

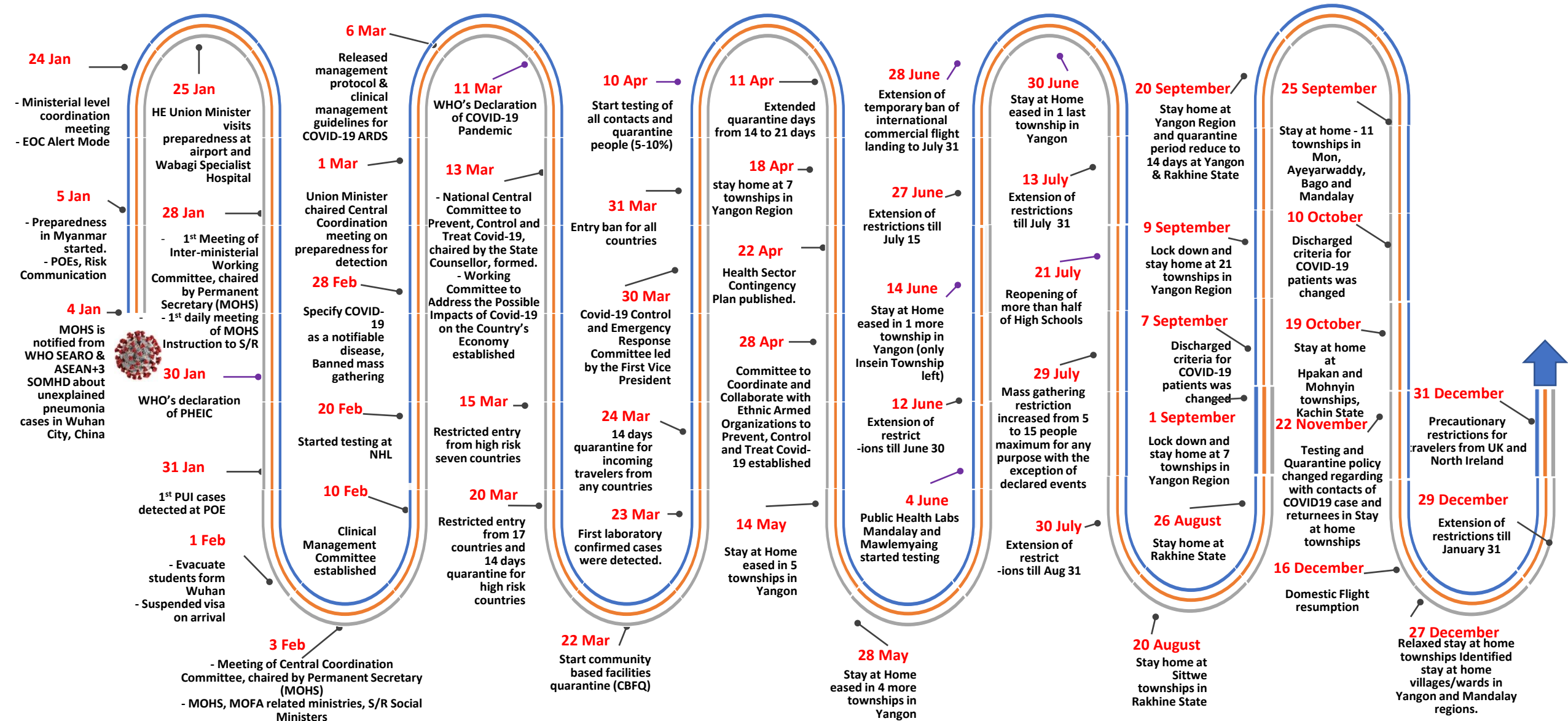
Epidemiological perspective of COVID-19 in Myanmar

49th Myanmar Health Research Congress
Symposium on Lessons learnt from COVID-19 Pandemic
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Timeline of Preparedness and Response to COVID-19 in Myanmar as of 8-1-2021

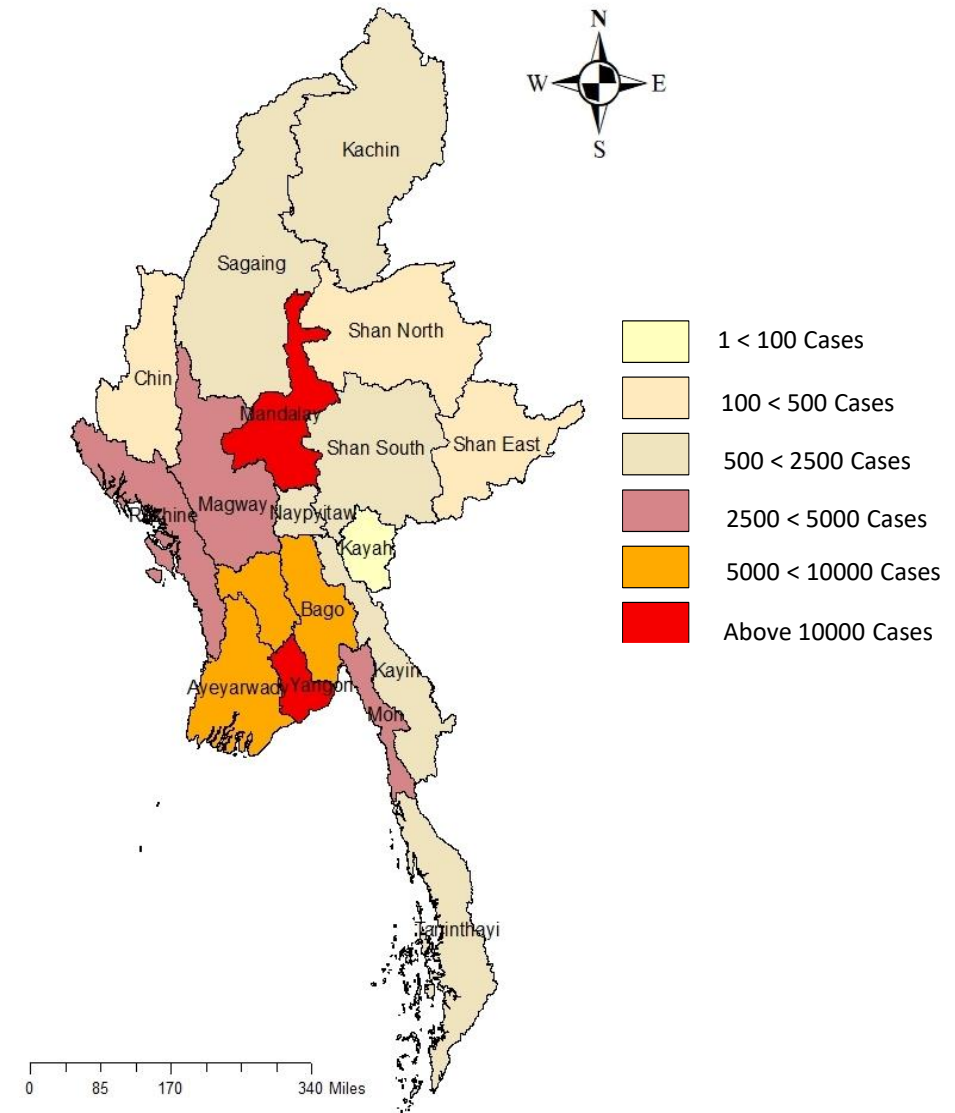


Summary of COVID-19 in Myanmar (10-1-2021)

Cumulative # of confirmed cases	130,604	
Recovered patients	114,049	87.3%
# of patients currently under ICU care	100	
# of patients currently under ventilator care	20	
# of patients currently under oxygen therapy	833	
Cumulative # of patients under ICU care	322	0.25%
Cumulative # of patients under ventilator care	151	0.12%
Total deaths (Case Fatality Rate)	2,846	2.18%

COVID-19 confirmed cases by State and Region (23.3.2020-8.1.2021), n=129,474

No.	State/Region	Population	Population Density(/km2)	Total confirmed Cases	Confirmed cases/ 10000 population	# of Deaths	CFR %
1	Yangon	7,360,703	716.3	84,592	115	2434	2.9%
2	Mandalay	6,165,723	199.6	14,804	24	227	1.5%
3	Bago	4,867,373	123.5	8,375	17	22	0.3%
4	Rakhine	3,188,807	86.7	4,194	13	31	0.7%
5	Mon	2,054,393	170	2,590	13	22	0.8%
6	Naypyitaw	1,160,242	131.1	1,076	9	4	0.4%
7	Ayeyarwaddy	6,184,829	176.5	5,134	8	36	0.7%
8	Kayin	1,574,079	52	1,212	8	16	1.3%
9	Magway	3,917,055	87	2,994	8	4	0.1%
10	Chin	478,801	13	266	6	1	0.4%
11	Tanintharyi	1,408,401	32	591	4	-	-
12	Sagaing	5,325,347	56.8	2,083	4	11	0.5%
13	Kachin	1,689,441	18.9	636	4	-	-
14	Kayah	286,627	24	55	2	1	1.8%
15	Shan (East)	5,824,432	37.4	872	2	-	-
16	Shan (North)					2	0.9%
17	Shan (South)					1	0.2%
	Total	51,486,253	83/km2	129,474	25	2812	2.2%

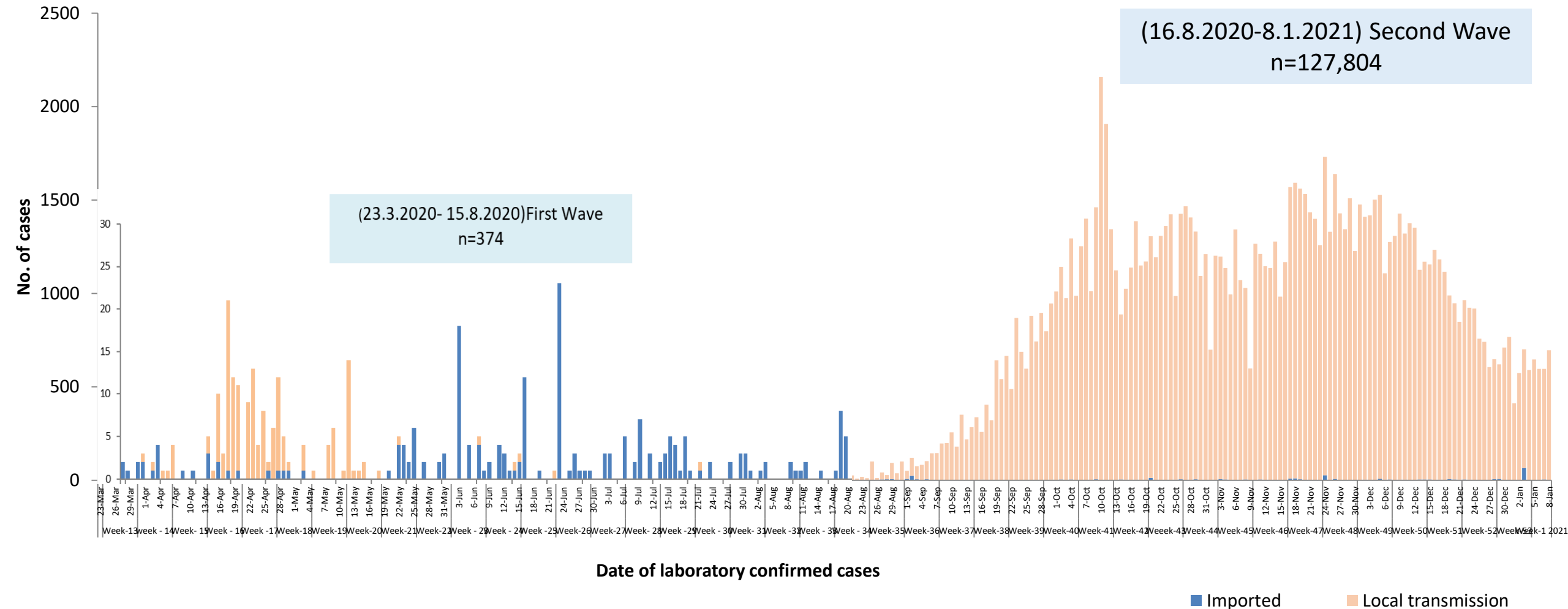


*Source of population and population density- Census 2014, Order of confirmed cases by case per 10,000 population



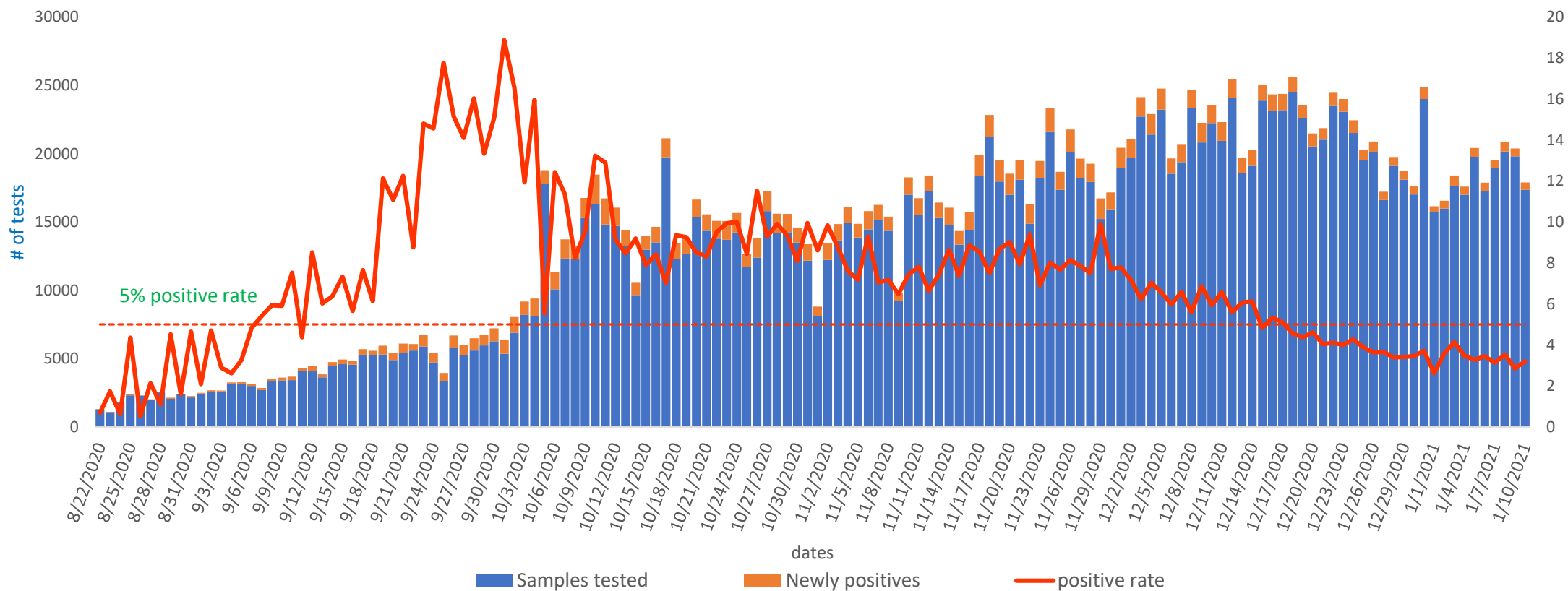
Epidemic curve of the COVID-19 cases in Myanmar

(23-3-2020 to 8-1-2021) (n=129,474)

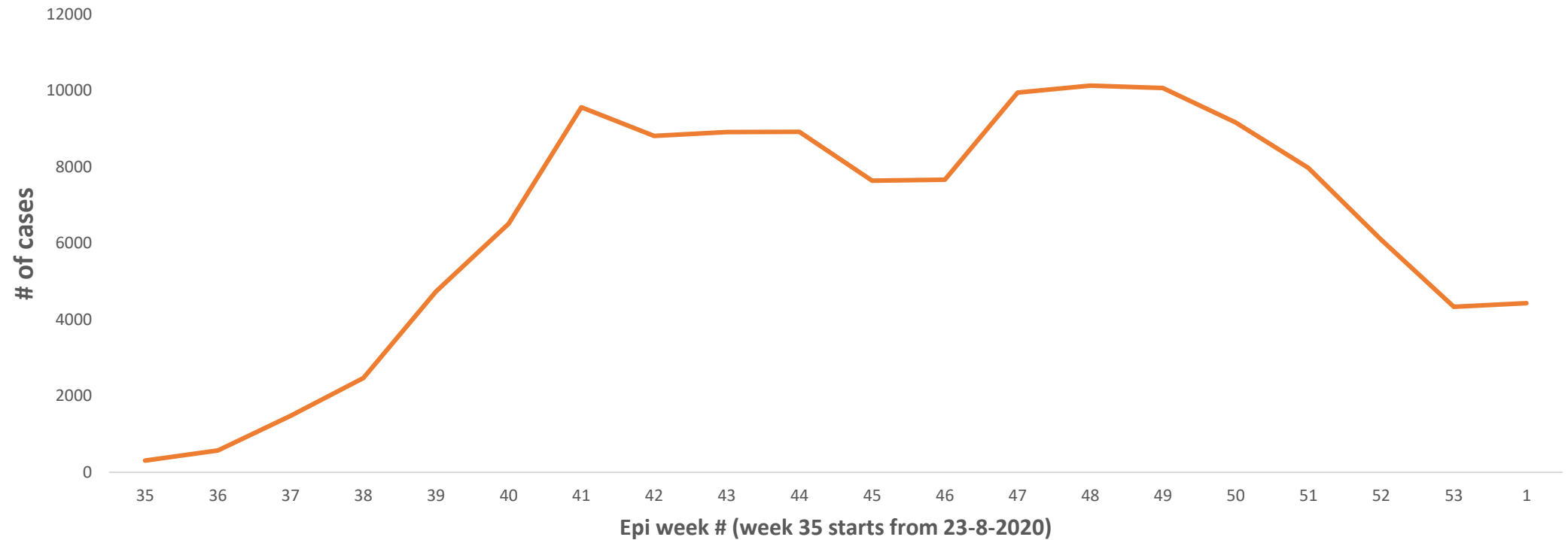


Trend of positive rates for COVID-19 Testing (22-8-2020 to 30-12- 2020)

(n (tested)= 1,657,423, n(confirmed)= 123,424)

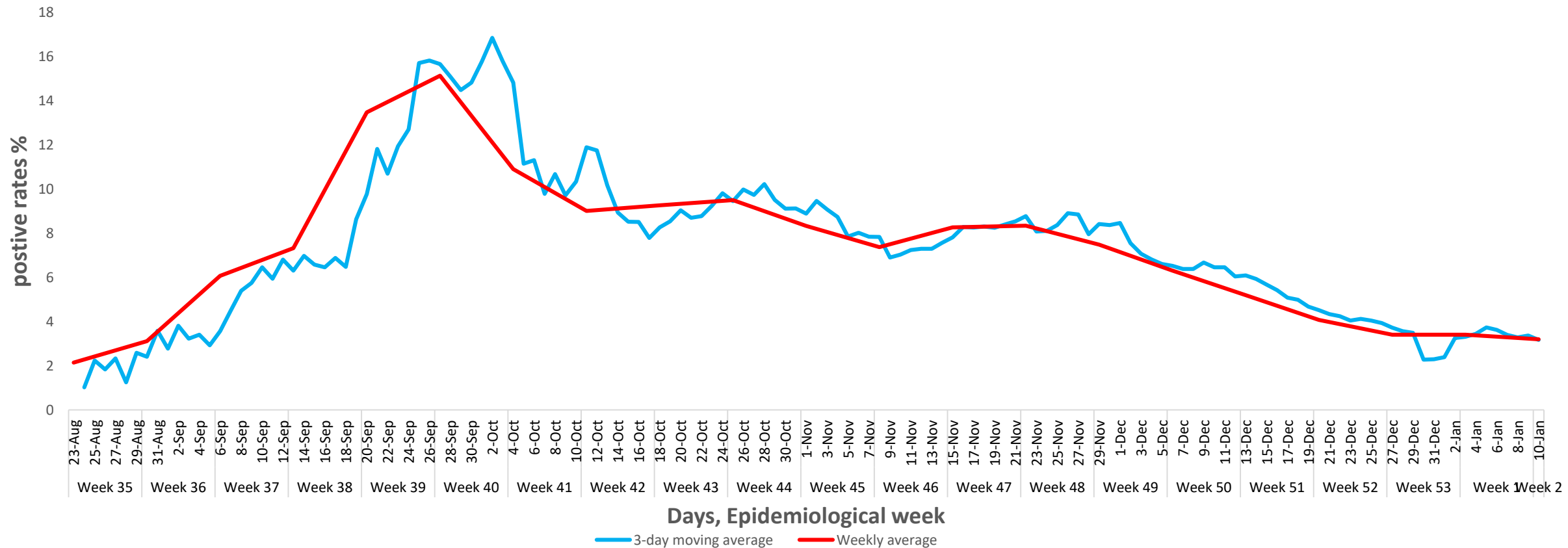


COVID-19 confirmed cases by week (Epi week 35, 2020 to week 1, 2021, as of 11-1-2021)

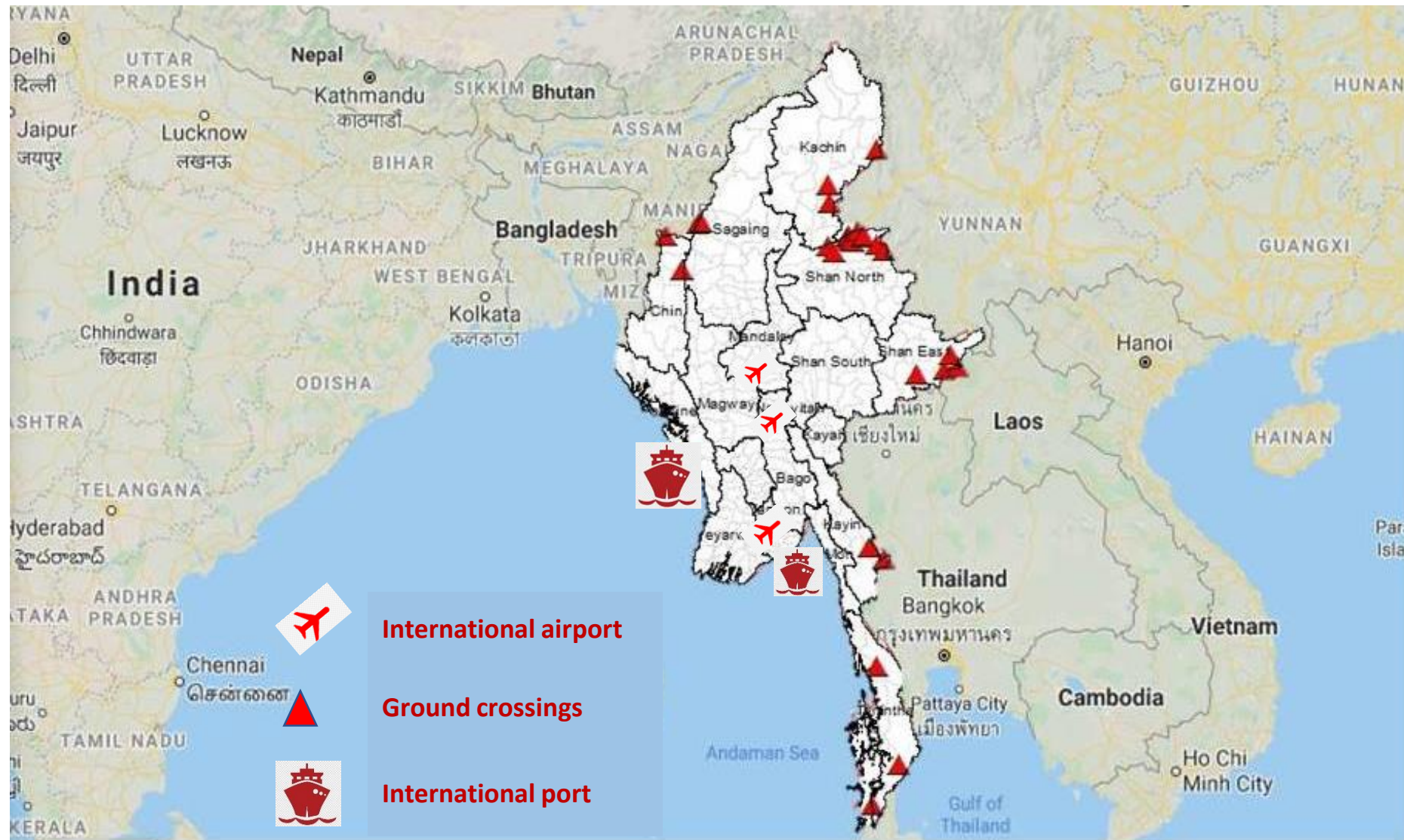


3-day moving average and weekly average of overall positive rates of COVID-19

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



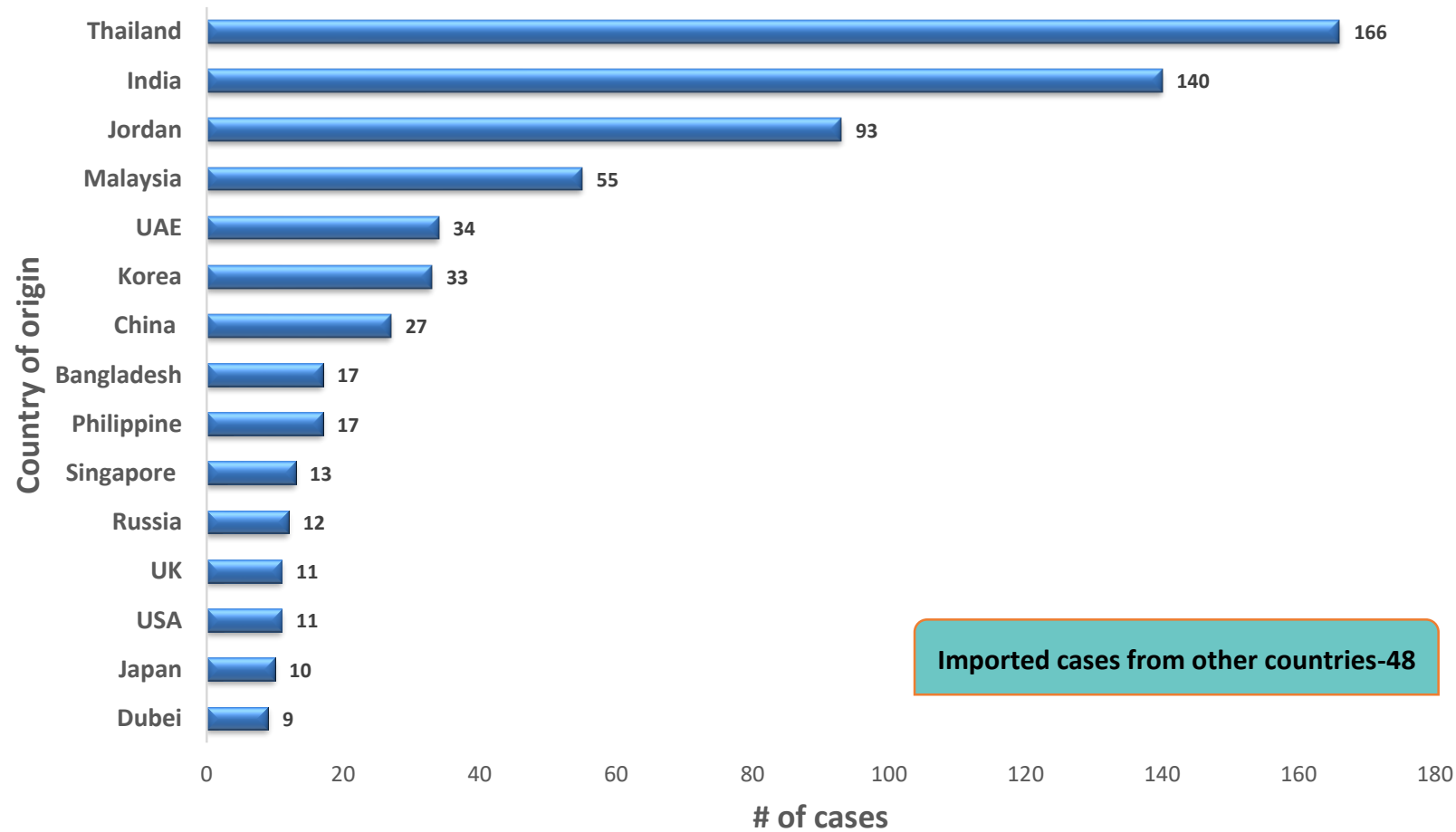
Points of Entry in Myanmar



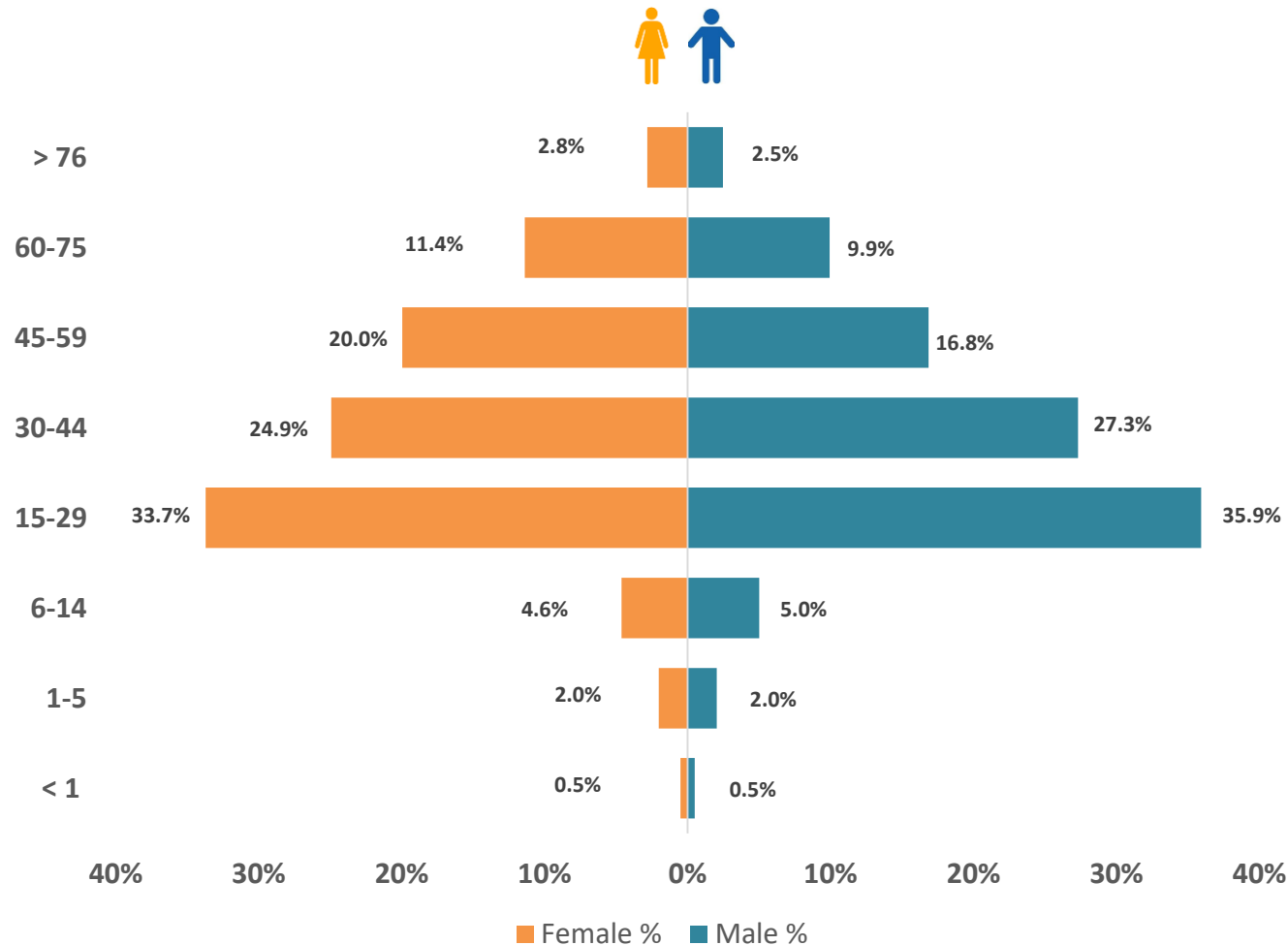
COVID-19 confirmed cases by type of transmission (23.3.2020- 8.1.2021) n=129,474

Type of transmission	No. of cases	Percentage of total confirmed cases
# of locally transmitted cases	128,778	99.5%
# of imported cases	696	0.5 %

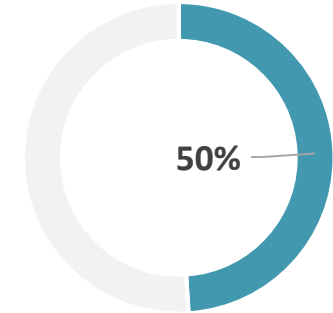
Country of origin of imported cases of COVID-19 imported cases (23.3.2020-8.1.2021), n=696



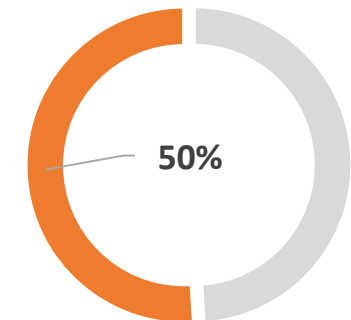
Analysis of Age group and gender distribution of confirmed cases (23.3.2020-6.1.2021), n= 128,178



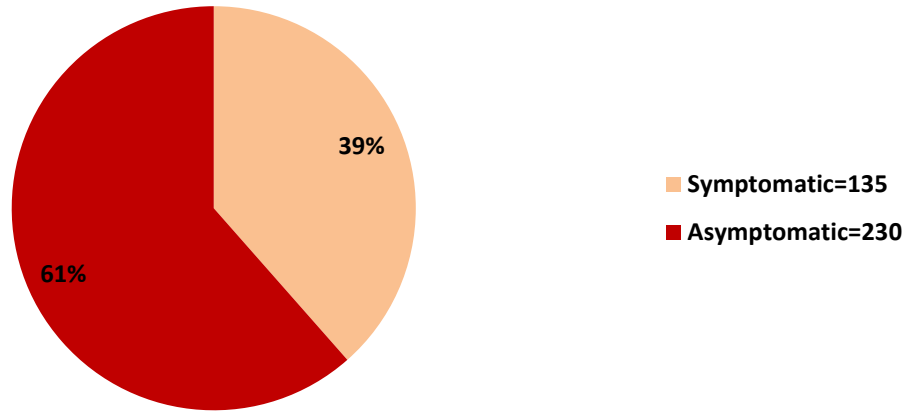
Male



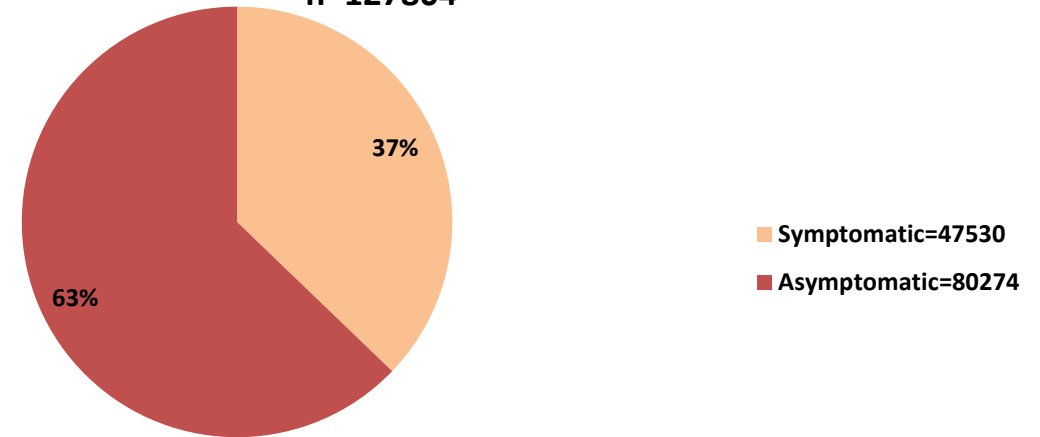
Female



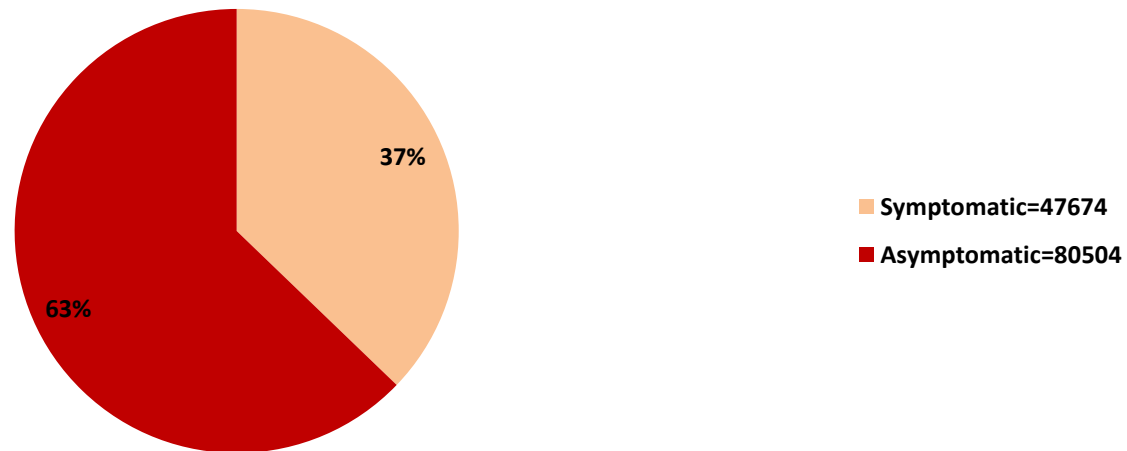
Proportion of symptomatic and asymptomatic percentage of confirmed cases(23.3.2020 - 15.8.2020), n=374

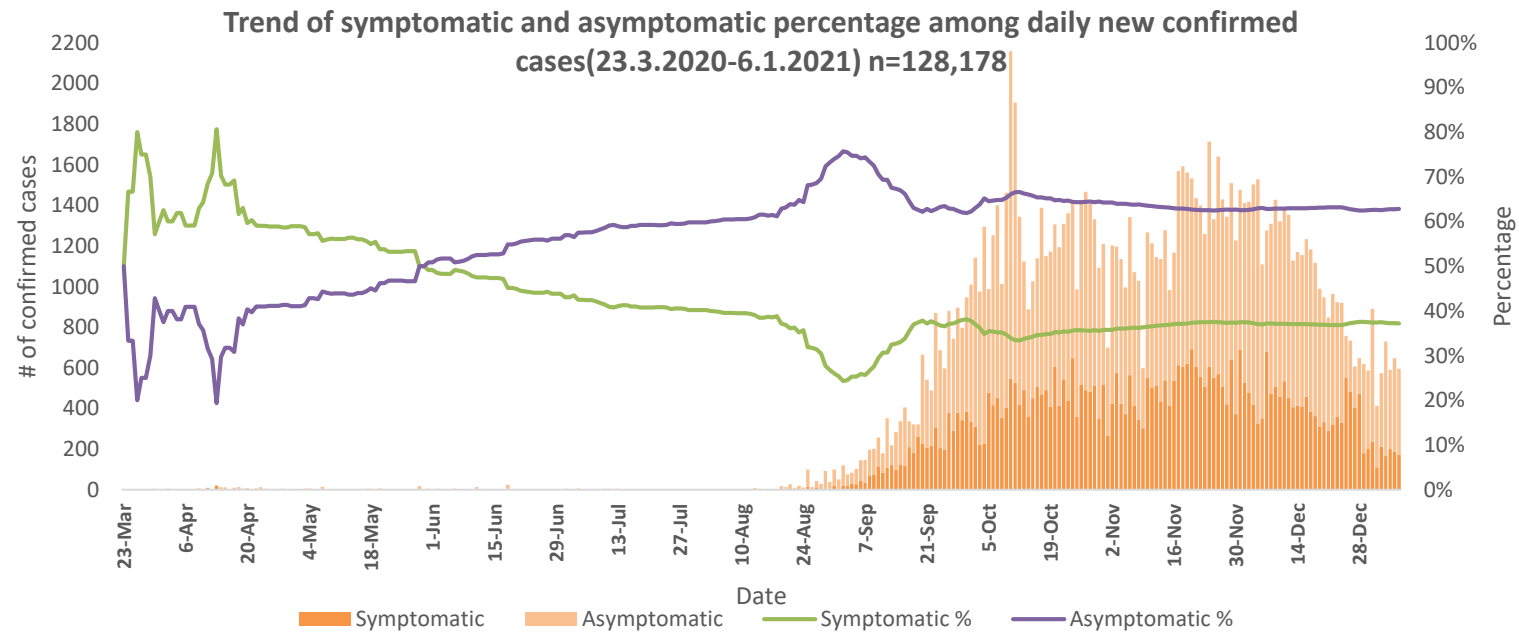
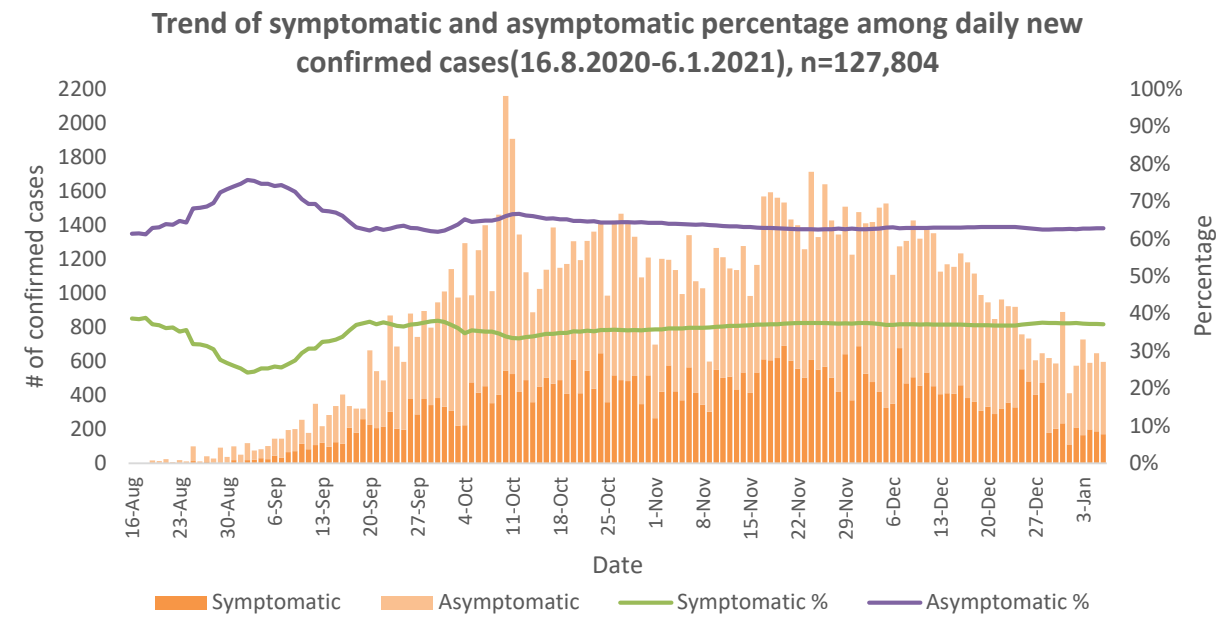
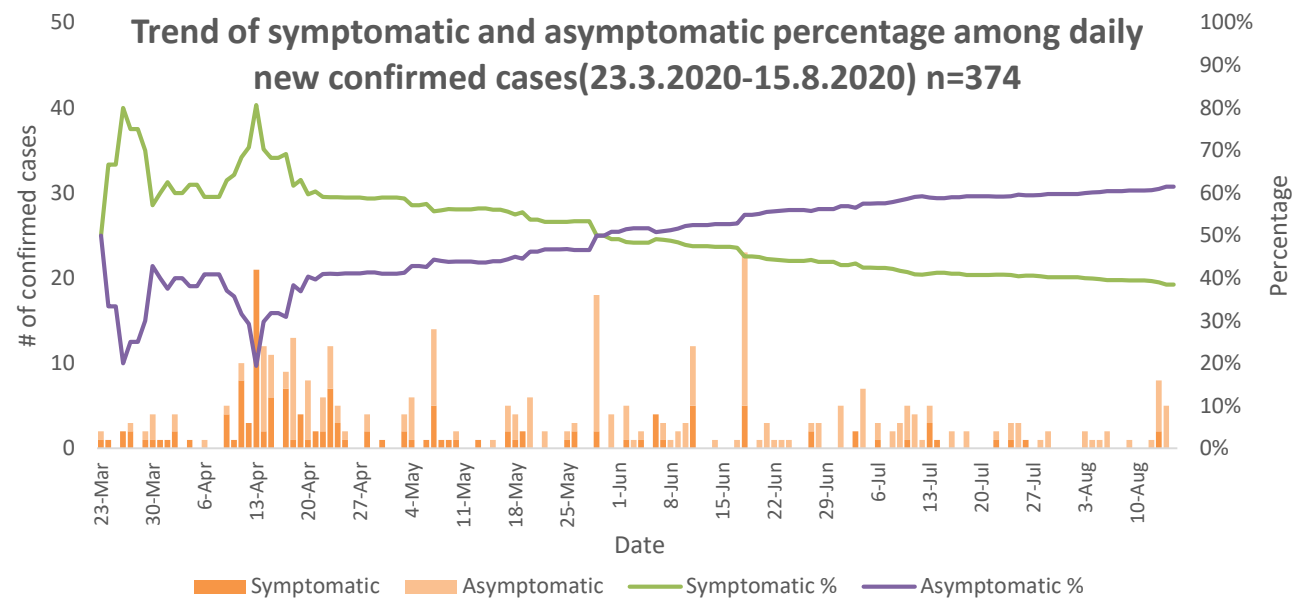


Proportion of symptomatic and asymptomatic percentage of confirmed cases at the time of reporting (16.8.2020-6.1.2021), n=127804

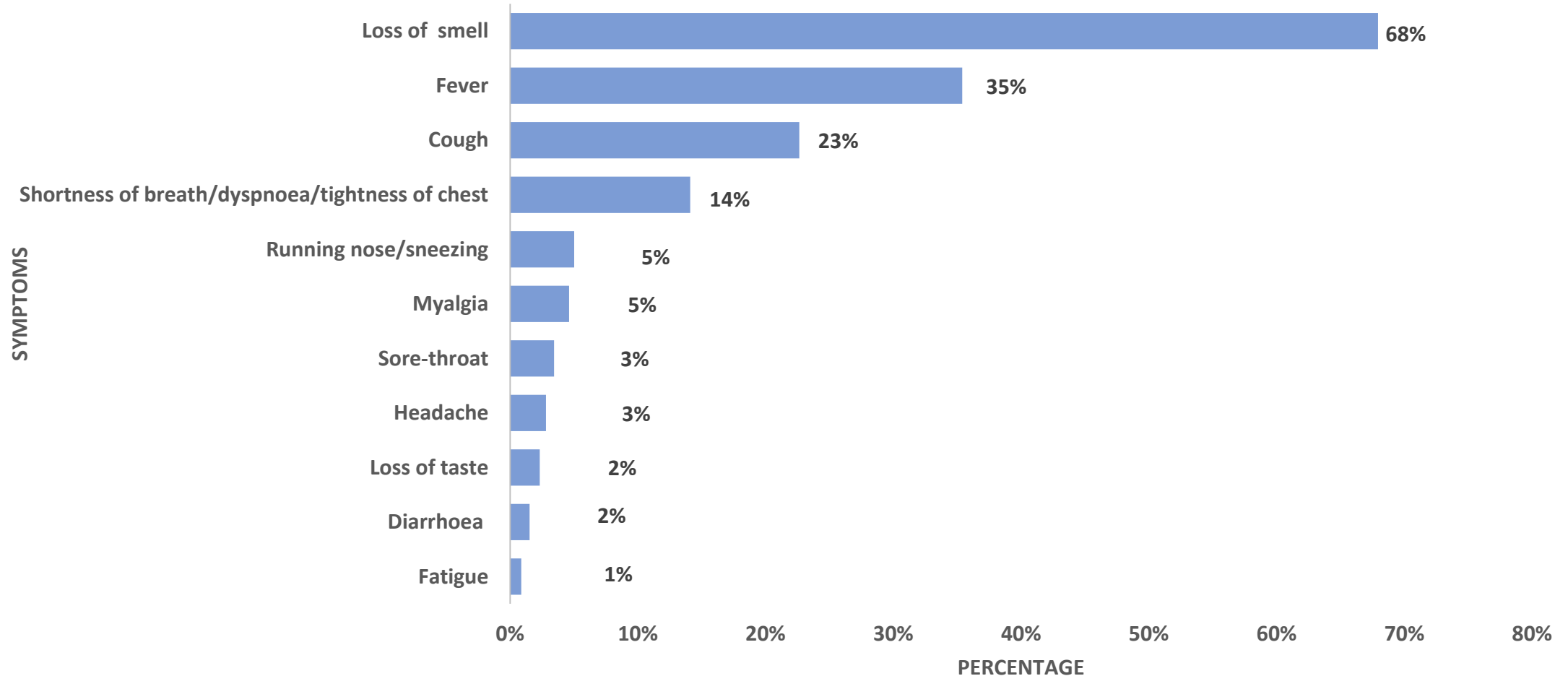


Proportion of symptomatic and asymptomatic percentage of confirmed cases at the time of reporting (23.3.2020-6.1.2021), n=128178

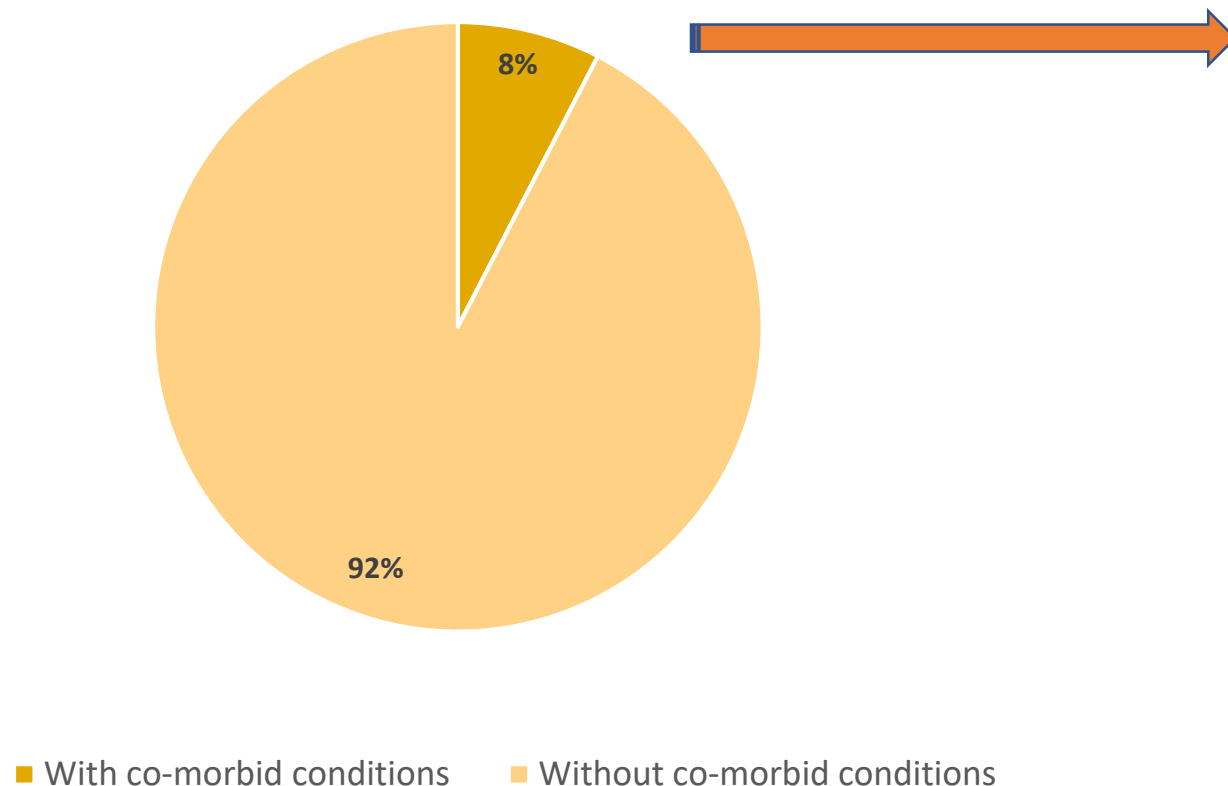




Symptom profile of confirmed cases at the time of reporting (23.3.2020 – 6.1.2021), n=128,178

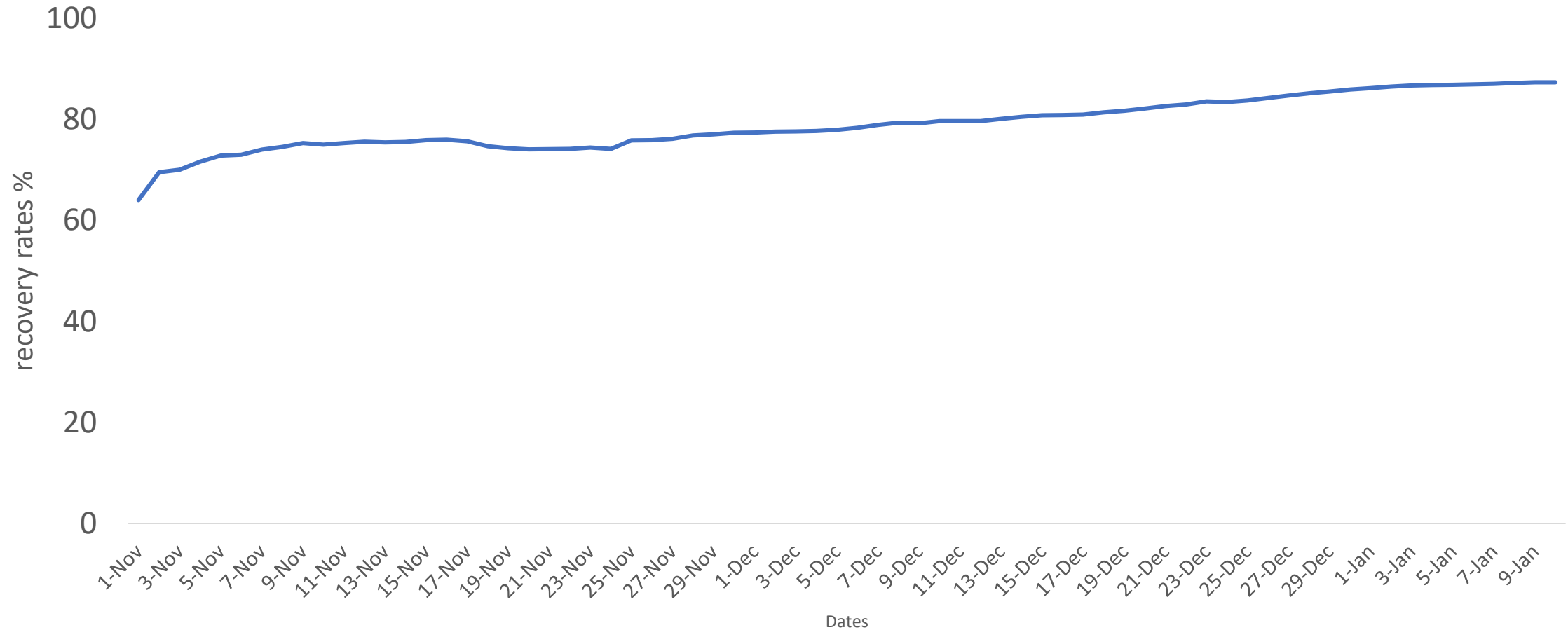


Types of underlying diseases among confirmed cases at the time of reporting (23.3.2020-6.1.2021), n=128,178



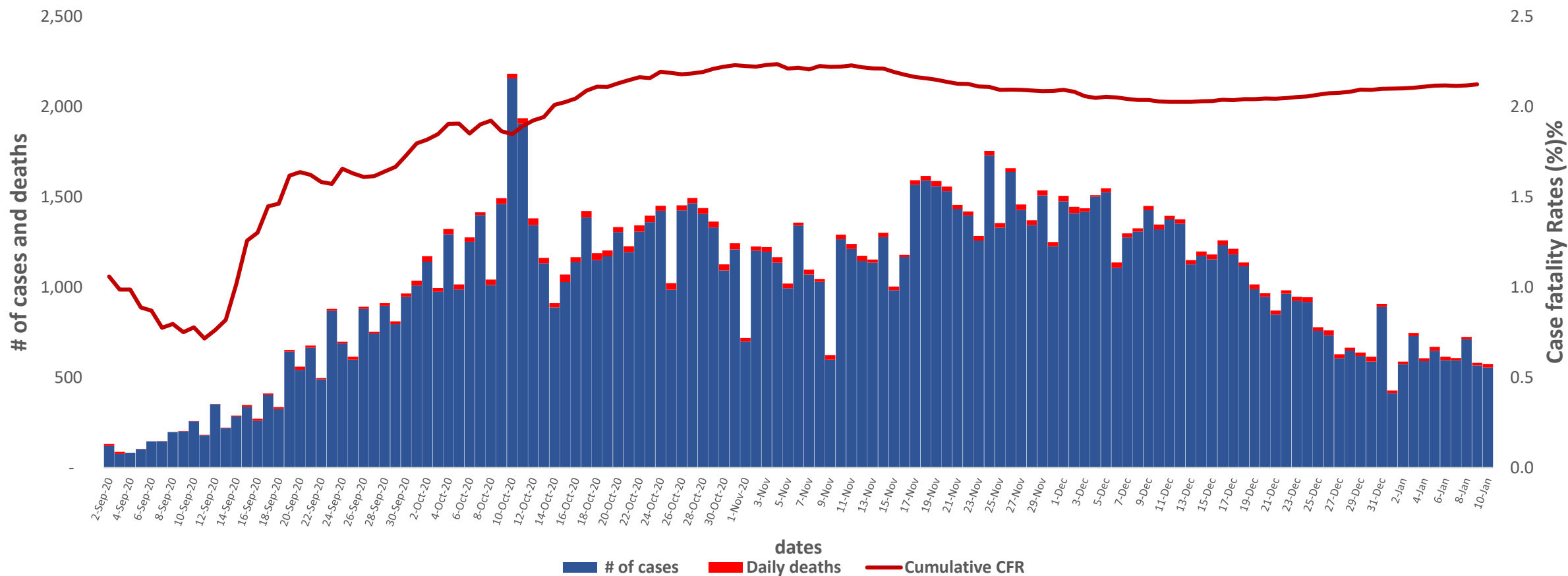
Underlying conditions	% of diseases
Diabetes Mellitus	24%
Hypertension	23.4%
Diabetes Mellitus+ Hypertension	13.5%
IHD	6.8%
Asthma	4.7%
Chronic kidney diseases	2.9%
Tuberculosis	2.8%
Stroke	2.2%
Cancer	1.8%
Pregnancy	1.7%
Other Liver diseases	1.7%
COPD	1%
Congenital anomalies	0.8%
Retro viral infection	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)



Case fatality rates and daily deaths

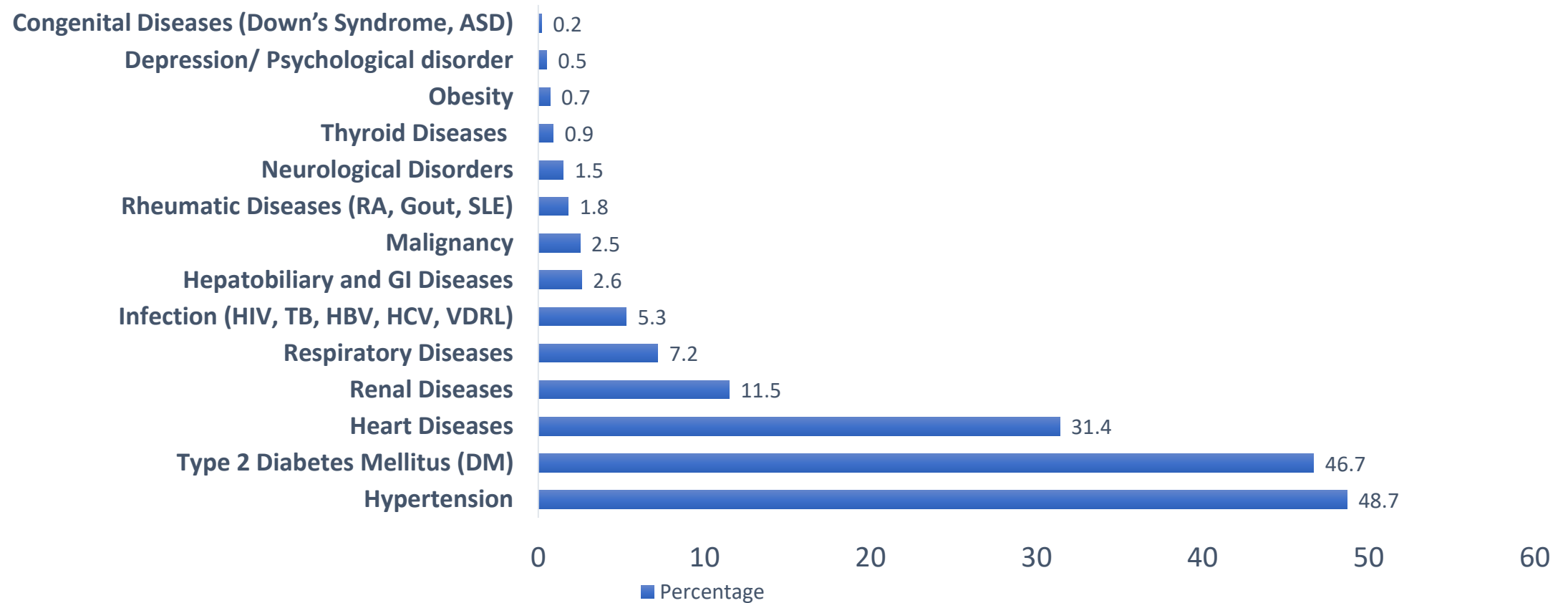
$n(\text{deaths}) = 2,846$ (as of 10-1-2021, 8pm)



Interval between date of hospitalization and date of death (in days) (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

Distribution of underlying diseases among COVID-19 deaths $n(\text{deaths}) = 2,846$ (as of 8-1-2021) ($n = 2,374$)



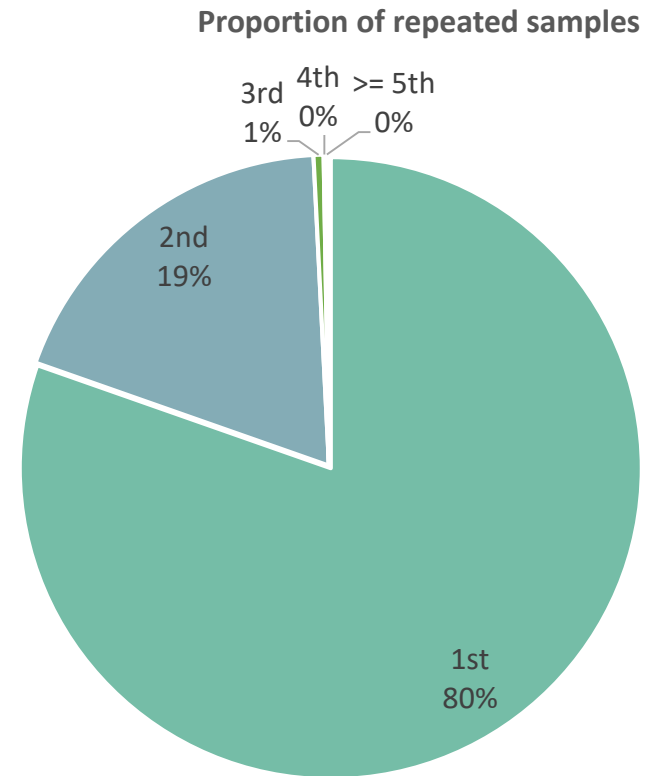
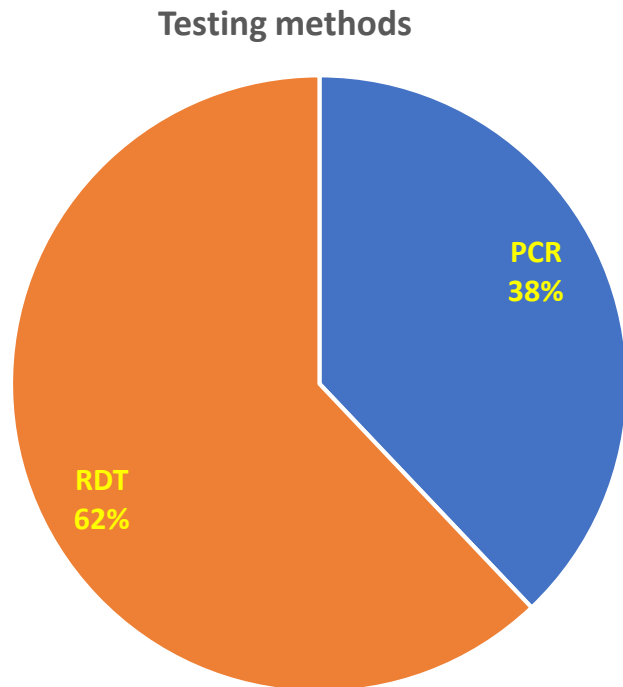
Testing of COVID-19 in Myanmar

COVID-19 testing in Myanmar

(as of 10-1-2021, 8 pm)

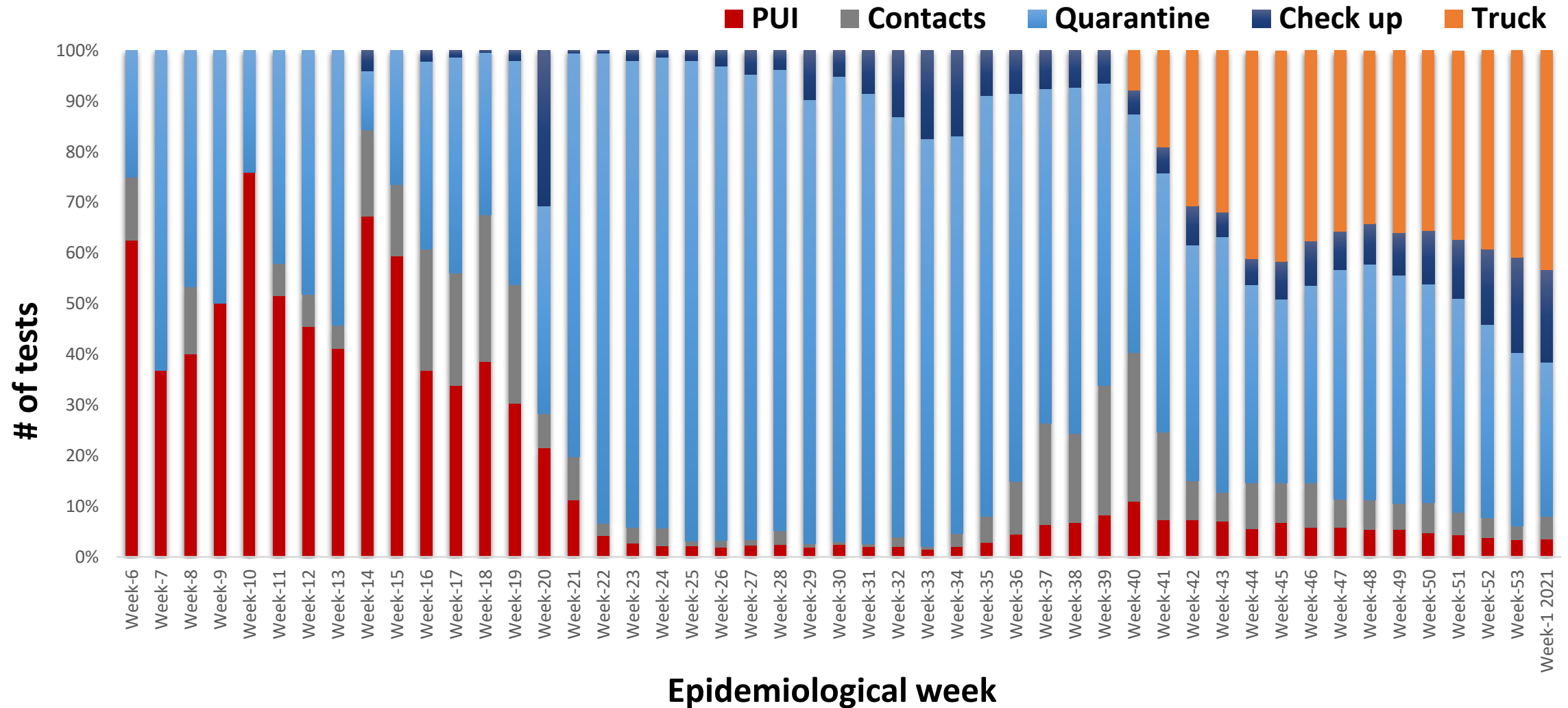
Test	# of tests	# of positives	Positive rate (%)
RT-PCR	770,767	62,379	8.09
RDT	1,227,167	68225	5.56
Total	1,997,934	130,604	6.54

Testing methods

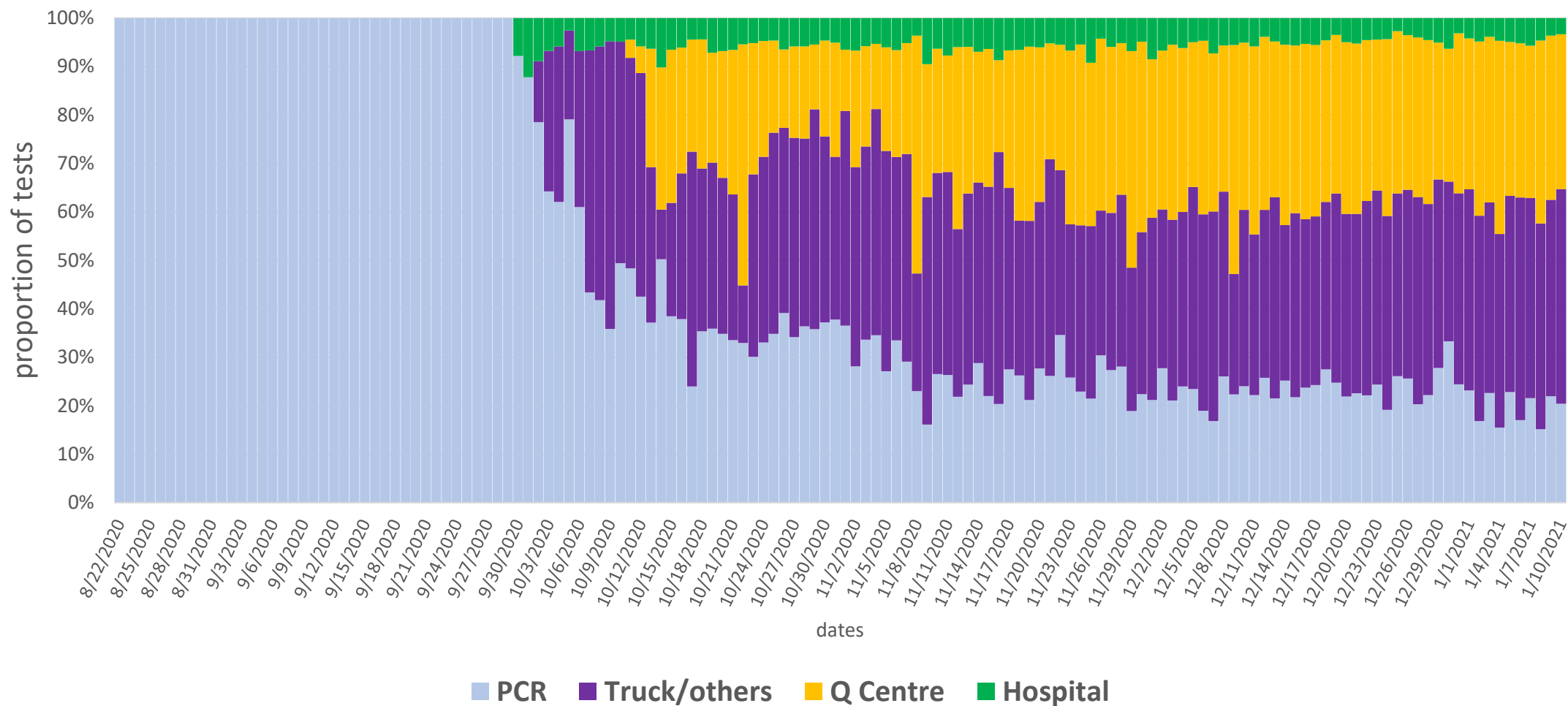


Maximum repeat time -16th times

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

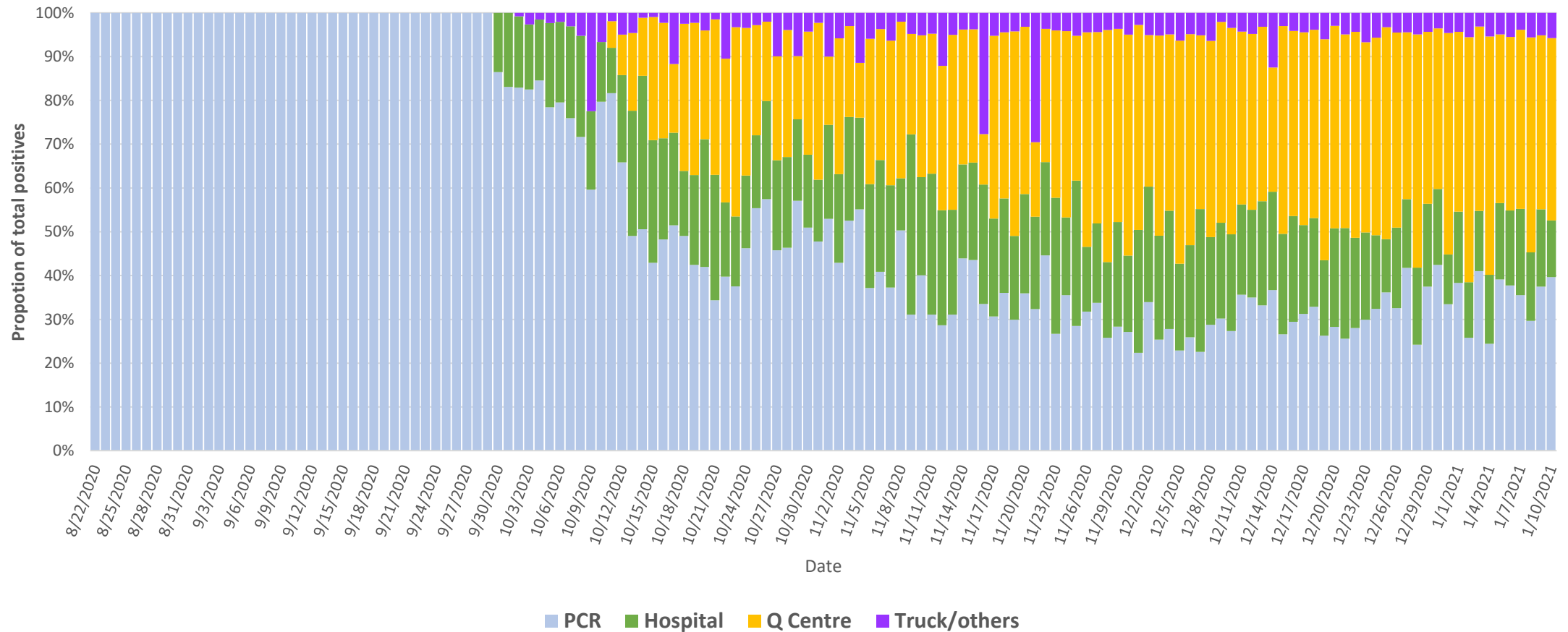


Trend of testing (as of 11-1-2021) (n=1,861,104)

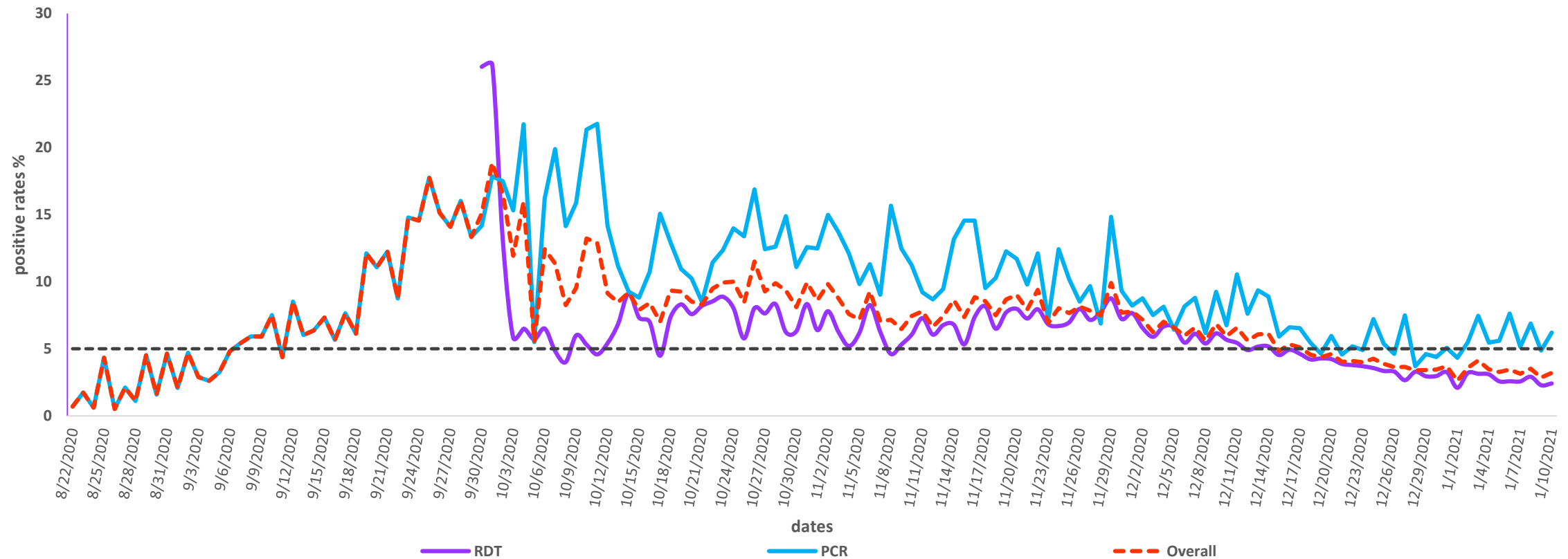


PCR Truck/others Q Centre Hospital

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

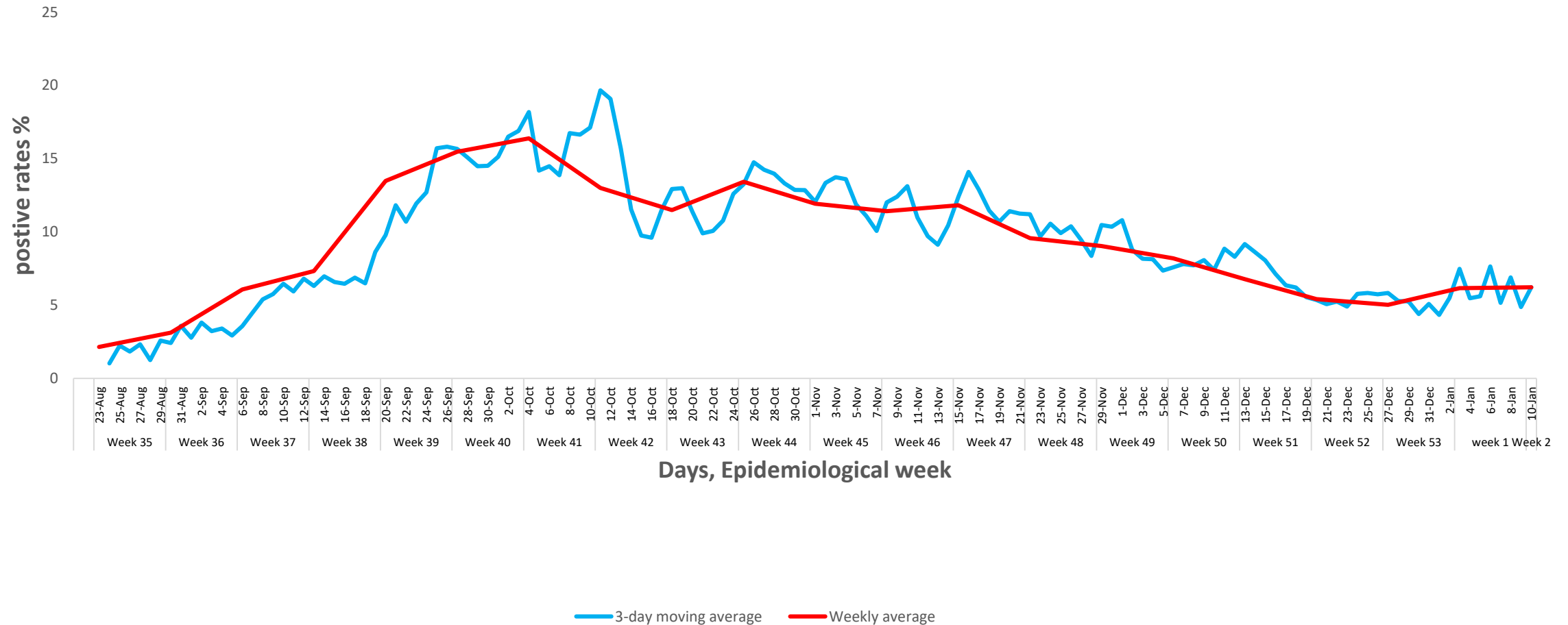


Trend of positive rates for RDT and PCR (as of 11-1-2021)



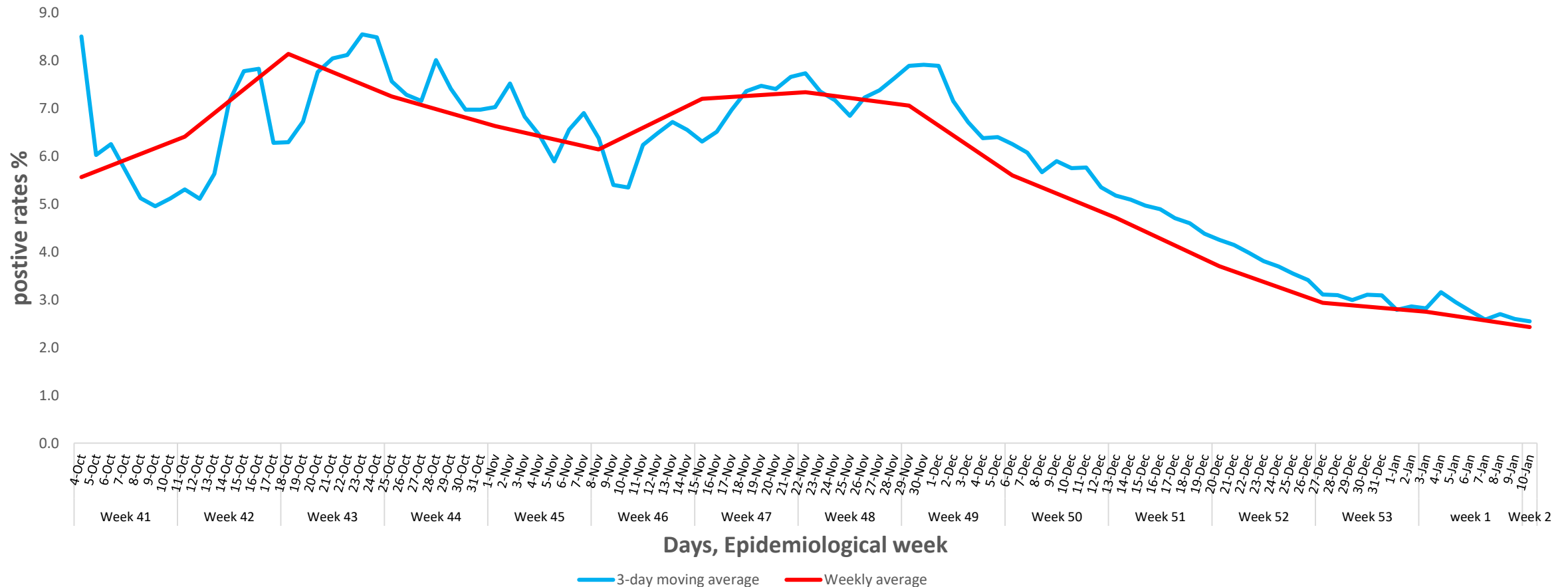
3-day moving average and weekly average of PCR positive rates of COVID-19

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

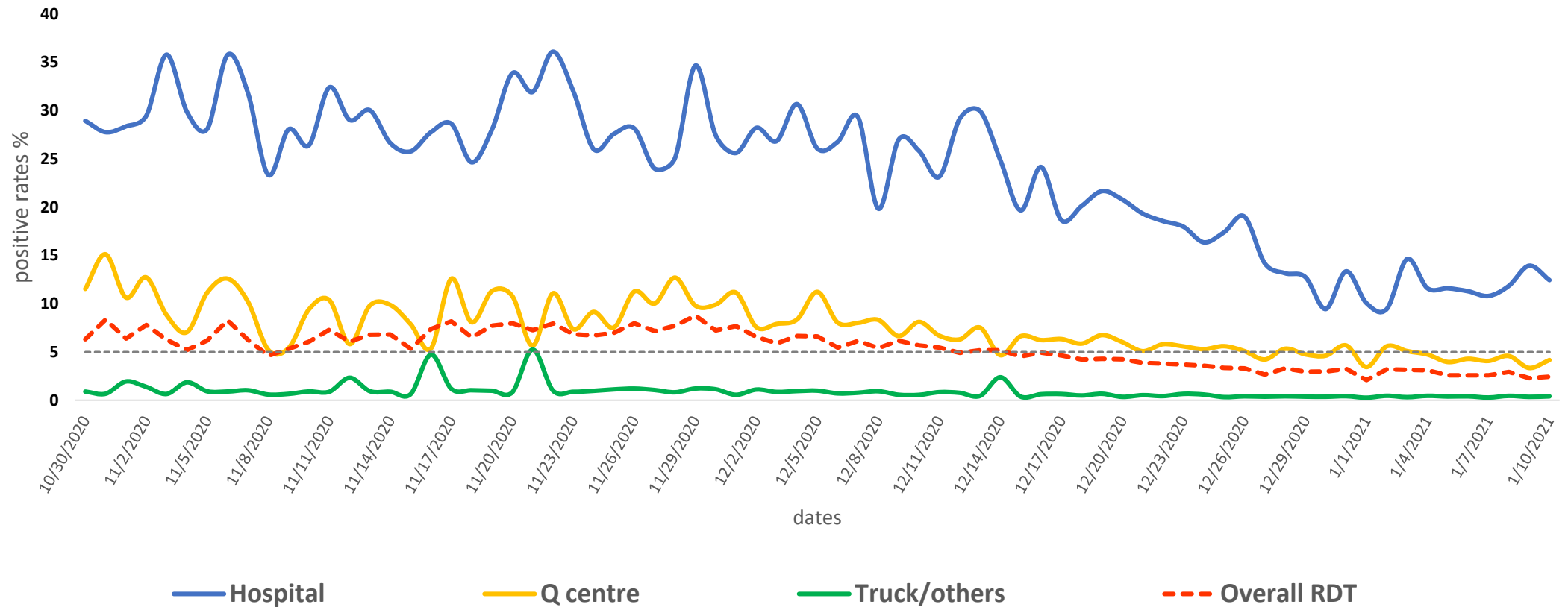


3-day moving average and weekly average of RDT positive rates of COVID-19

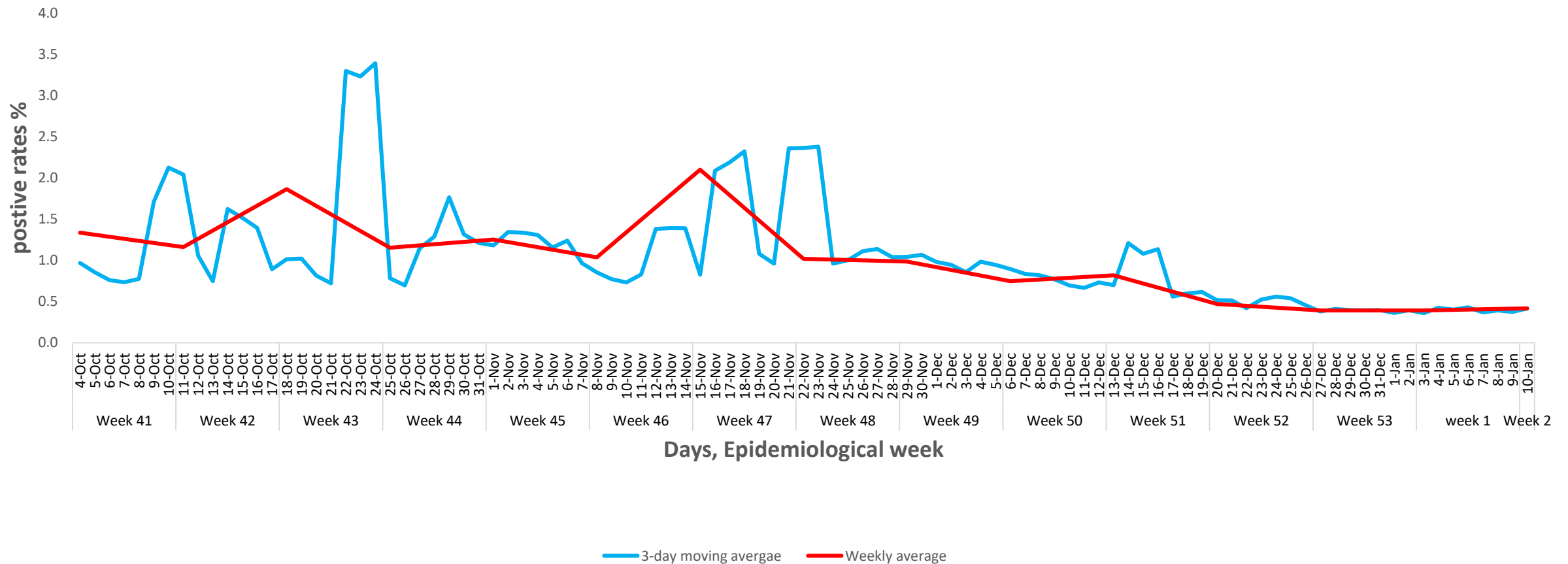
(Epi week 35, 2020 to week 1, 2021, as of 11-1-2021)



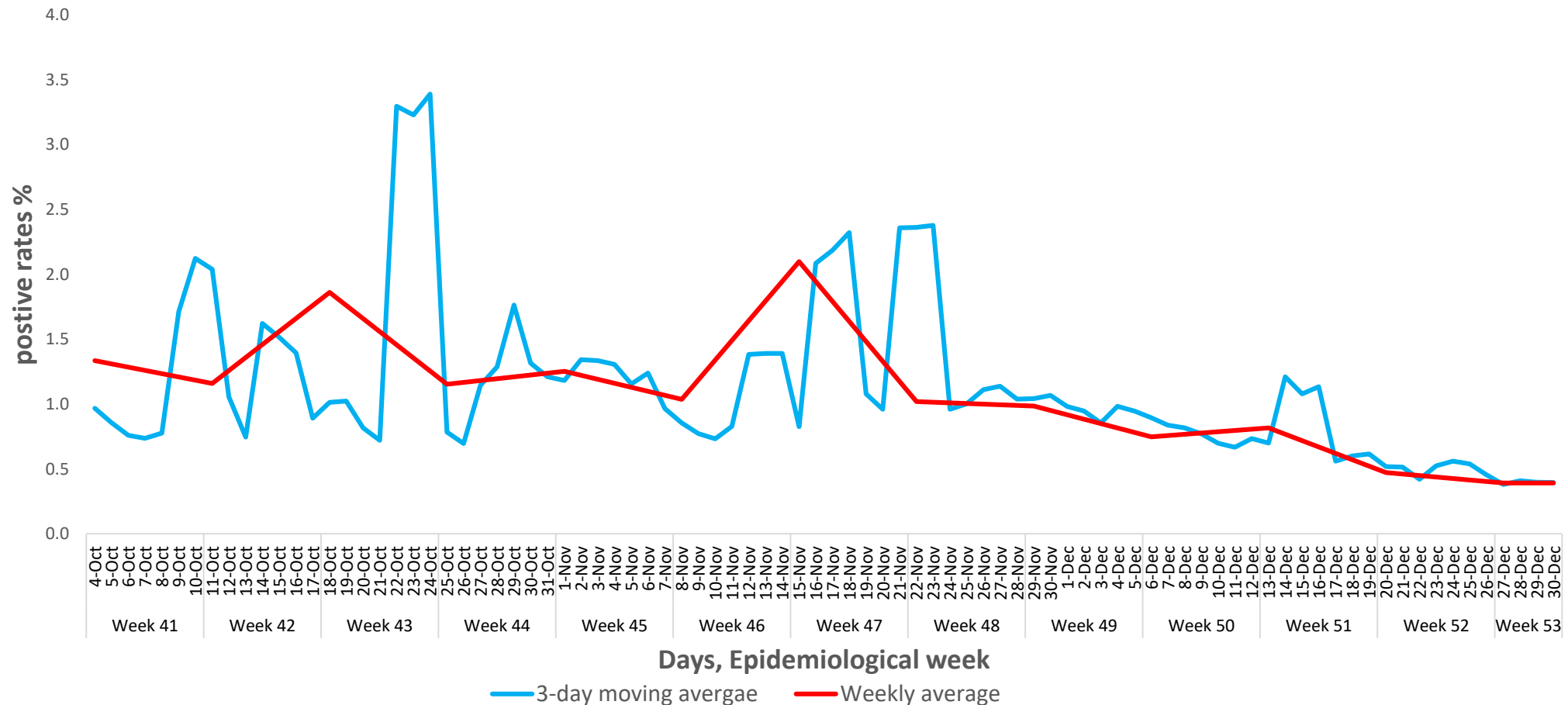
Daily positive rates for RDT in different groups (as of 11-1-2021)



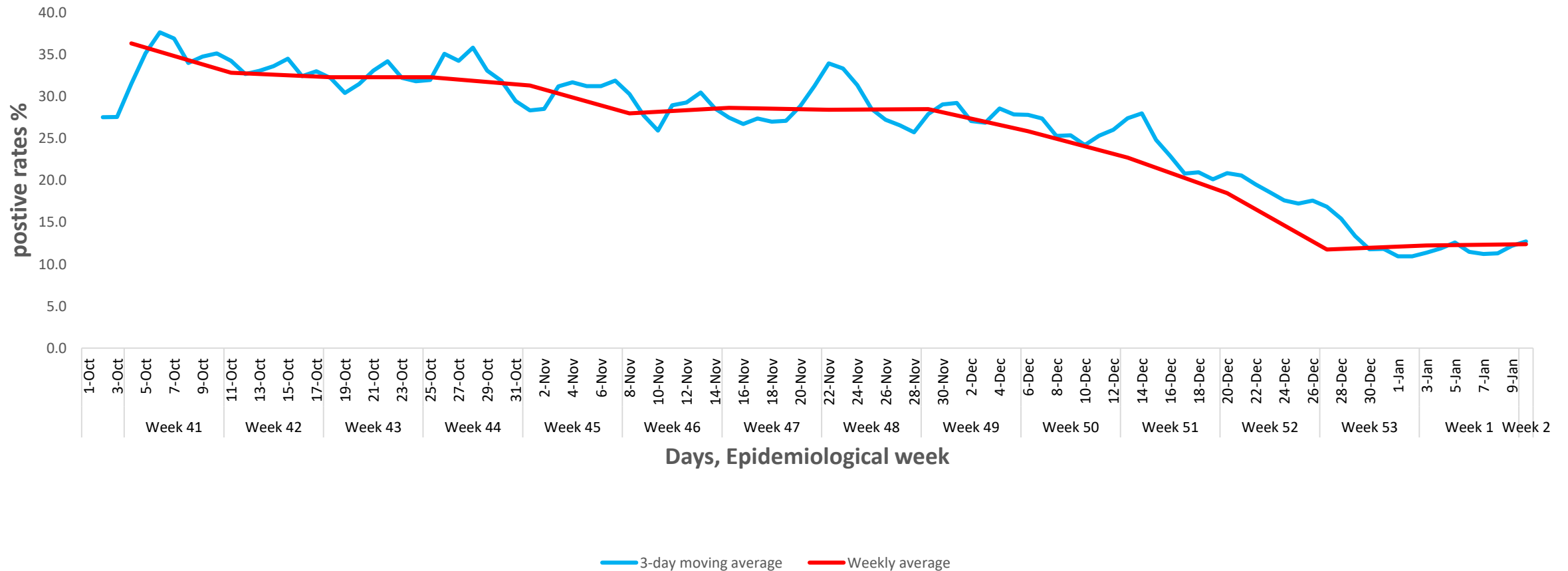
3-day moving average and weekly average of positive rates of RDT for Q persons (Epi week 35, 2020 to week 1, 2021, as of 11-1-2021)



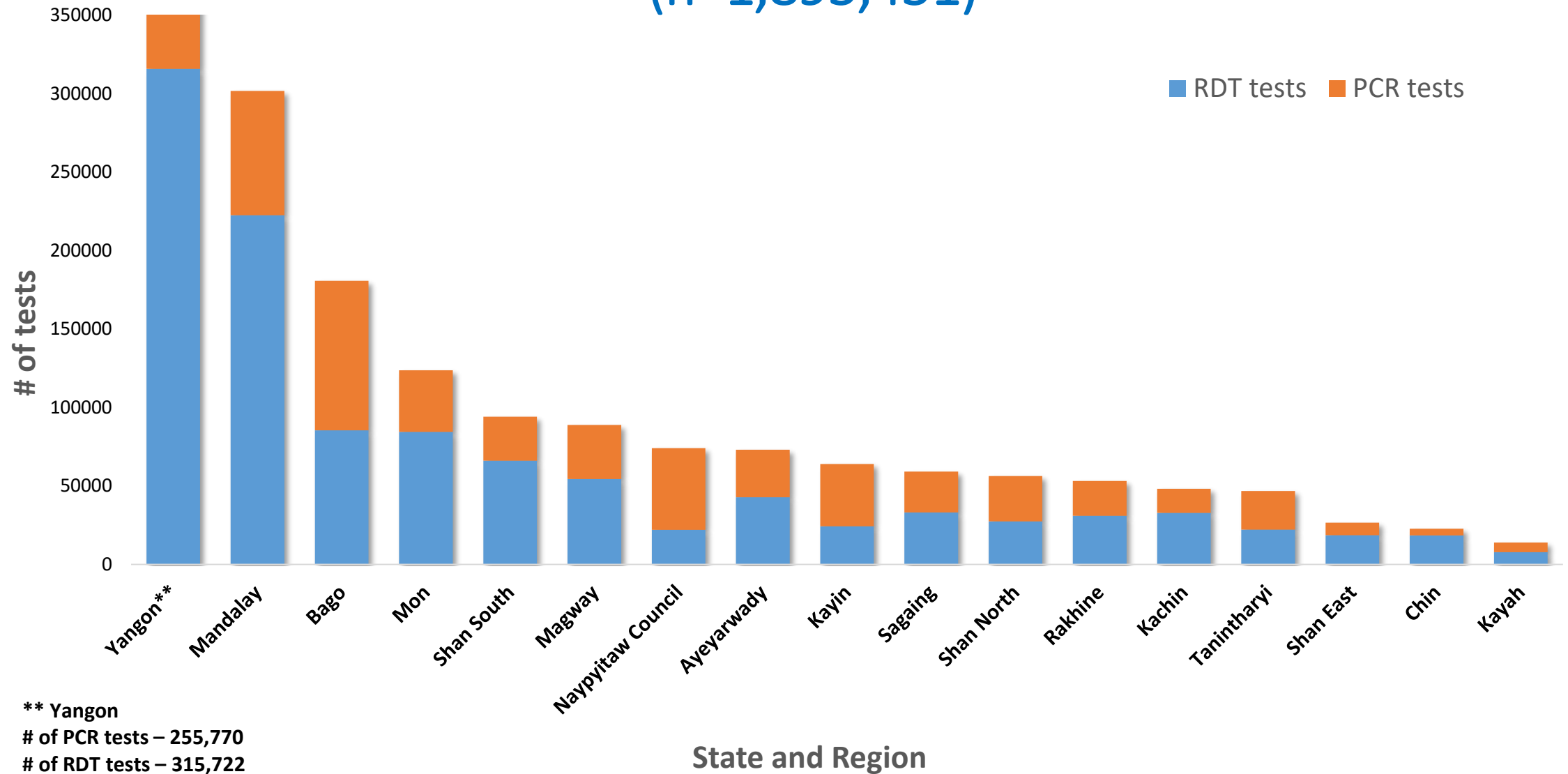
3-day moving average and weekly average of RDT positive rates of **truck car drivers** (Epi week 35, 2020 to week 1, 2021, as of 11-1-2021)



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)



Way forward

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

Thank you for your kind attention

