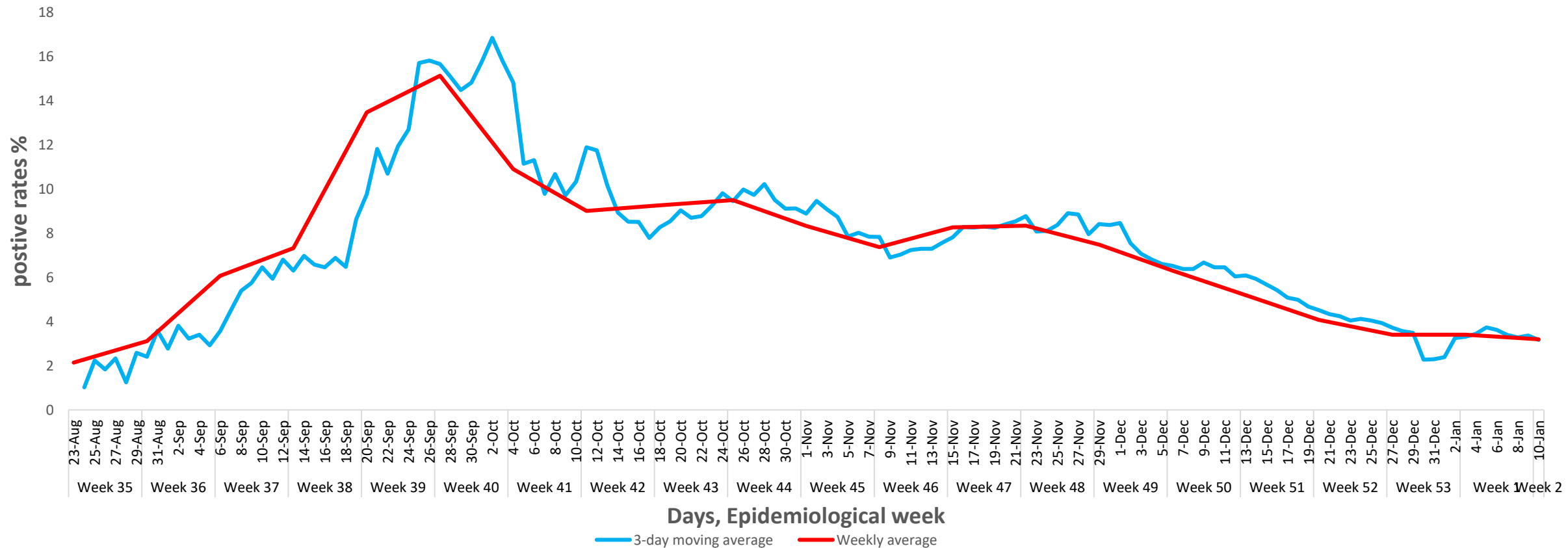


COVID-19 confirmed cases by week (Epi week 35, 2020 to week 1, 2021, as of 11-1-2021)



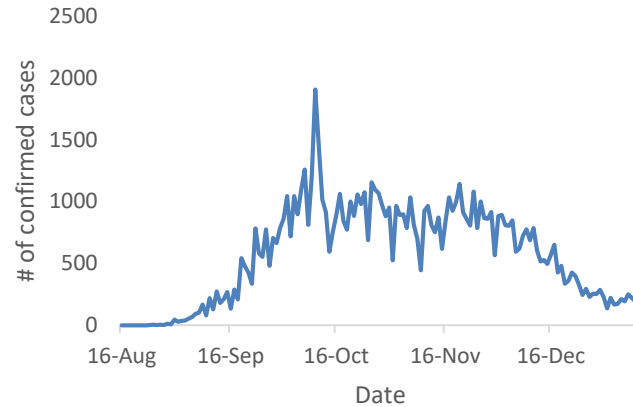
3-day moving average and weekly average of overall positive rates of COVID-19

(Epi week 35, 2020 to week 1, 2021, as of 11-1-2021)

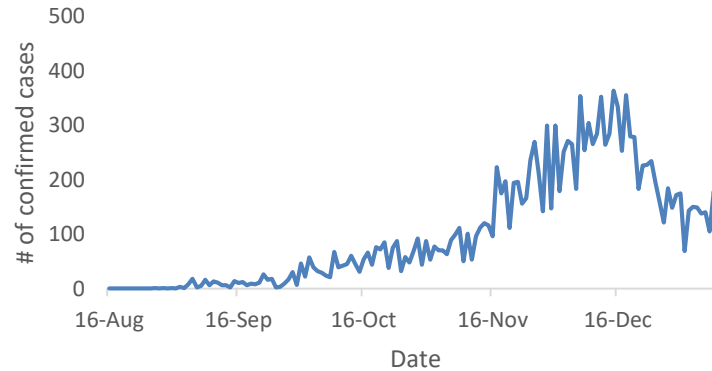


Trend of daily new confirmed cases in SR (16.8.2020-10.1.2021)

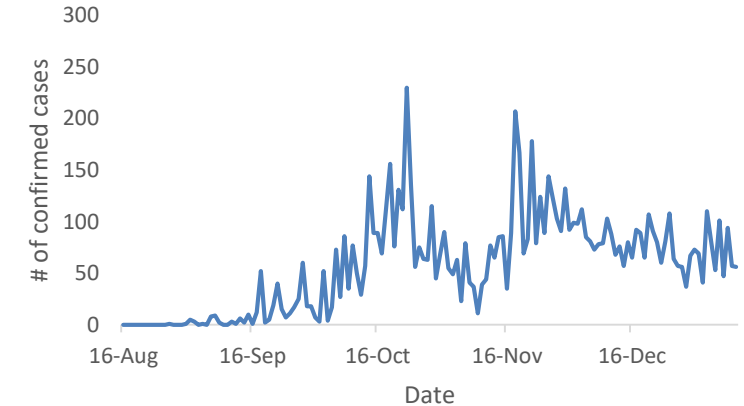
Yangon region (n=84,569)



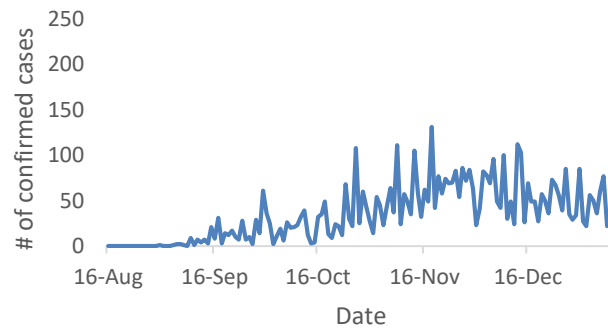
Mandalay Region (n=15,034)



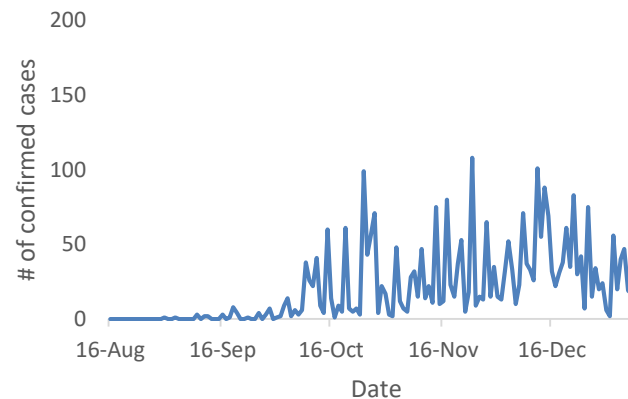
Bago Region (n=8,428)



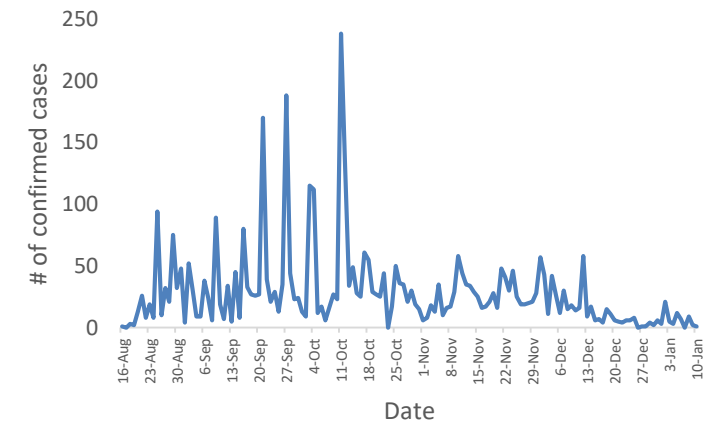
Ayeyarwaddy Region n=5,189



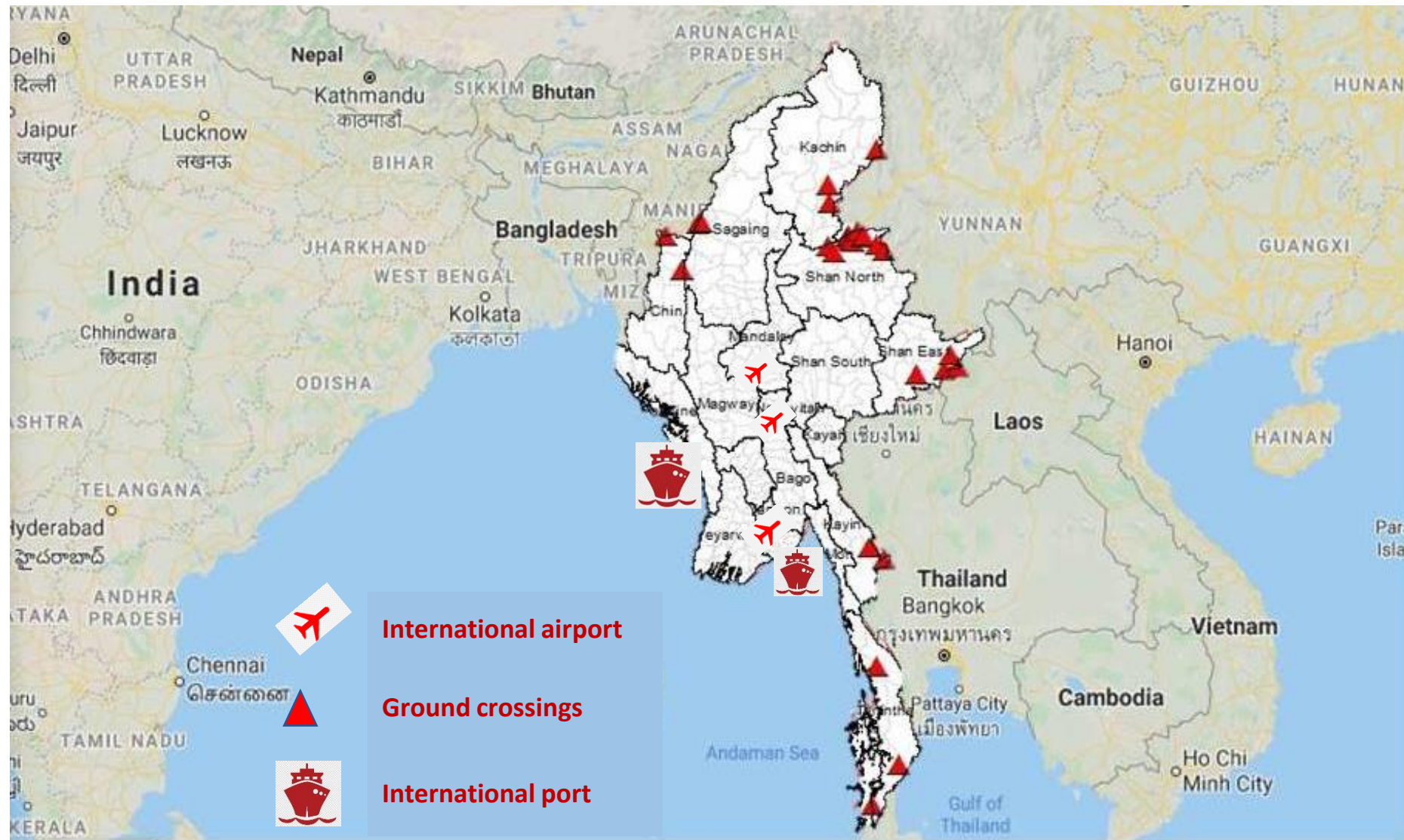
Magway Region (n=3,056)



Rakhine State (n=4,170)



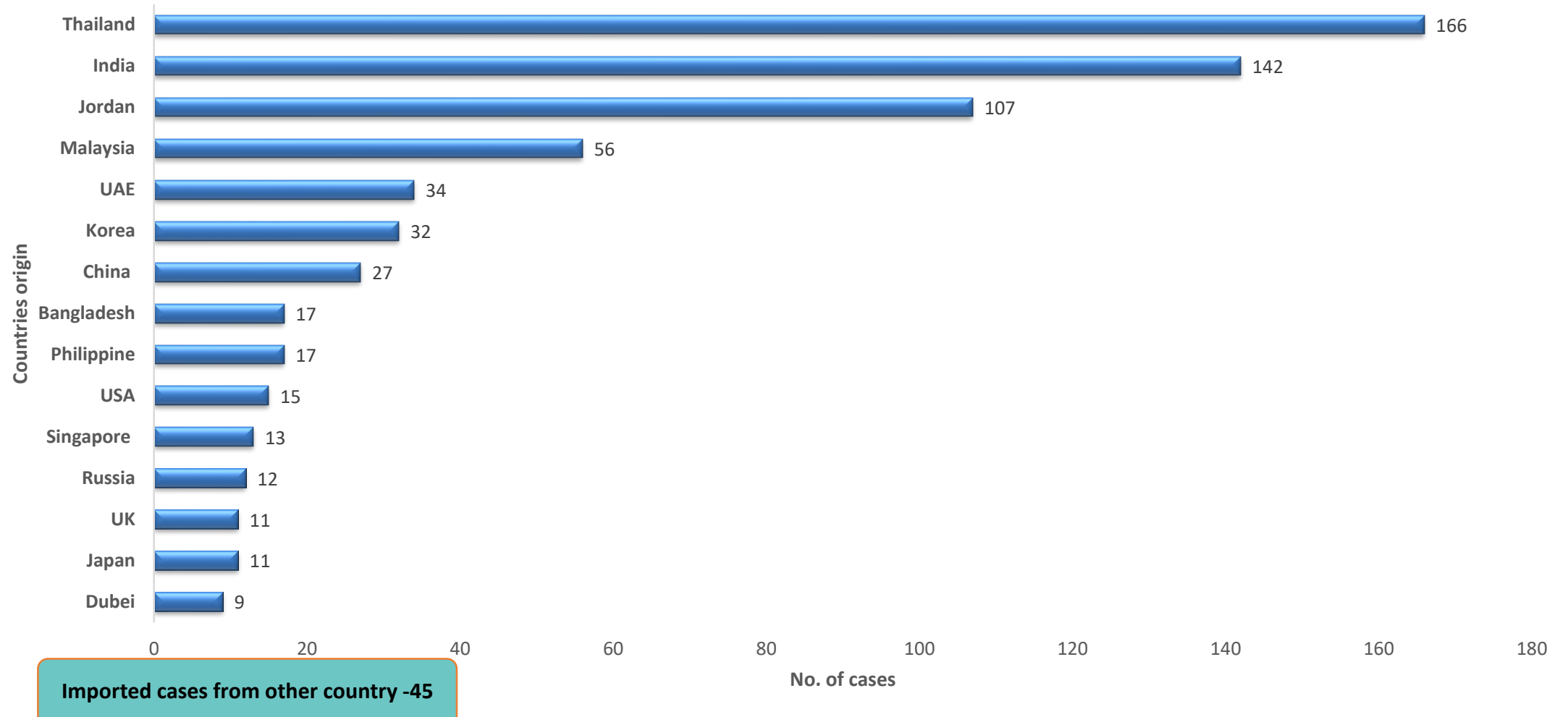
Points of Entry in Myanmar



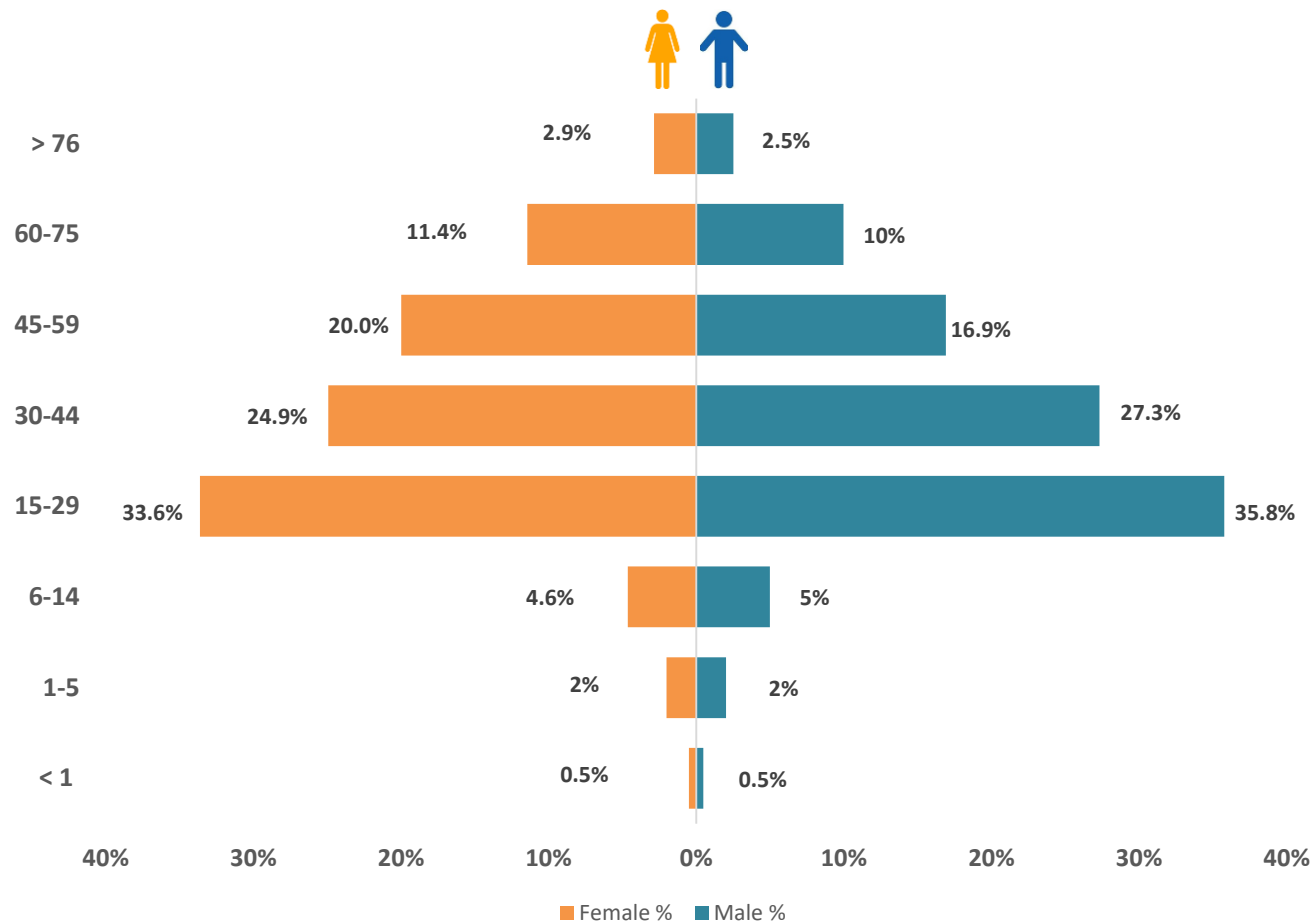
COVID-19 confirmed cases by type of transmission (23.3.2020- 13.1.2021) n=132,260

Type of transmission	No. of cases	Percentage of total confirmed cases
No. of locally transmitted cases	131,546	99.5%
No. of imported cases	714	0.5 %

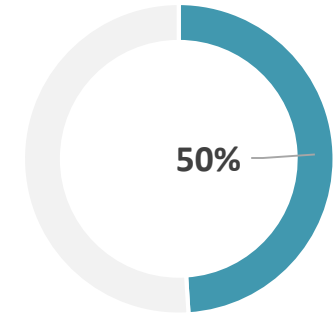
Country origin of imported cases (23.3.2020- 13.1.2021) n=132,260



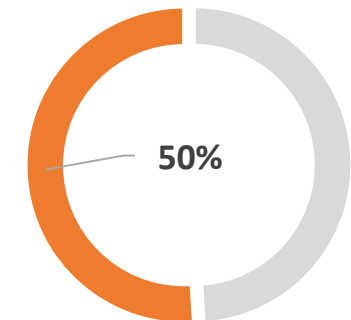
Analysis of Age group and gender distribution of confirmed cases (23.3.2020-12.1.2021), n= 131,737



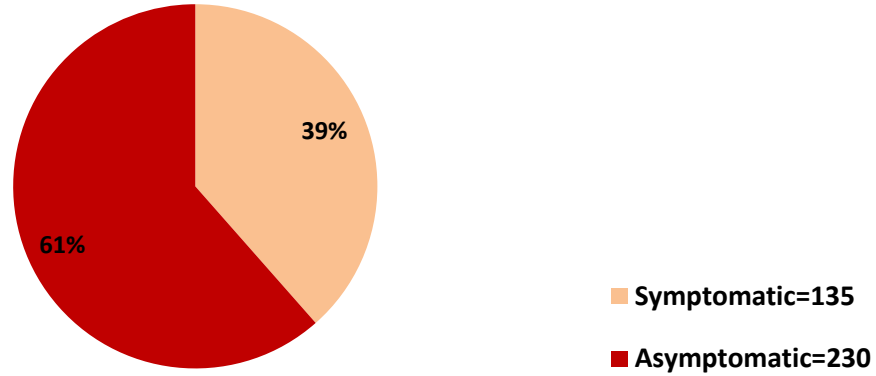
Male



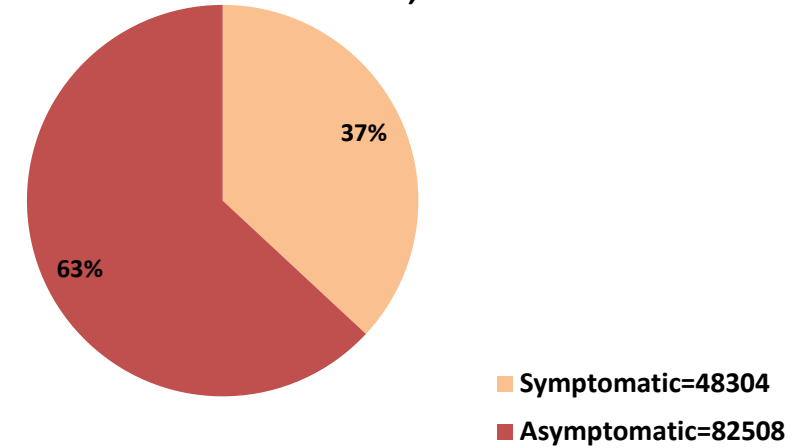
Female



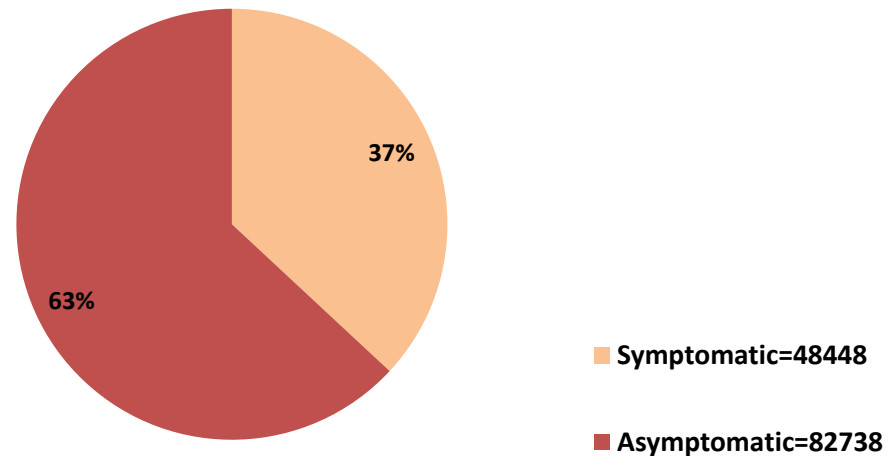
Proportion of symptomatic and asymptomatic percentage of confirmed cases at the time of reporting (23.3.2020 - 15.8.2020), n=374

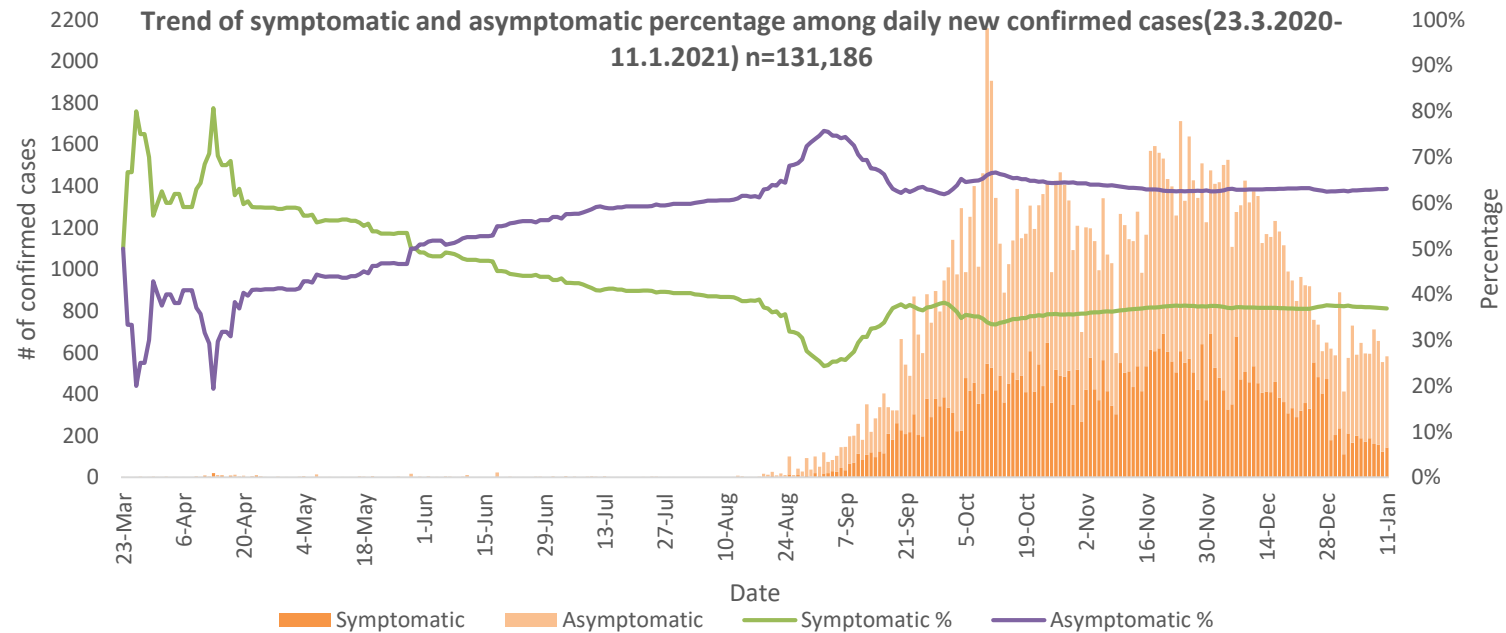
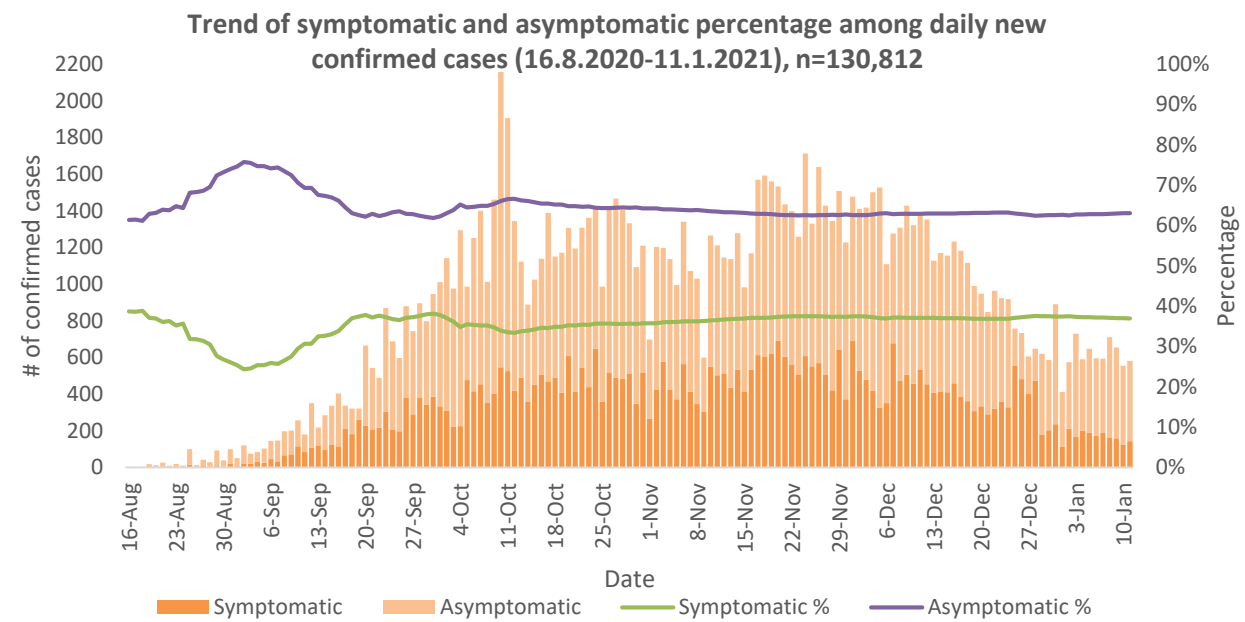
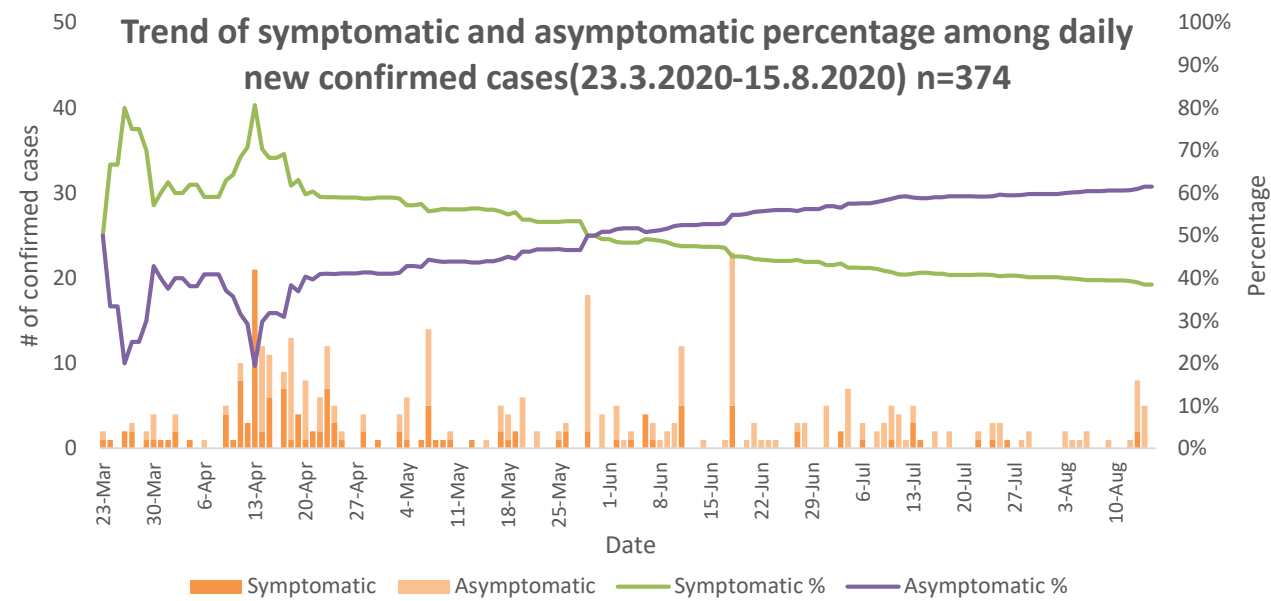


Proportion of symptomatic and asymptomatic percentage of confirmed cases at the time of reporting (16.8.2020-11.1.2021), n=130,812

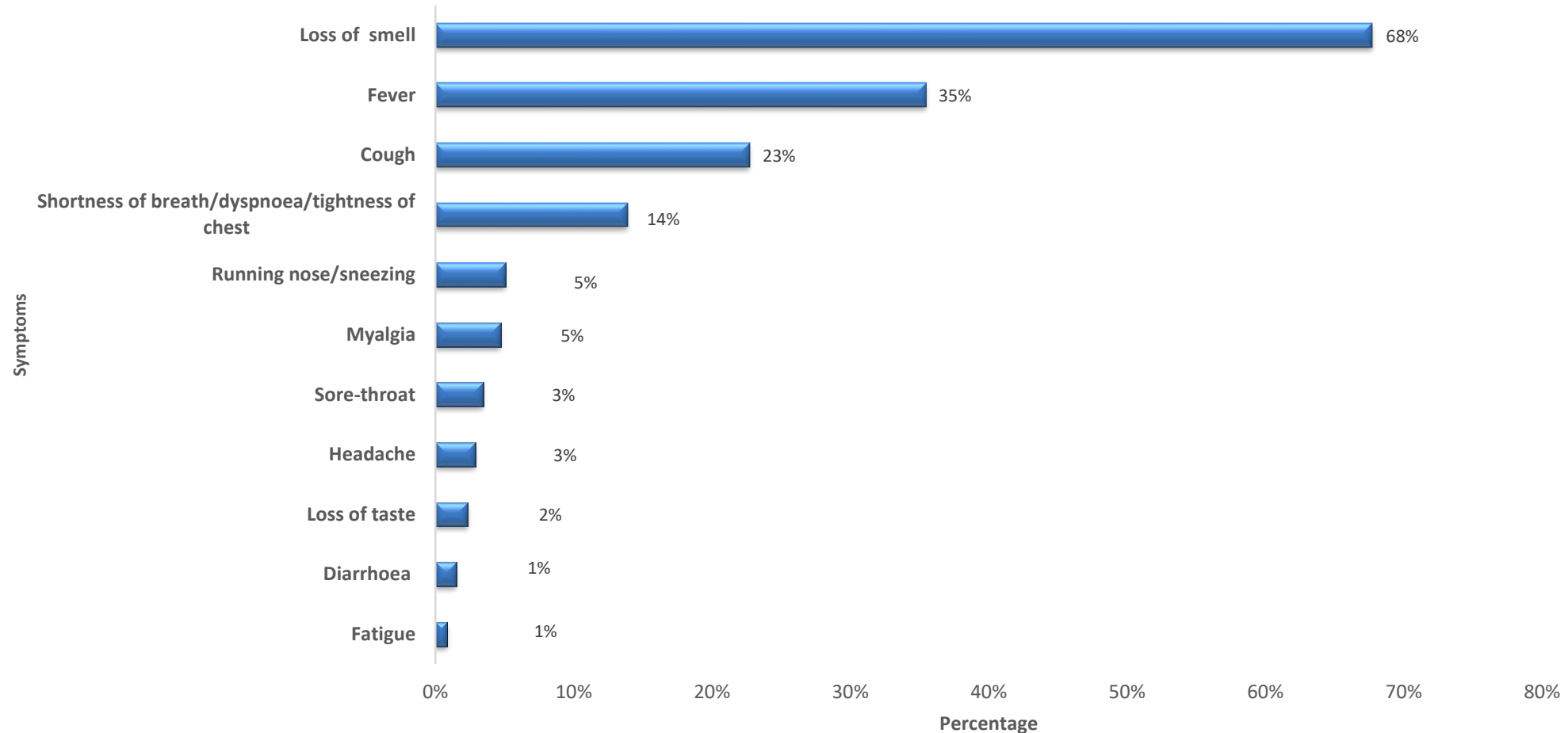


Proportion of symptomatic and asymptomatic percentage of confirmed cases at the time of reporting (23.3.2020-11.1.2021), n=131,186

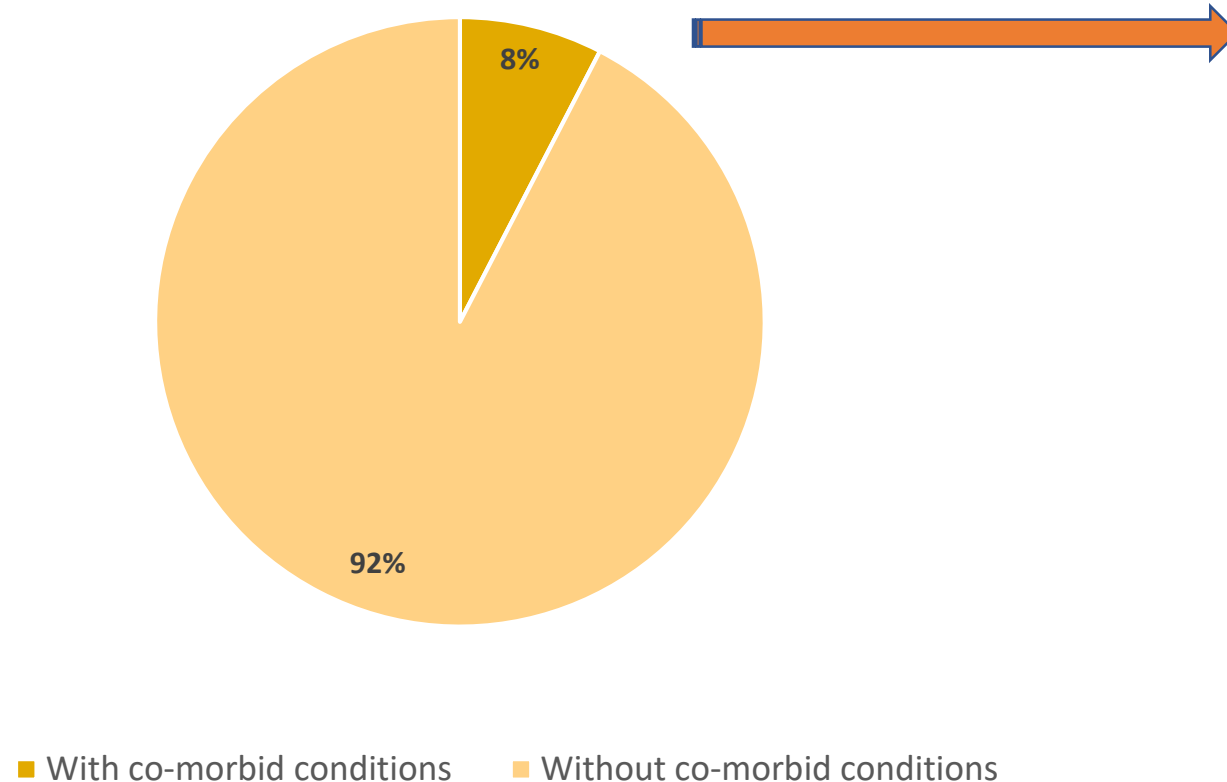




Symptom profile of confirmed cases at the time of reporting (23.3.2020 – 11.1.2021), n=48,448

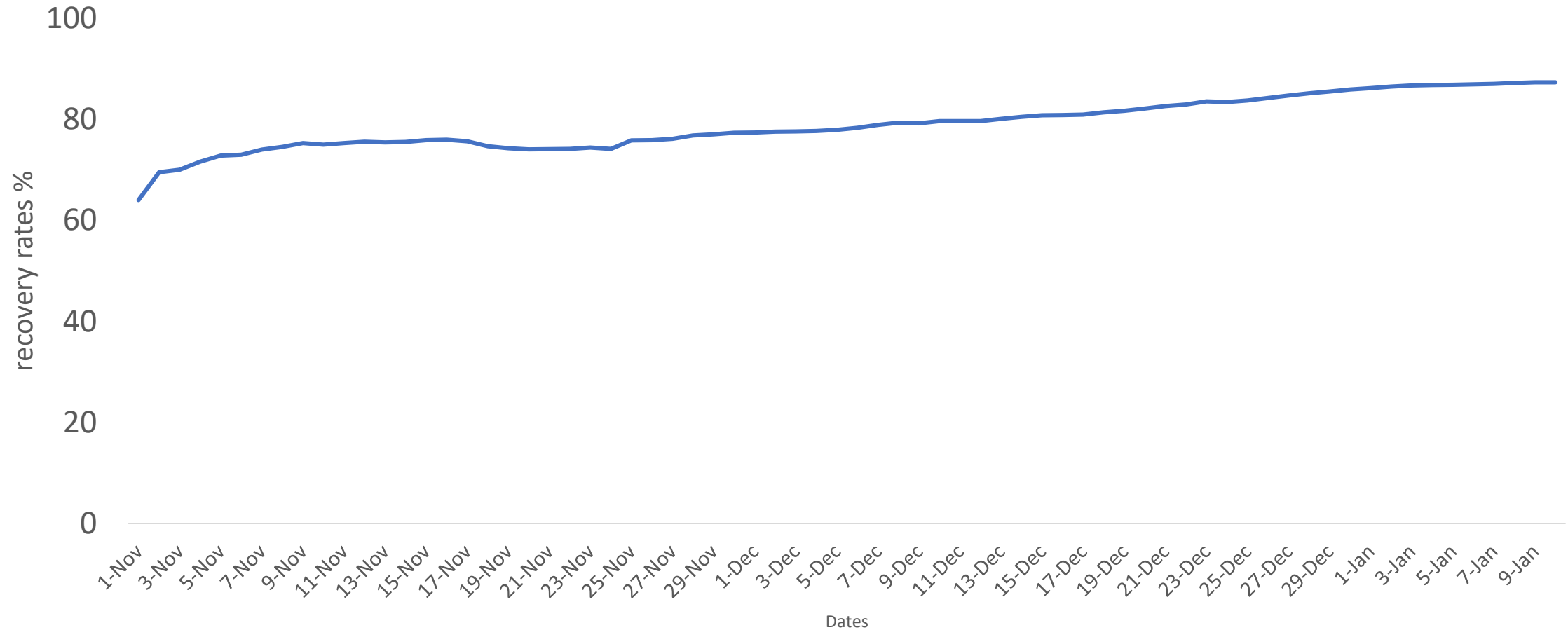


Types of underlying diseases among confirmed cases at the time of reporting (23.3.2020-11.1.2021), n=131,186

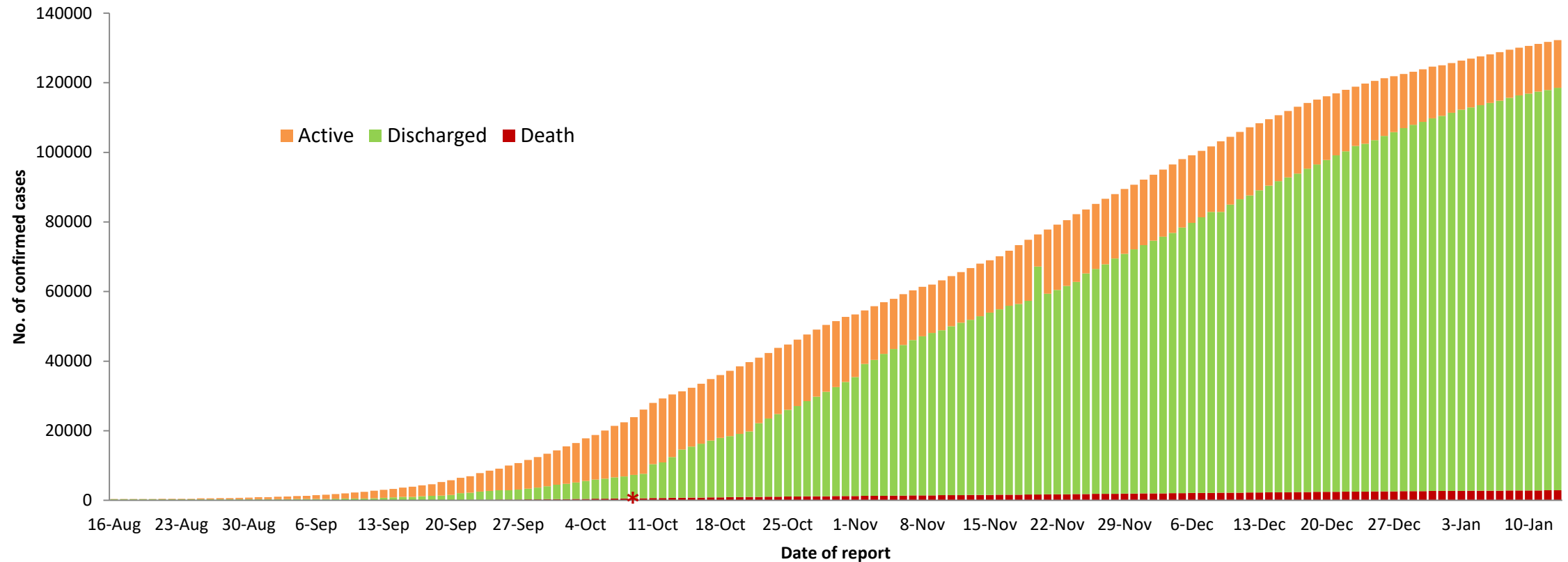


Underlying conditions	% of diseases
Diabetes Mellitus	24%
Hypertension	23.8%
Diabetes Mellitus+ Hypertension	13%
IHD	6.8%
Asthma	4.7%
Chronic kidney diseases	2.9%
Tuberculosis	2.8%
Stroke	2.3%
Cancer	1.8%
Pregnancy	1.7%
Other Liver diseases	1.7%
COPD	1%
Congenital anomalies	0.8%
Retro viral infection	0.7%
Hepatitis B Virus infection	0.7%
Haematological diseases	0.6%
Hepatitis C Virus infection	0.4%
SLE	0.3%

Trend of recovery rates of COVID-19 confirmed cases (1-11-2020 to 11-1-2021)



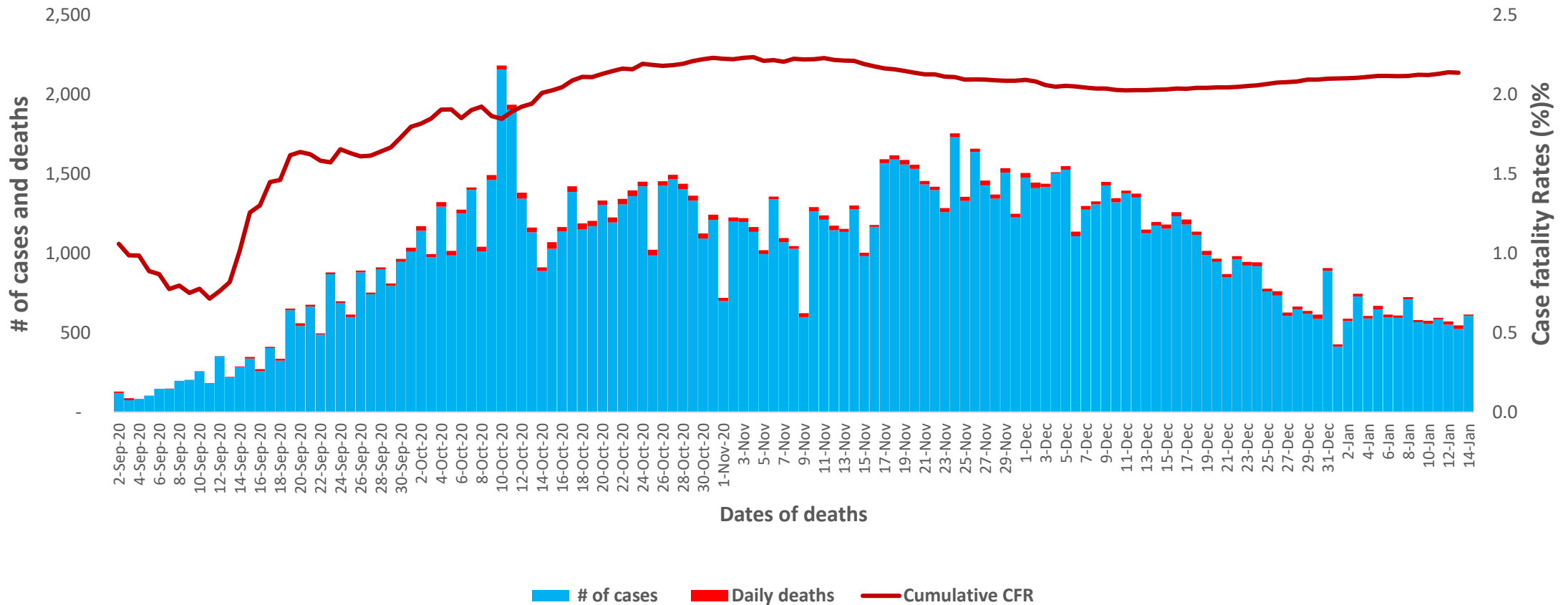
Cumulative confirmed, active cases , discharged and death by date (16.8.2020 – 13-1-2021), n=132,260



*** Discharged criteria for COVID-19 patients was changed on 10.10.2020**

Cumulative Case Fatality Rates and daily deaths

$n(\text{deaths}) = 2,846$ (as of 10-1-2021, 8pm)



Age-specific case fatality rate (as of 13-1-2021)

Age Group	# of positives	# of death	CFR (%)
<15 Years	9299	7	0.1
15-29 Years	45527	35	0.1
30-44 Years	34194	160	0.5
45-60 Years	24186	700	2.9
61-75 Years	14045	1271	9.0
>75 Years	3506	728	20.8

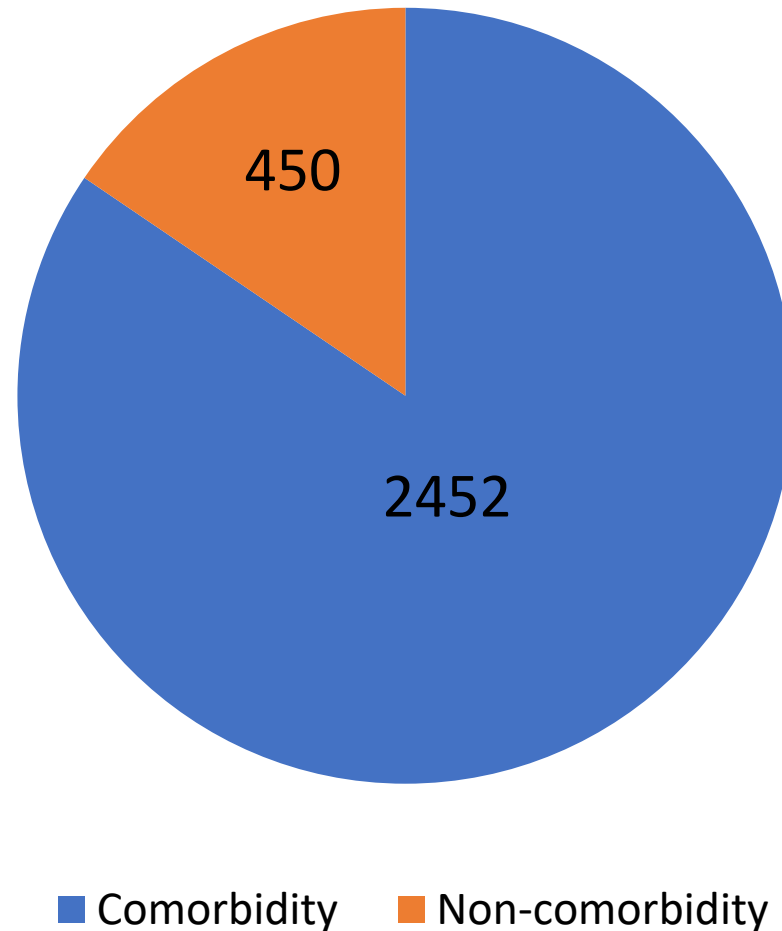
Interval between date of hospitalization and date of death (in days) (as of 11-1-2021) (n=2,812)

Interval between date of hospitalization and death	No. of cases	Percentage
Brought death	286	10
1 day	587	21
2 days	225	8
3 days	210	7
4 days	144	5
5 days	166	6
6 days	139	5
7 days	122	4
8-14 days	595	21
15-21 days	234	8
22-28 days	104	4
Total	2,812	100

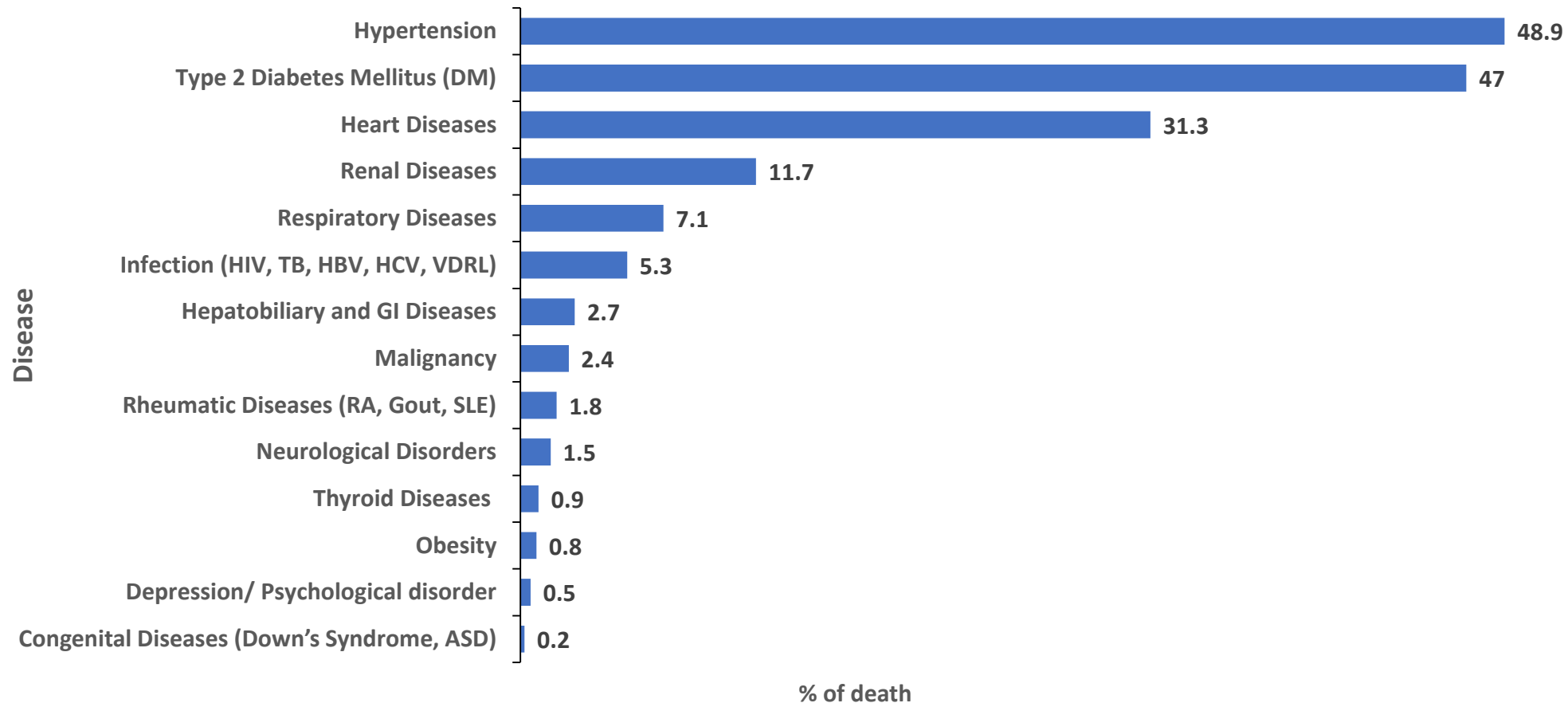
Age-specific case fatality rate (as of 13-1-2021)

Age Group	# of positives	# of death	CFR (%)
<15 Years	9299	7	0.1
15-29 Years	45527	35	0.1
30-44 Years	34194	160	0.5
45-60 Years	24186	700	2.9
61-75 Years	14045	1271	9.0
>75 Years	3506	728	20.8

Proportion of comorbid patient among COVID-19 deaths as of 13-1-2021 (n=2,902)



Distribution of underlying diseases among COVID-19 deaths $n(\text{deaths}) = 2,452$ (as of 13-1-2021) ($n = 2,374$)

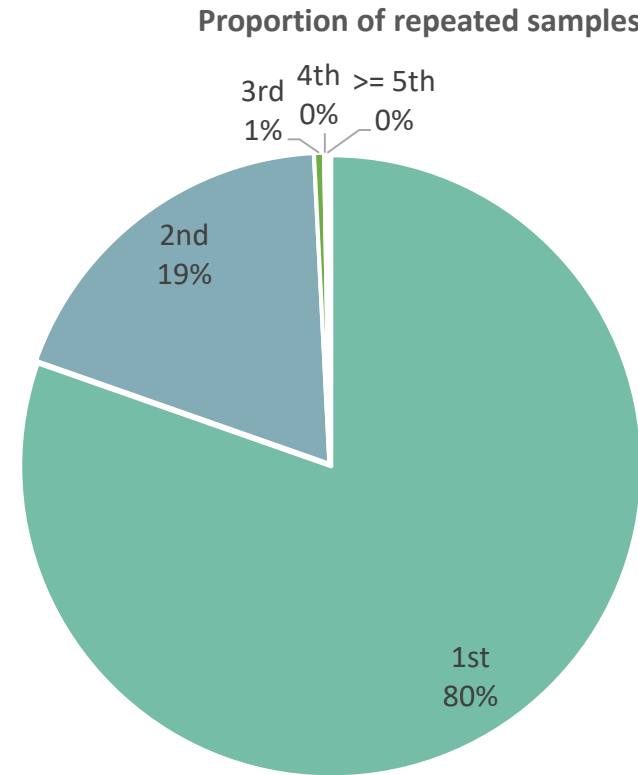
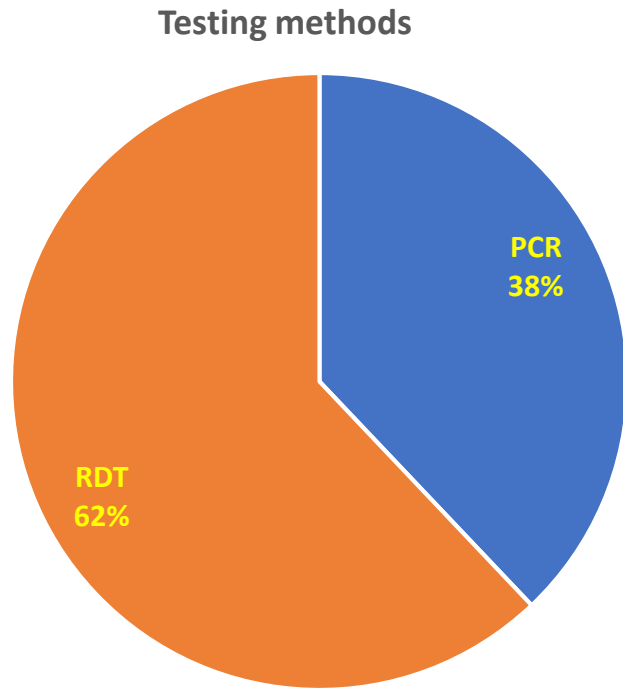


COVID-19 testing in Myanmar

(as of 14-1-2021, 8 pm)

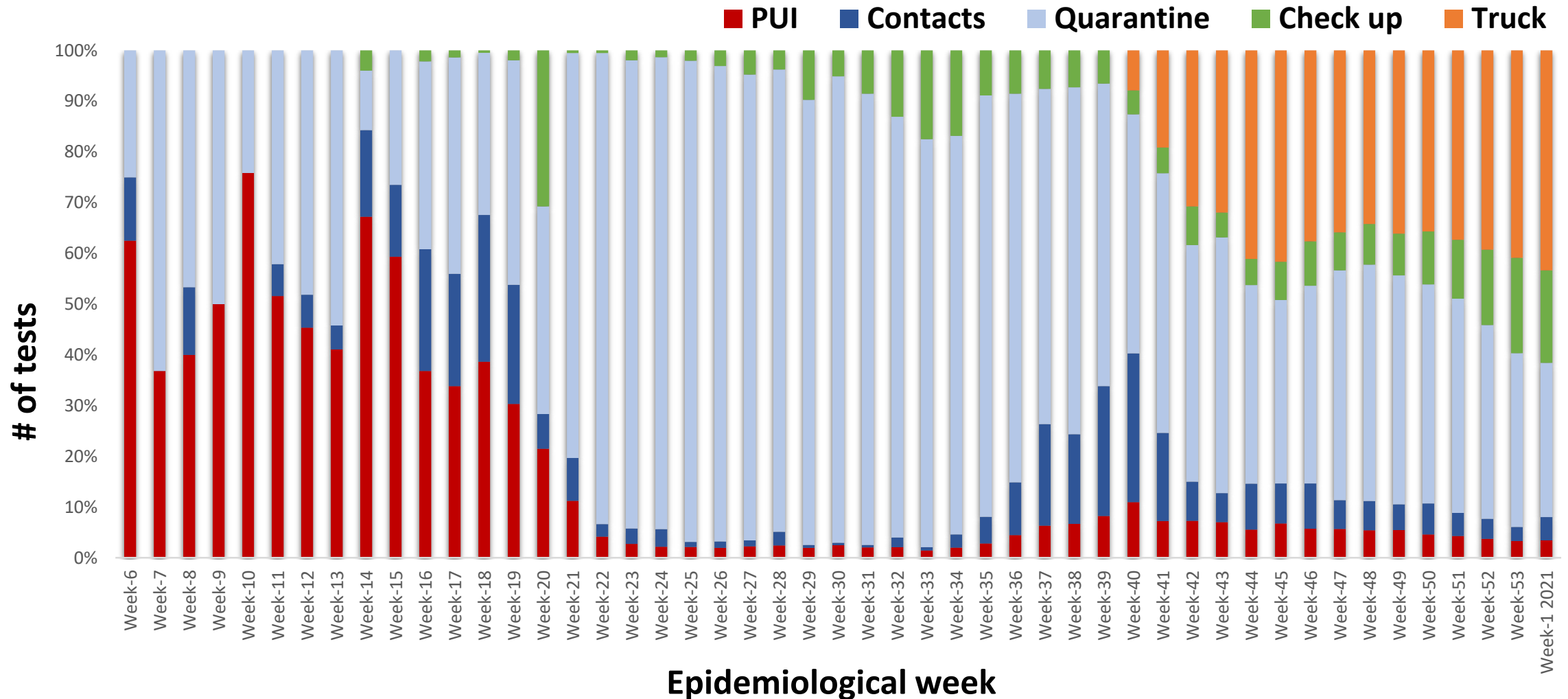
Test	# of tests	# of positives	Positive rate (%)
RT-PCR	787,358	63,242	8.03
RDT	1,287,219	69,623	5.41
Total	2,074,577	132,865	6.40

Testing methods (as of 13-1-2021) (n= 2,074,577)

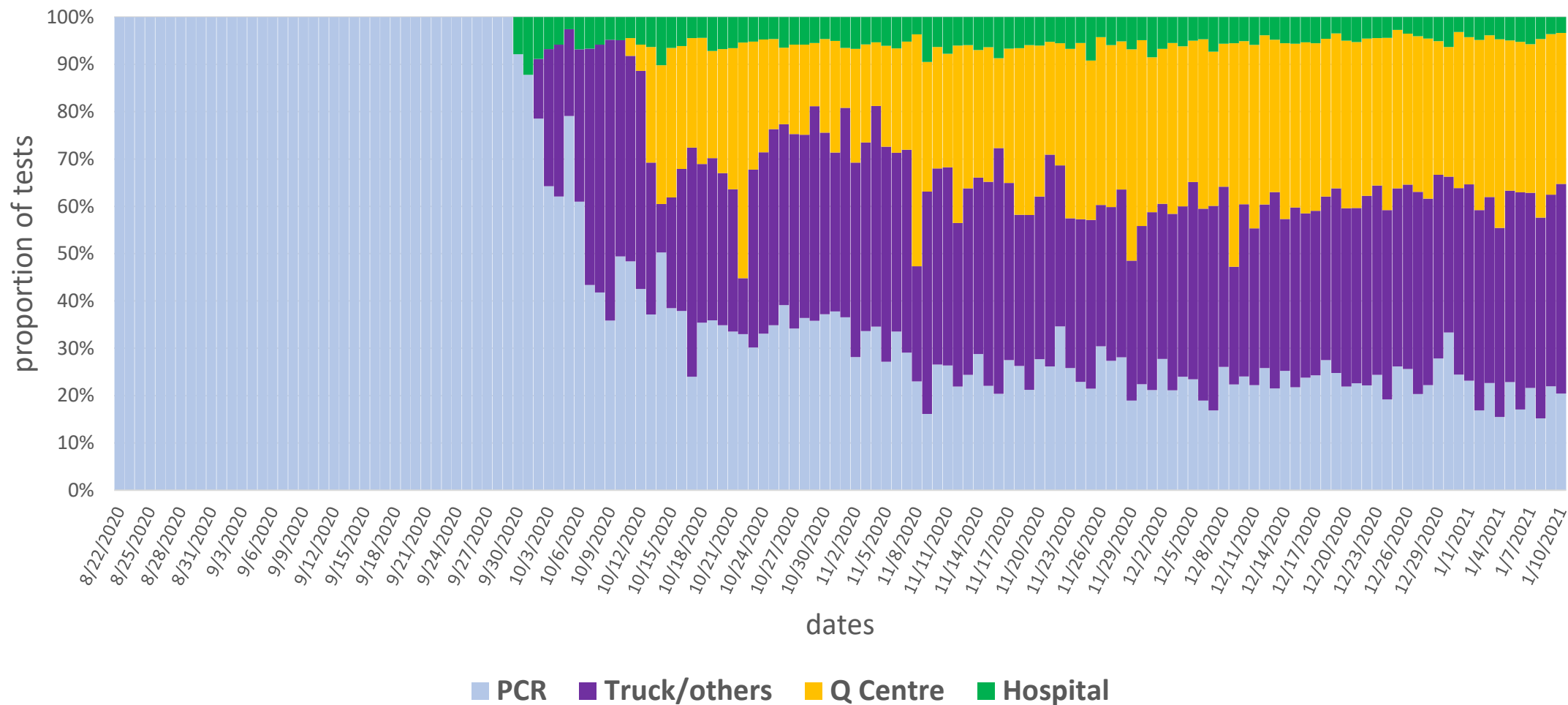


Maximum repeat time -16th times

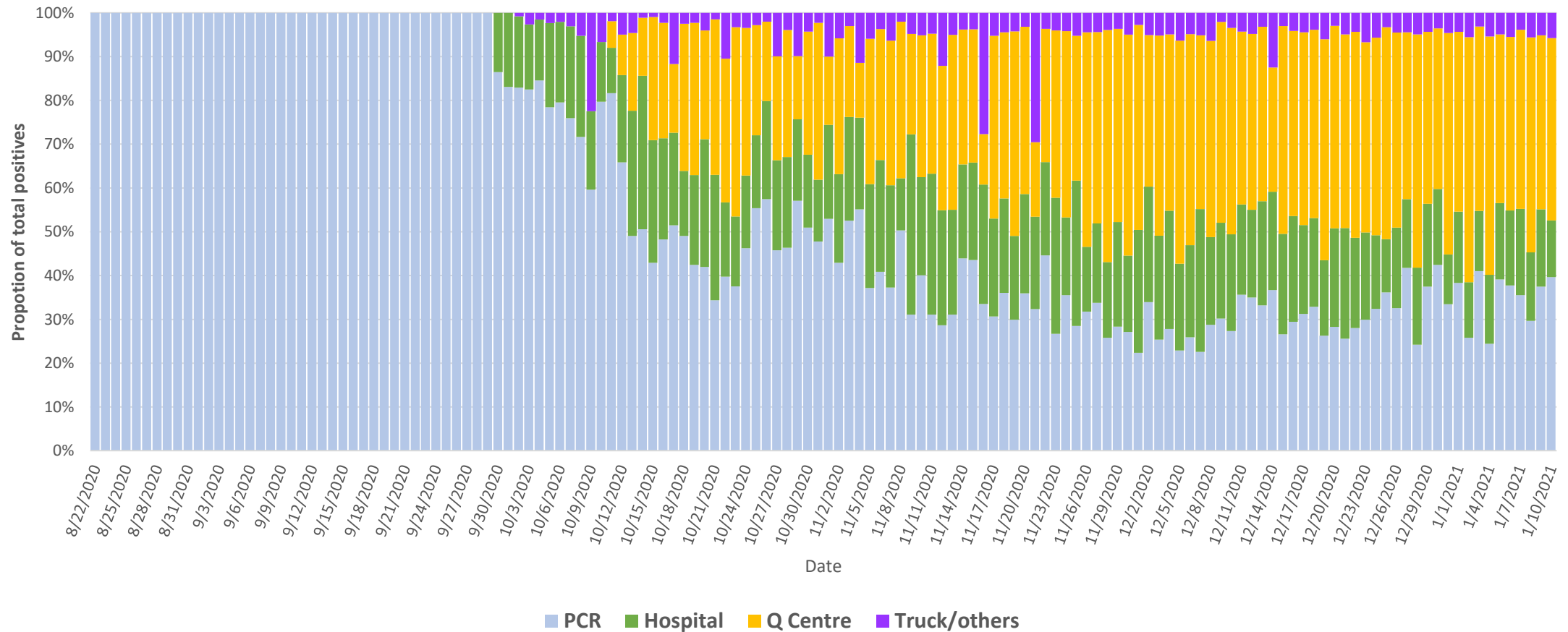
Proportion of categories of tested samples by week (as of 8-1-2021) (n=1,895,451)



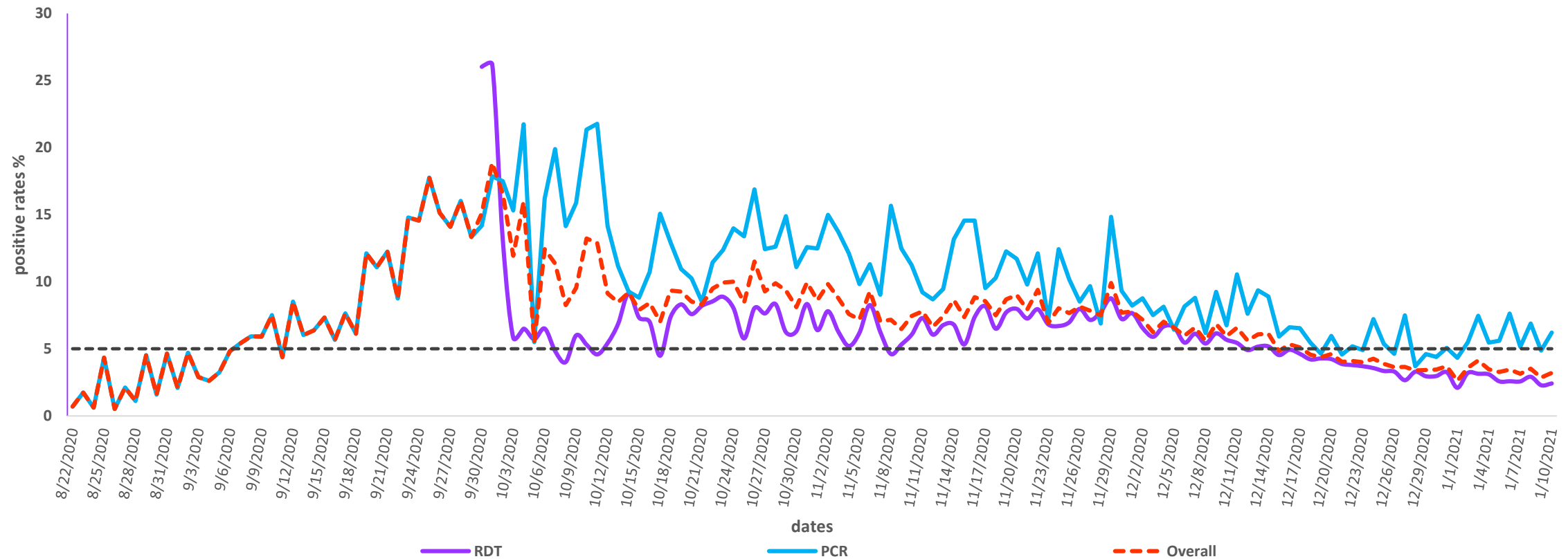
Trend of testing (as of 11-1-2021) (n=1,861,104)



Trend of proportion of positives detected by different tests (as of 11-1-2021) (n=130,288)

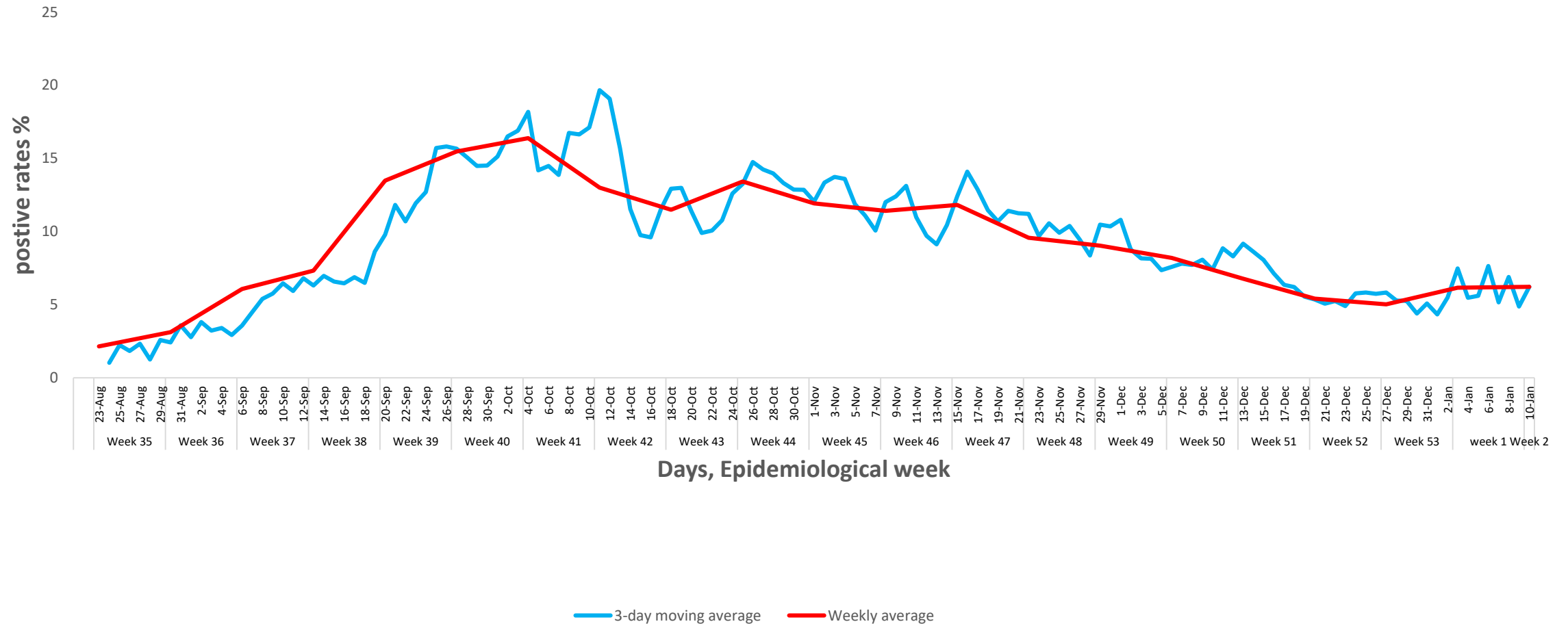


Trend of positive rates for RDT and PCR (as of 11-1-2021)



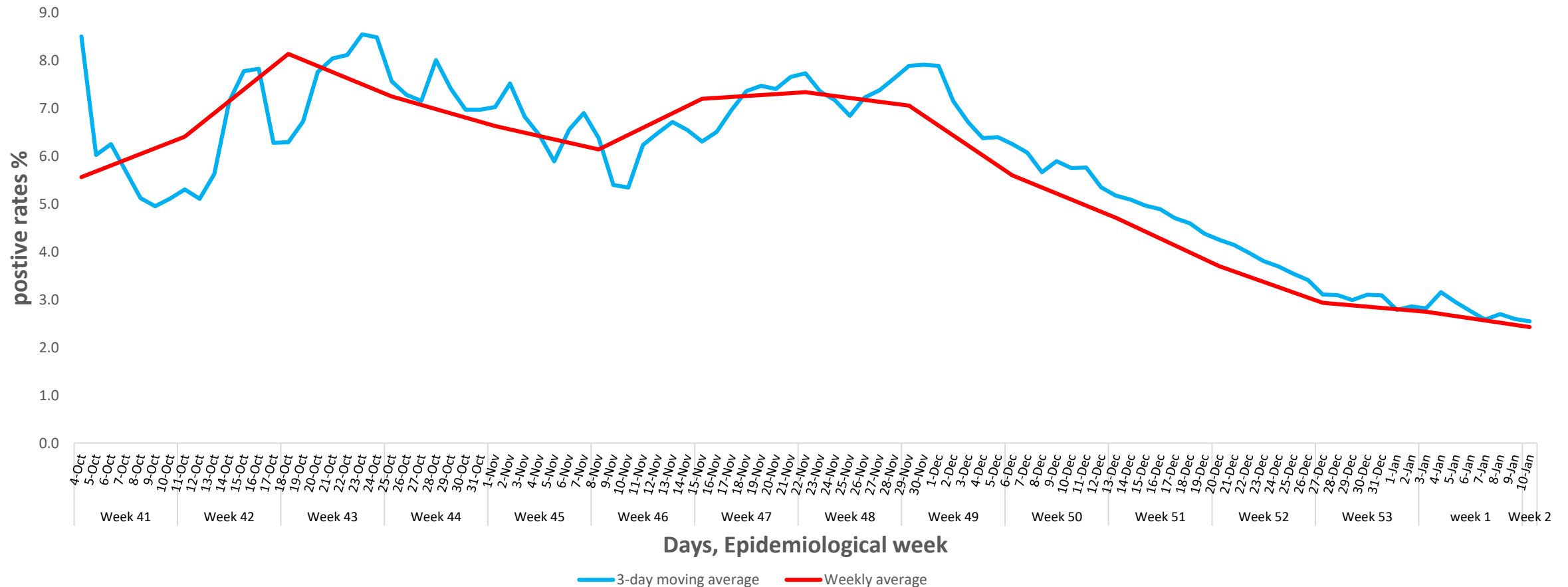
3-day moving average and weekly average of PCR positive rates of COVID-19

(Epi week 35, 2020 to week 1, 2021, as of 11-1-2021)

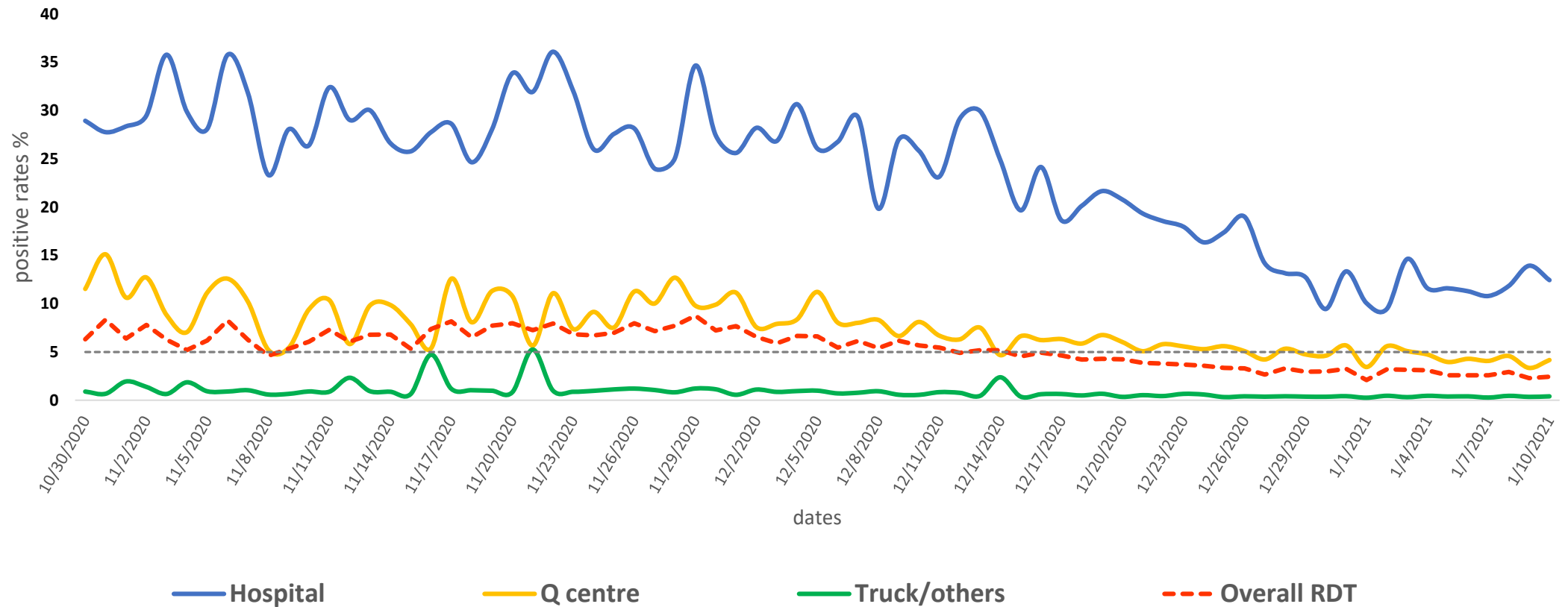


3-day moving average and weekly average of RDT positive rates of COVID-19

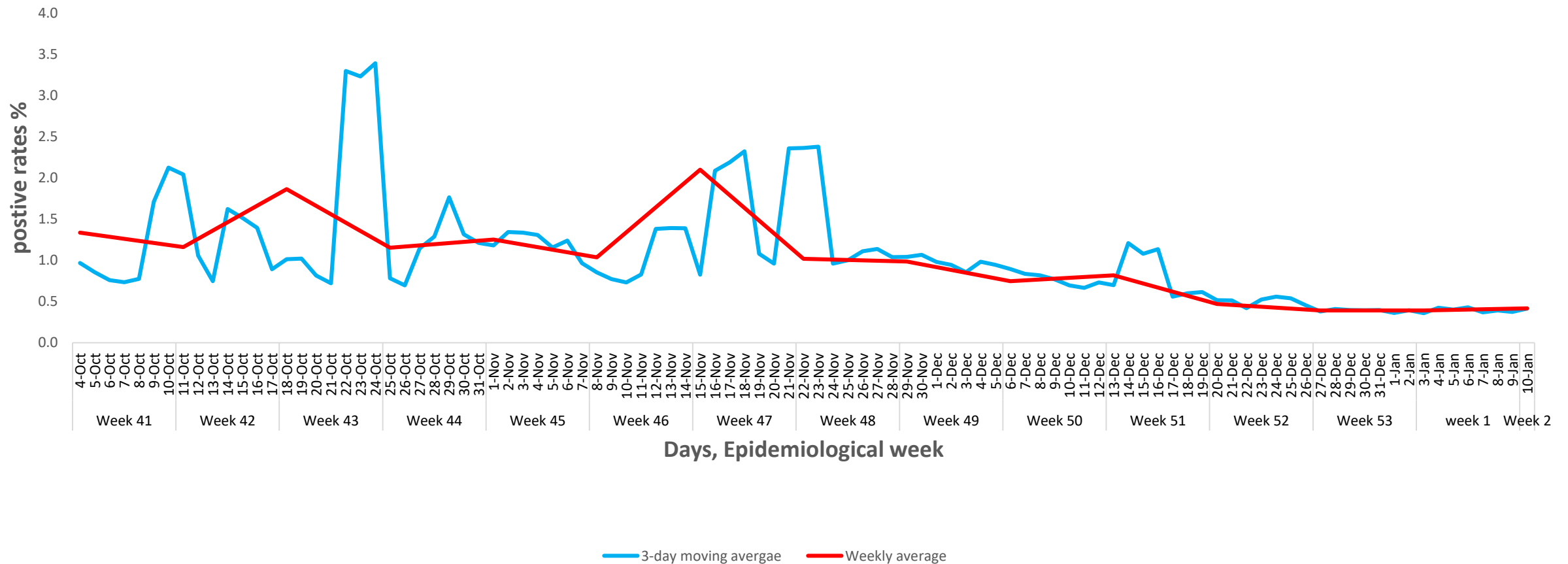
(Epi week 35, 2020 to week 1, 2021, as of 11-1-2021)



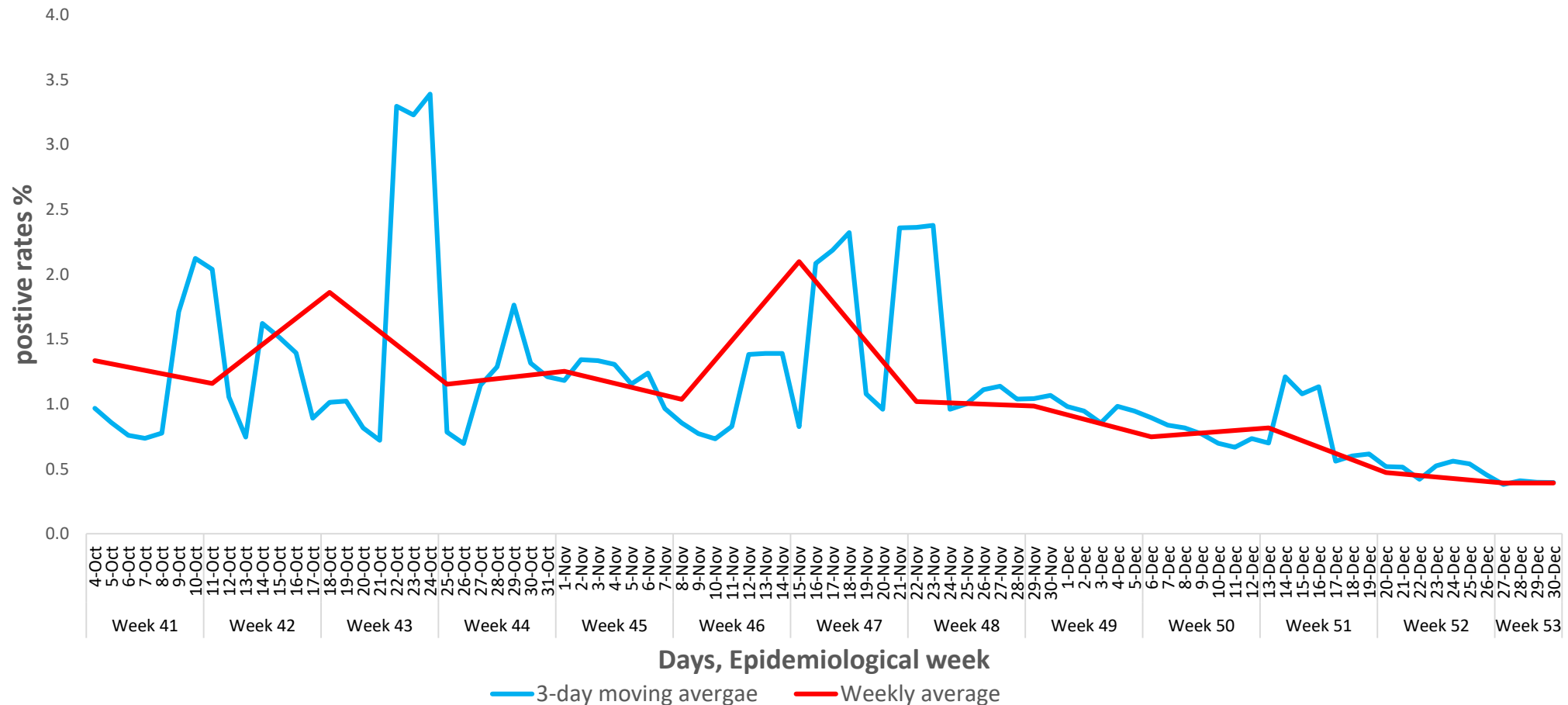
Daily positive rates for RDT in different groups (as of 11-1-2021)



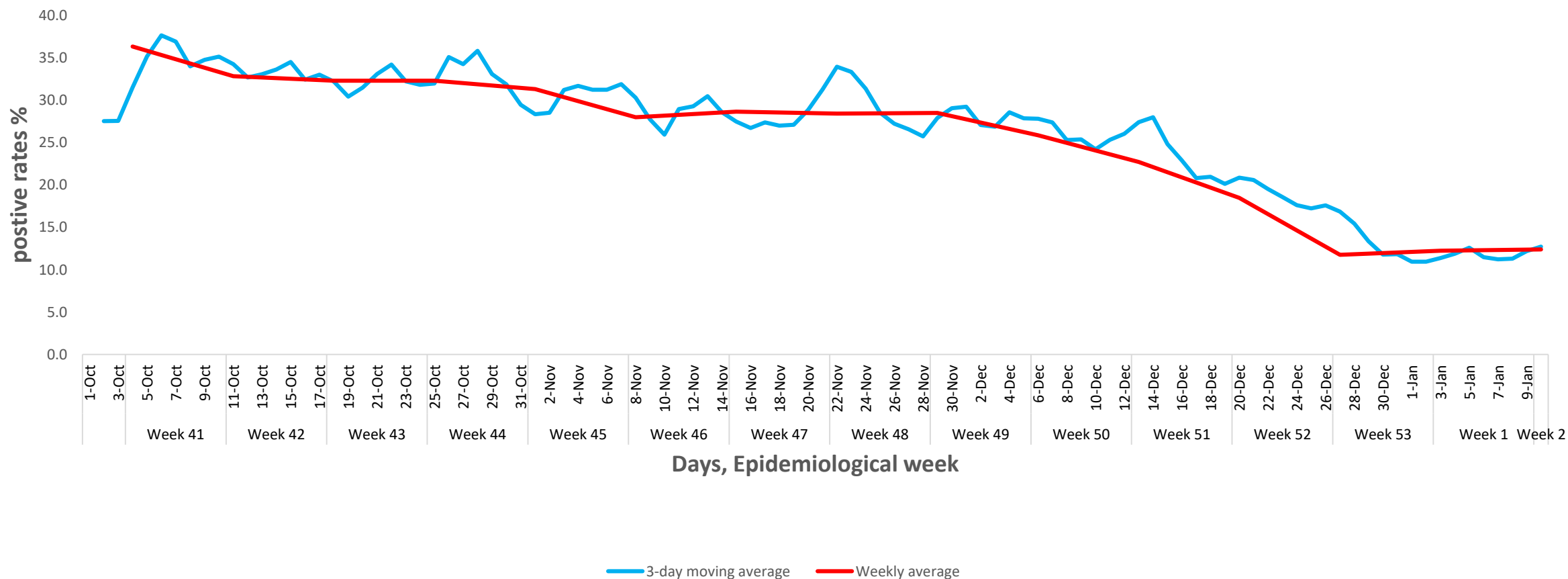
3-day moving average and weekly average of positive rates of RDT for Q persons (Epi week 35, 2020 to week 1, 2021, as of 11-1-2021)



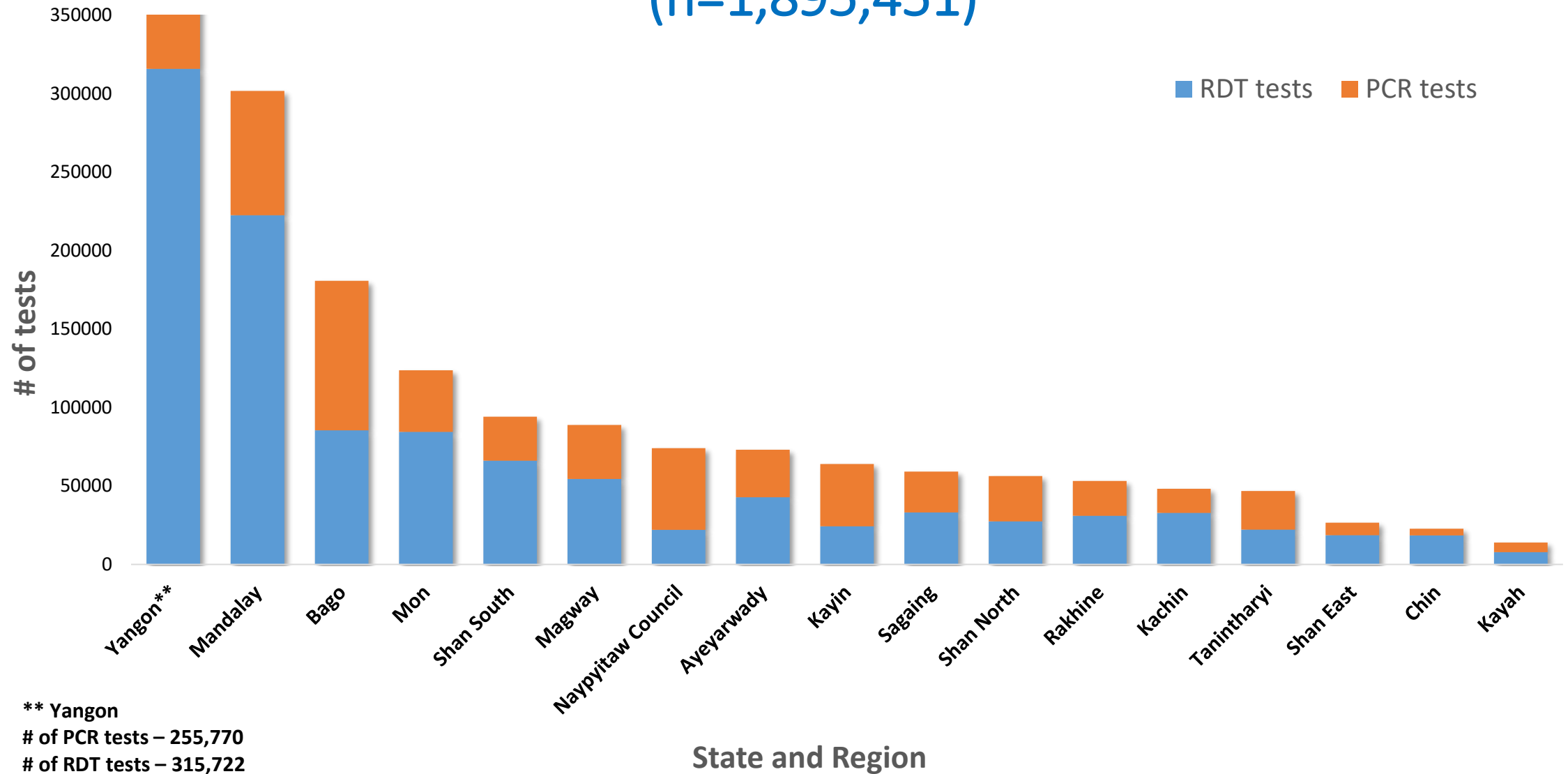
3-day moving average and weekly average of RDT positive rates of **truck car drivers** (Epi week 35, 2020 to week 1, 2021, as of 11-1-2021)



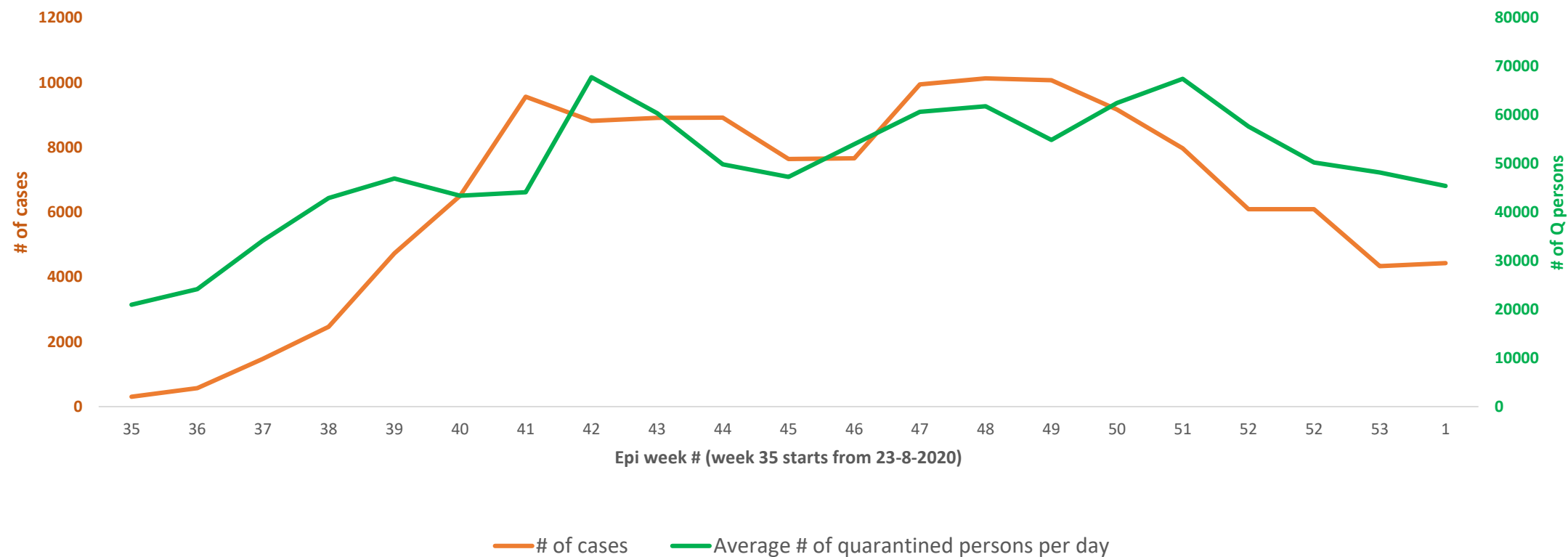
3-day moving average and weekly average of positive rates of RDT for **PUIs at hospitals** (Epi week 35, 2020 to week 1, 2021, as of 11-1-2021)



PCR and RDT Testing by State and Region (as of 8-1-2021) (n=1,895,451)



Trend of confirmed cases and Q persons (week 35, 2020 to Week 1, 2021)

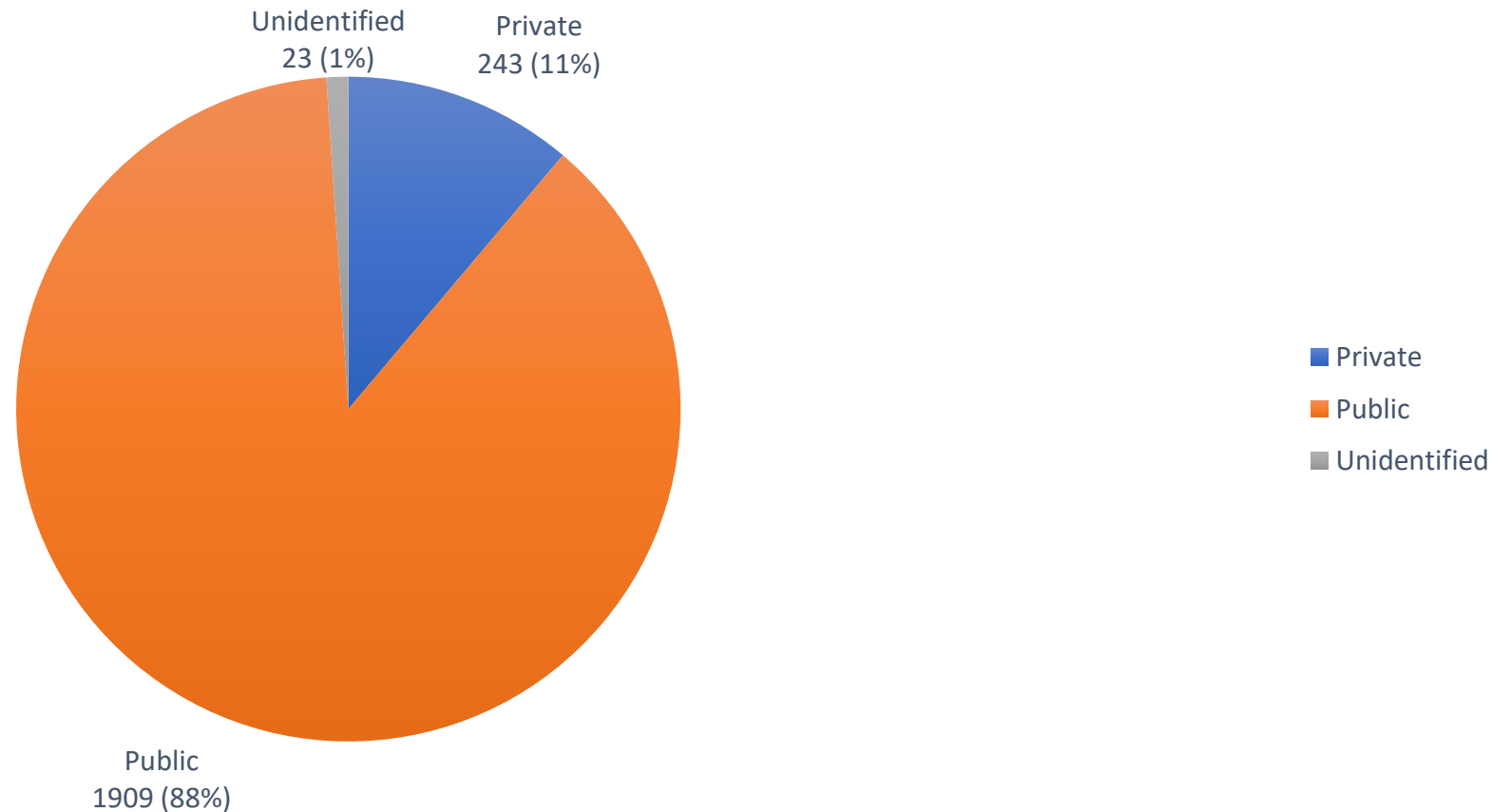


COVID-19 infection among HCW (as of 7-1-2021)

- # of health care workers who are tested positive for COVID-19 infection = 2,175
- 1.63 % of total confirmed cases

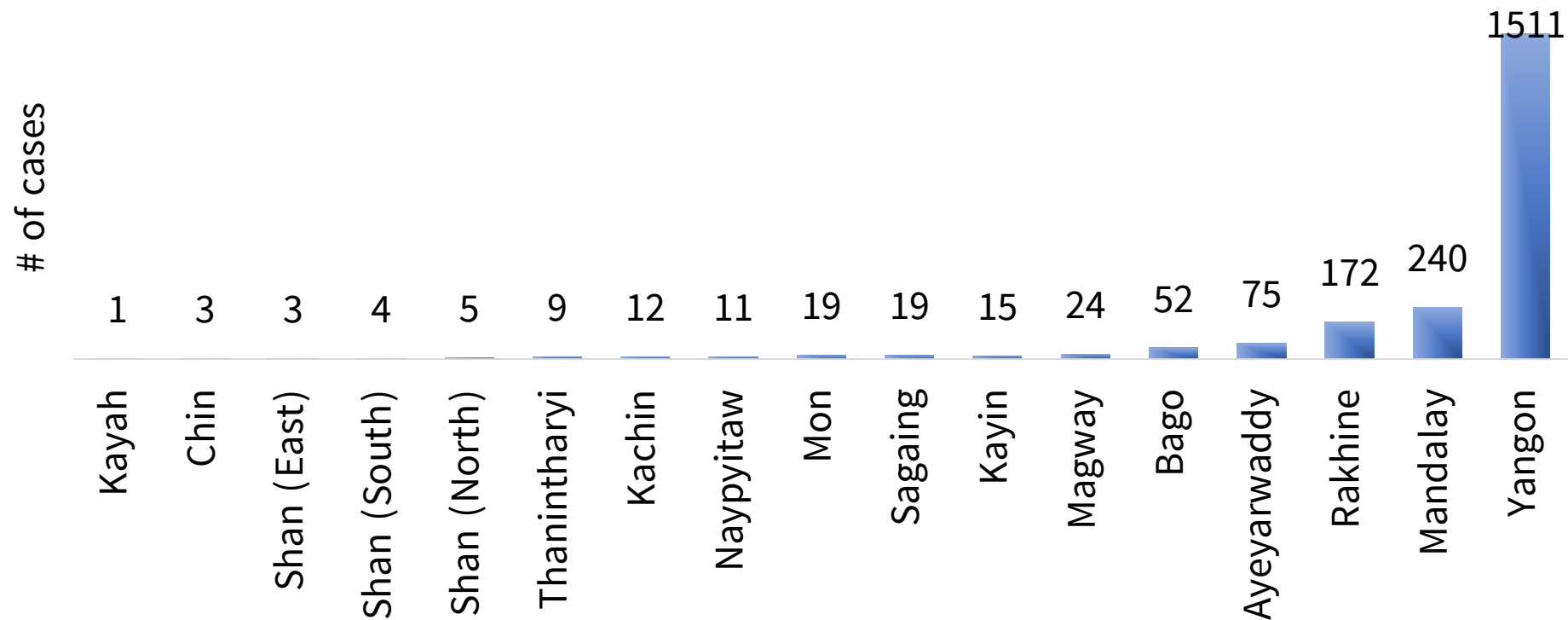
Health care workers with COVID-19 infection in public & private sector

(as of 7-1-2021) (n = 2,175)

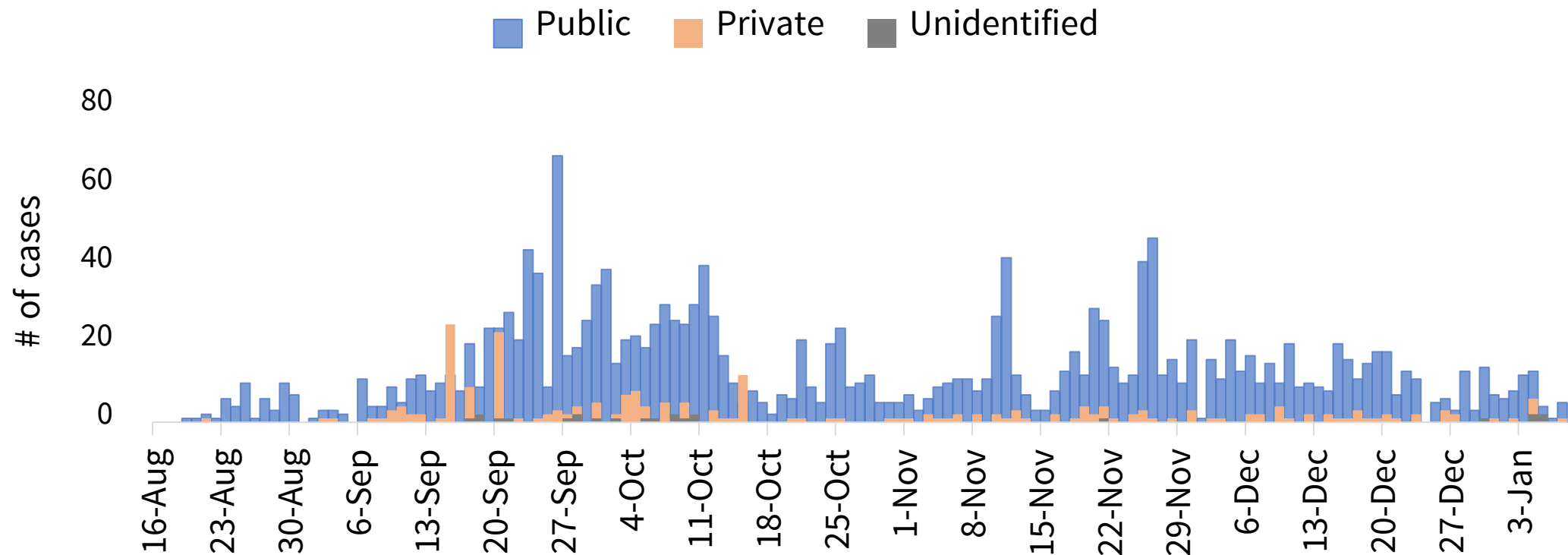


Health care workers with COVID-19 infection by State/ Region

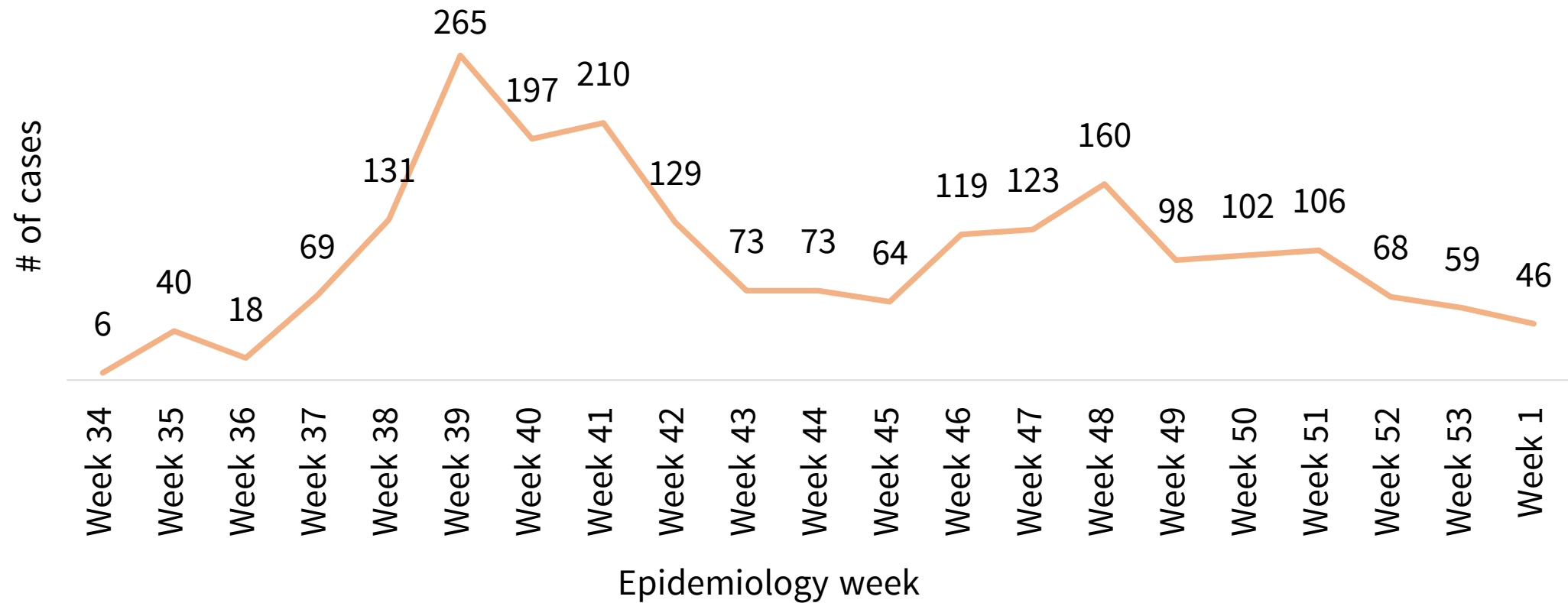
(as of 7-1-2021) (n = 2,175)



Epidemic curve of health care workers with COVID-19 infection, 16-8-2020 to 7-1-2021 (n = 2,156)

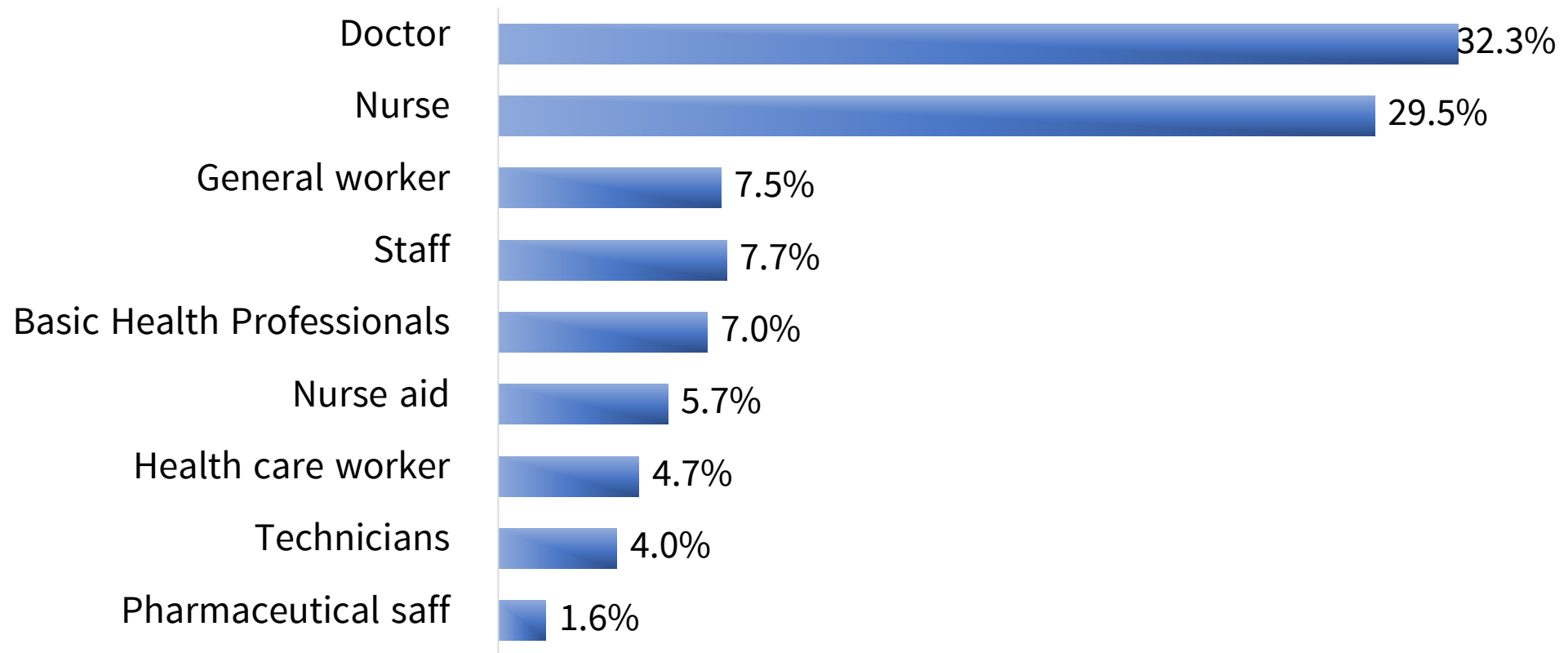


Trend of health care workers with COVID-19 infection by epidemiology week, 16-8-2020 to 7-1-2021 (n = 2,156)



Categories of health care workers with COVID-19 infection

(as of 7-1-2021) (n = 2,175)



Way forward

- Strengthening risk communication (mask campaign, new normal)
Enhancing surveillance – community-based, institution-based, real-time surveillance
- Expanding testing capacity
- Promoting private sector involvement – testing, treatment
- Promoting policies in all sectors including health sector for living with COVID
- Vaccination program
- Capacity building (curative and public health sector)
- Long-term HR and logistic management

Data contribution

- State/Region Public Health and Medical Services Departments
- Hospitals and treatment centres
- NHL, PHL MDY, PHL MLM, TG and PCR labs
- Department of Medical Research
- Department of Human Resource for Health (Medical Universities)
- Defence Services Medical Corps
- Central Epidemiology Unit

Thank you for your kind attention

