







Photo: Social Media, Syria

In this issue of Syria COVID-19 Morbidity and Mortality Summary (SMMS) N° 09:

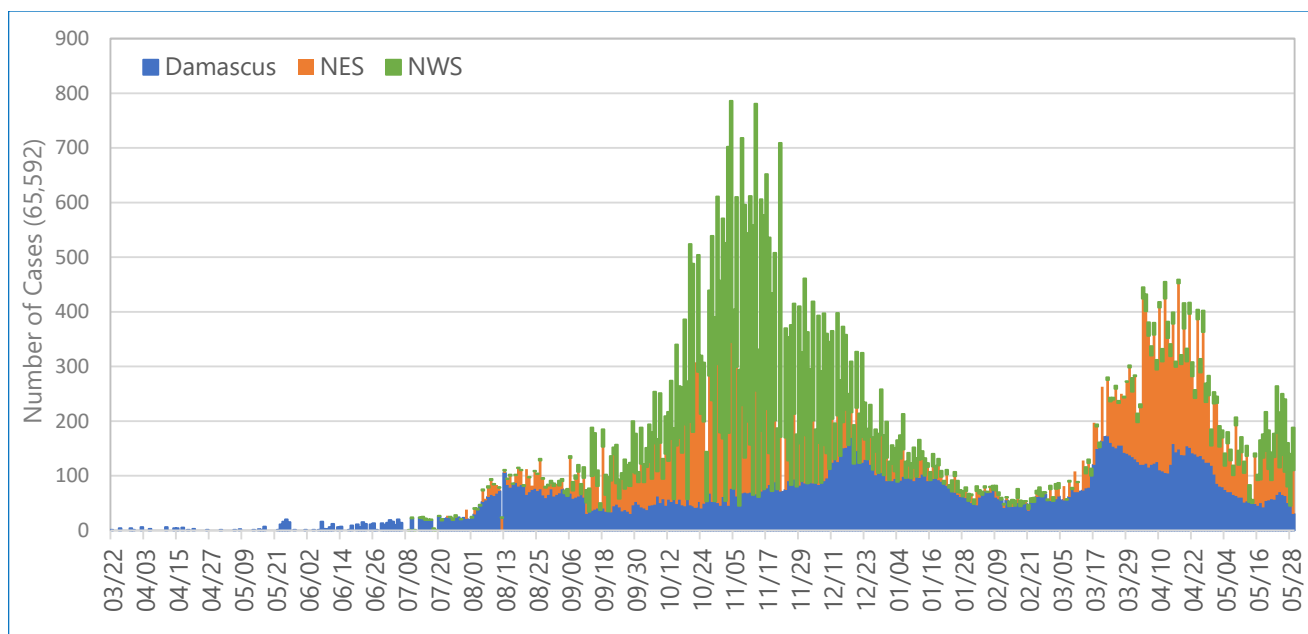
- ✓ *detailed epidemiological update on COVID-19 outbreak in Syria and North East Syria*
- ✓ *daily and weekly distribution of COVID-19 cases and related deaths*
- ✓ *number of cases, deaths, testing rate, positivity rate, attack rate and case fatality rate per governorate*
- ✓ *daily distribution of COVID-19 cases and rolling seven-day average per governorate in whole of Syria*
- ✓ *overall and cumulative weekly attack rate and rates in selected governorates in Syria*
- ✓ *number of COVID-19 testing laboratories and number of daily tested per 100,000 in Syria and North East Syria*
- ✓ *geographical distribution of COVID-19 attack rate (AR) and COVID-19 laboratories per governorate in Syria*

Whole of Syria	Tested	Confirmed	Recovered	Dead
				
TOTAL	263,882	65,592	44,009	3,156
Syria	79,630	24,440	21,593	1,763
NES	48,374	17,826	1,798	727
NWS	135,878	23,326	20,618	666
	Tests/100,000	AR/100,000	Recovery Rate %	CFR%
	1,199	321.6	67.1%	4.8
	COVID-19 Facilities	Isolation Beds	ICU Beds	Ventilators
TOTAL	185	3,447	1,147	857
Syria	151	1,832	828	602
NES	22	689	85	93
NWS	12	926	234	162

1. Whole of Syria (WoS)

Between 23 March 2020 and 03 June 2021, there were sixty-five-thousand-five-hundred-ninety-two (**65,592**) COVID-19 cases¹ confirmed by rt-PCR. Out of the total number of cases, **37.2%** (**24,440/65,592**) were reported from Damascus, **35.6%** (**23,326**) from Northwest Syria (NWS), and the remaining **27.2%** (**16,184**) were reported from Northeast Syria (NES). During the same reporting period, a total of three-thousand-one-hundred-fifty-six (**3,156**) related deaths were reported, of them **55.9%** (**1,763/3,156**) from **Syria**, **23.0%** (**727**) from **NES**, and **21.1%** (**666**) from **NES** - the overall Case Fatality Ratio (CFR)² is **4.8%** (3,156/65,592).

The figure below is showing the daily distribution of reported confirmed COVID-19 cases, 23 March – 03 June 2021, whole of Syria.



The following table is showing the reported number of cases, deaths, testing rate, positivity rate, attack rate and case fatality rate per governorate, 23 March 2020 – 03 June 2021, whole of Syria.

Governorate	# Test	Test/100,000	# Positive	Positivity Rate	Attack Rate	# Deaths	CFR
As-Sweida	1,733	457	1,270	73.28%	334.9	80	6.3%
Tartous	2,701	298	1,828	67.68%	201.7	201	11.0%
Homs	5,198	358	2,931	56.39%	202.0	291	9.9%
Ar-Raqqa	11,629	1683	4,285	36.85%	620.3	74	1.7%
Hama	2,795	208	1,063	38.03%	79.2	40	3.7%
Aleppo	91,080	2,316	16,554	18.18%	420.9	602	3.6%
Dar'a	3,621	357	1,287	35.54%	126.8	62	4.8%
Deir-ez-Zor	2,713	366	1,017	37.49%	137.2	89	8.7%
Rural Damascus	9,248	293	2,524	27.29%	79.9	34	1.3%
Quneitra	1,887	1,827	476	25.23%	460.9	29	6.1%
Damascus	24,224	1,320	5,413	22.35%	294.9	561	10.3%
Lattakia	17,482	1,473	3,784	21.65%	318.9	216	5.7%
Al-Hasakeh	29,826	2,813	11,005	36.90%	1,037.9	468	4.2%
Idleb	59,745	2,308	12,155	20.34%	469.6	409	3.3%
Total	263,882	1,294	65,592	24.86%	321.6	3,156	4.8%

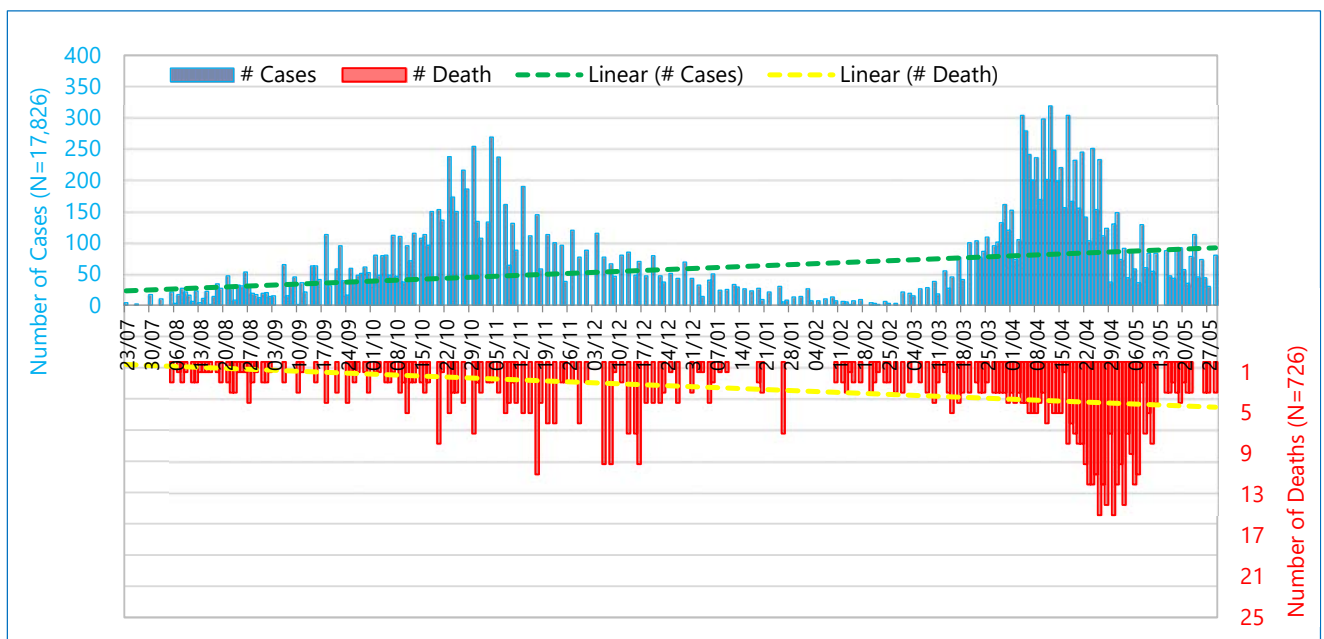
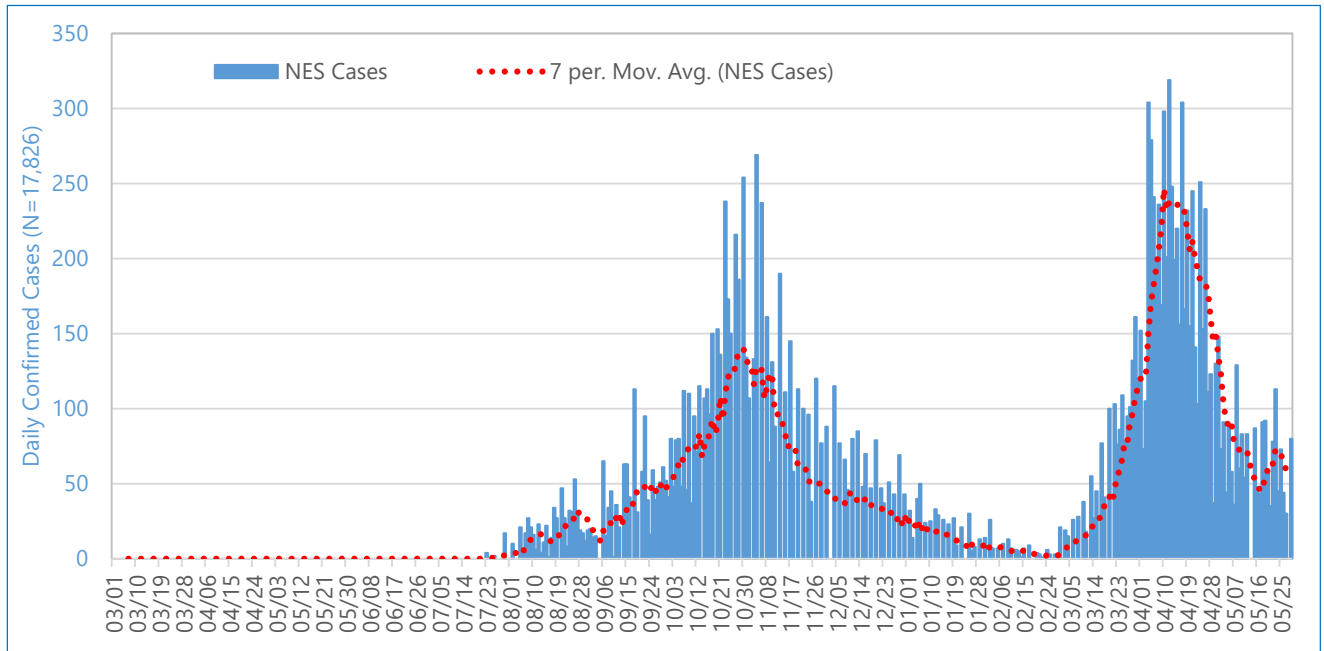
¹ WHO Syria COVID-19 Situation Reports present official counts of confirmed COVID-19 as announced by the MOH on the indicated date. Difference in data between the WHO reports and other sources can result from using different cutoff times for the aggregation and reporting of data. the total number of new cases in the country.

2. Northeast Syria (NES)

In Northeast Syria, between 23 July 2020 and 03 June 2021, there were seventeen-thousand-eight-hundred-twenty-six (17,826) COVID-19 cases³ confirmed by rt-PCR, including seven-hundred-twenty-seven (727) related deaths. Case Fatality Ratio (CFR) is 4.1% (727/17,826).

During the same period, a total of 41,781 COVID-19 tests were conducted with the overall positivity rate of 42.7%. According to available data, health workers are representing 5.8% (1,030) among the total number of reported cases.

The figures below are showing the daily distribution of reported confirmed COVID-19 cases, 23 March 2020 – 03 June 2021, Northeast Syria (NES).

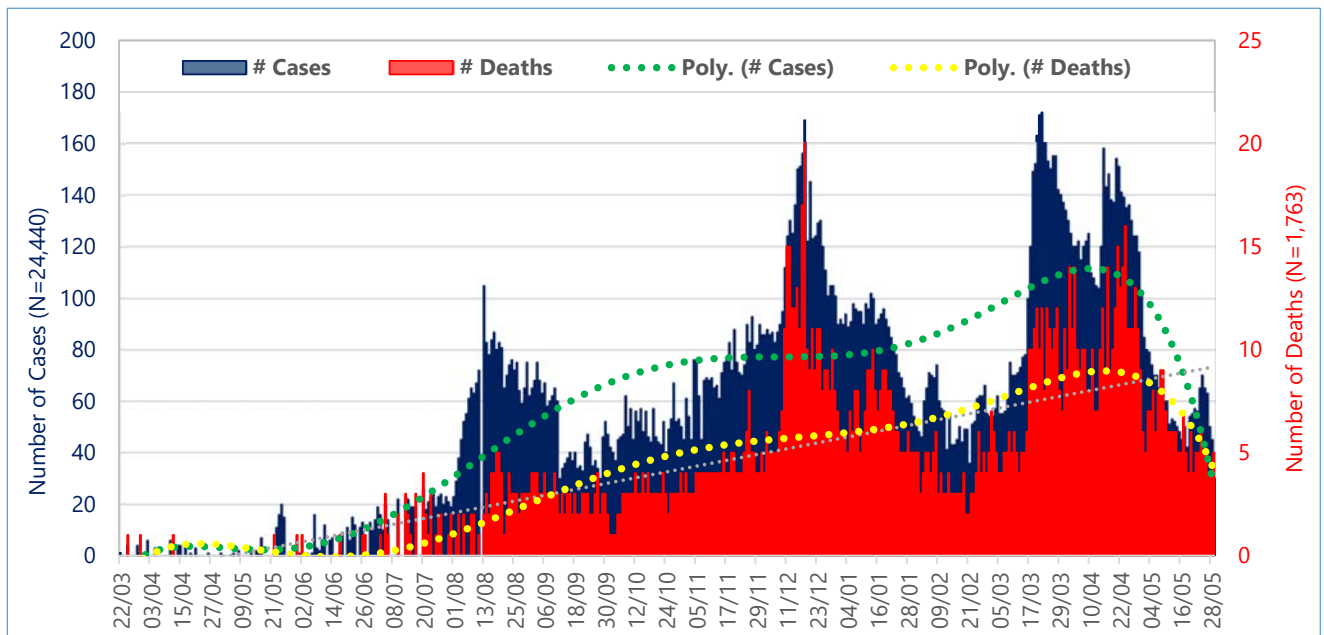
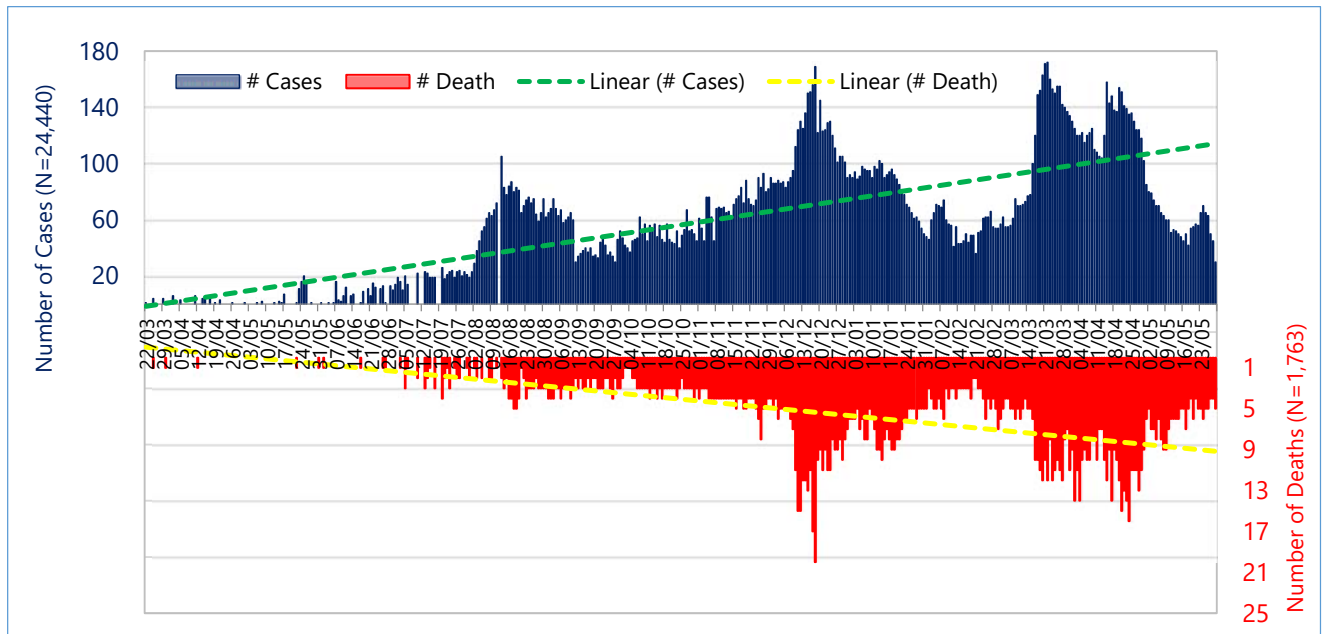


³ WHO Syria COVID-19 Situation Reports present official counts of confirmed COVID-19 as announced by the MOH on the indicated date. Difference in data between the WHO reports and other sources can result from using different cutoff times for the aggregation and reporting of the total number of new cases in the country.

3. Syria

Between 23 March 2020 and 03 June 2021, MOH there were twenty-four thousand-four -hundred-forty-two (**24,440**) COVID-19 cases⁴ confirmed by rt-PCR, including one-thousand-seven-hundred-seventy-three (**1,763**) related deaths. Case Fatality Ratio (**CFR**)⁵ is **7.2%** (1,763/24,440). In the last four epidemiological weeks (17 - 21) of 2021 in comparison to the previous epidemiological four weeks (11 - 16), the number of new COVID-19 cases decreased by **56.4%** (**2,441** and **5,598** respectively) and the number of death cases decreased by **45.1%** (**237** and **432** respectively).

The figures below are showing the daily and weekly distribution of reported confirmed COVID-19 cases and deaths, 23 March 2020 – 03 June 2021, Syria.

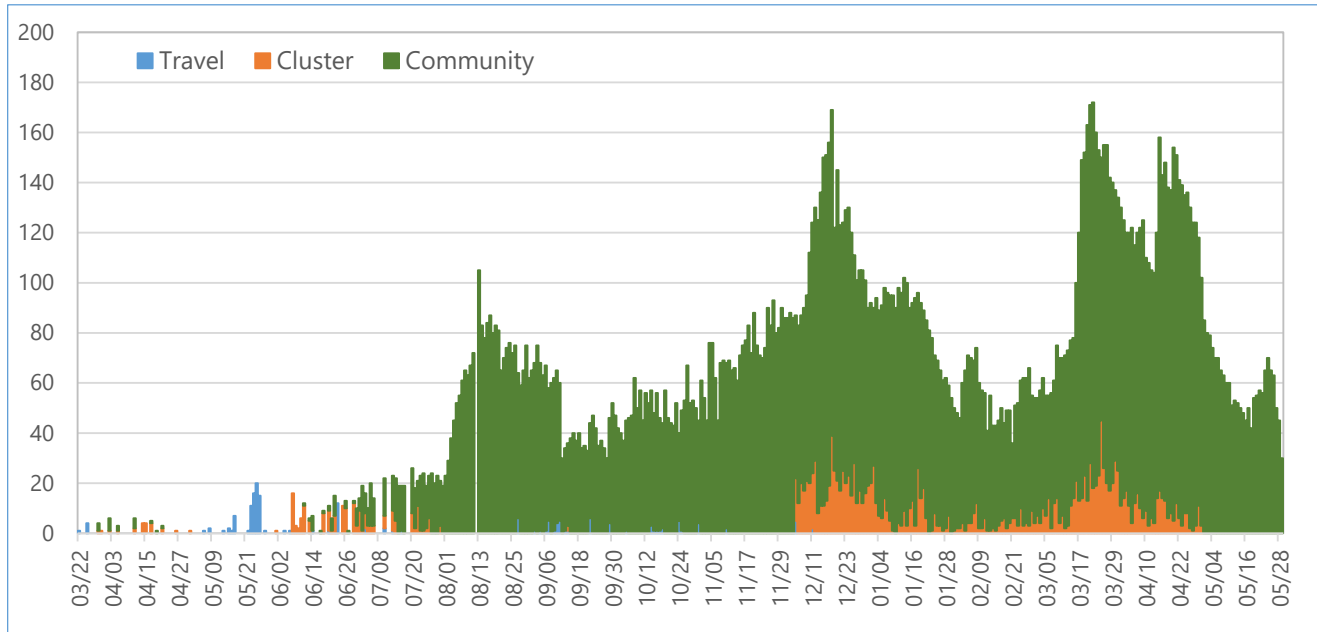


⁴ WHO Syria COVID-19 Situation Reports present official counts of confirmed COVID-19 as announced by the MOH on the indicated date. Difference in data between the WHO reports and other sources can result from using different cutoff times for the aggregation and reporting of the total number of new cases in the country.

⁵ CFR is not same as Infection fatality ratio (IFR) which is the proportion of individuals diagnosed with a disease who die from that disease and is therefore a measure of severity among detected cases, Estimating mortality from COVID-19, WHO scientific brief, 4 August 2020. <https://www.who.int/publications/i/item/WHO-2019-nCoV-Sci-Brief-Mortality-2020>.

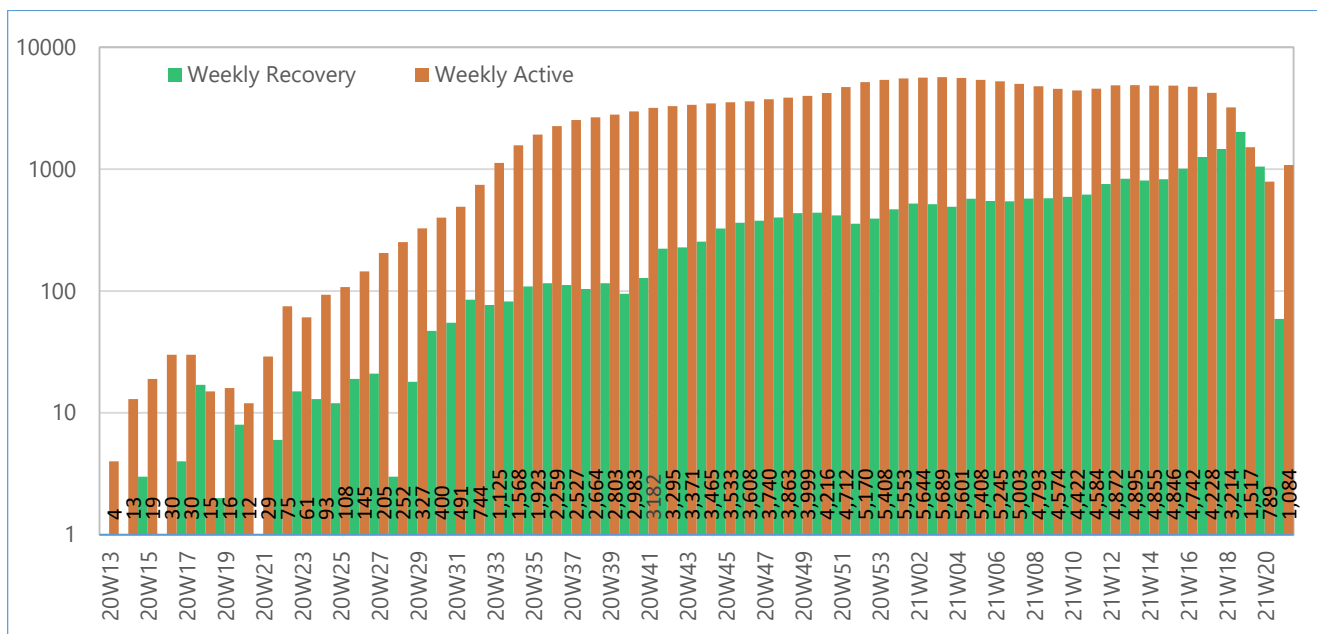
As of 03 June 2021, information on the mode of transmission was available on **100%** of confirmed reported COVID-19 cases (**24,440/24,440**). Of all cases, **92.0%** (22,479) were community transmission, **7.3%** (1,792) - contacts of confirmed cases (cluster) and **0.7%** (169) were imported cases.

The figure below is showing the mode of transmission of the reported confirmed COVID-19 cases, 23 March 2020 – 03 June 2021, Syria.



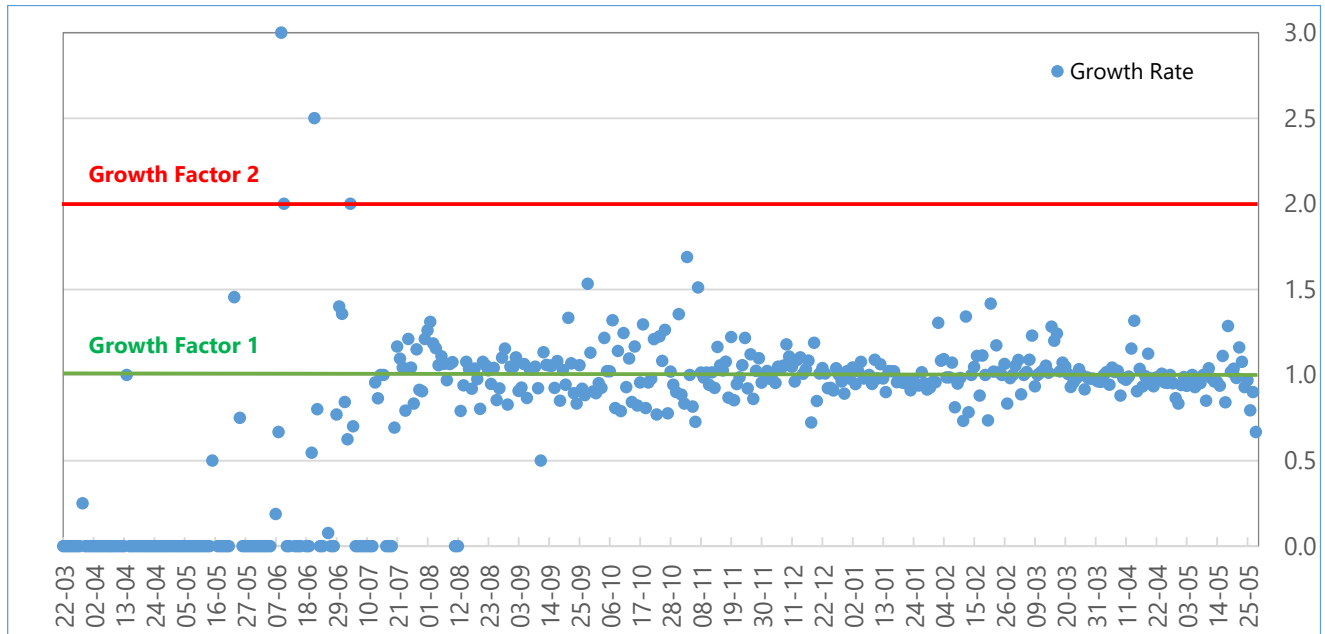
In the epidemiological week 21, 2021, the number of COVID-19 **weekly active** cases increased by **37.4%**, in comparison to the previous week (**1,084** and **789** respectively) and over the same period, the number of **recovered** COVID-19 cases decreased by **94.4%** (**59** and **1,051** respectively).

The figure below is showing the weekly outcomes of the reported confirmed COVID-19 cases, 23 March 2020 – 03 June 2021, Syria.



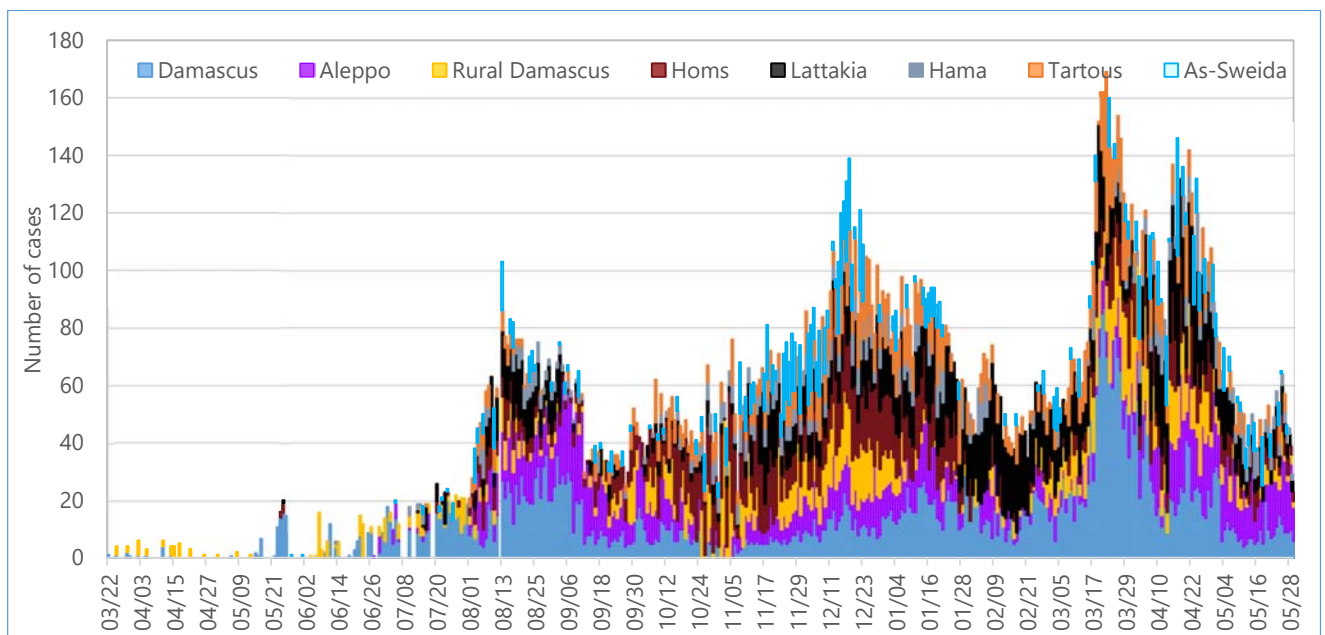
Growth factor (every day's number of new cases/number of new cases on the previous day) between **0** and **1** indicates a decline; when it is above 1 it signals an increase, and if is persistently above 1 this could signify exponential growth.

The figure below is showing the Growth Factor of daily confirmed COVID-19 cases, 23 March 2020 – 03 June 2021, Syria.

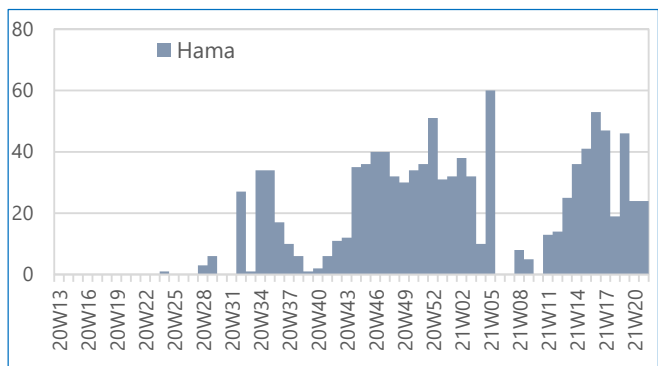
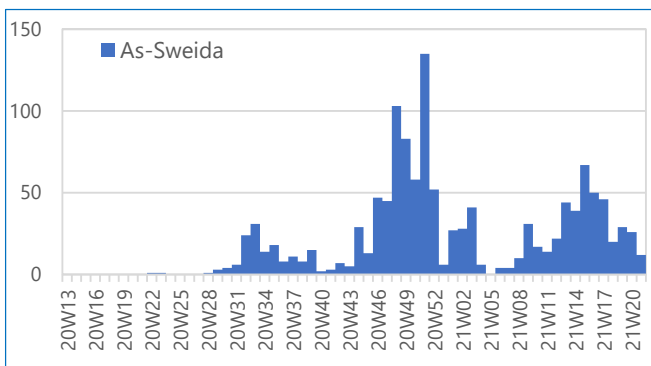
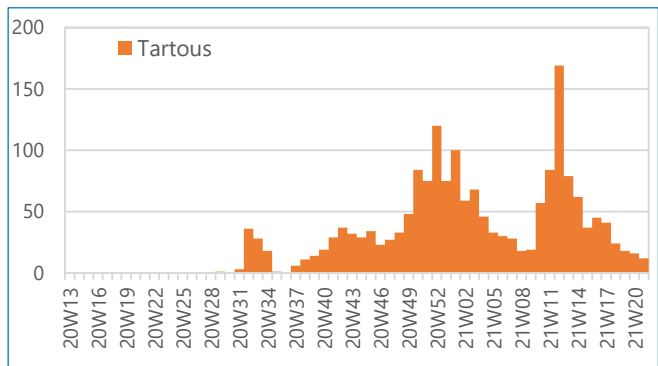
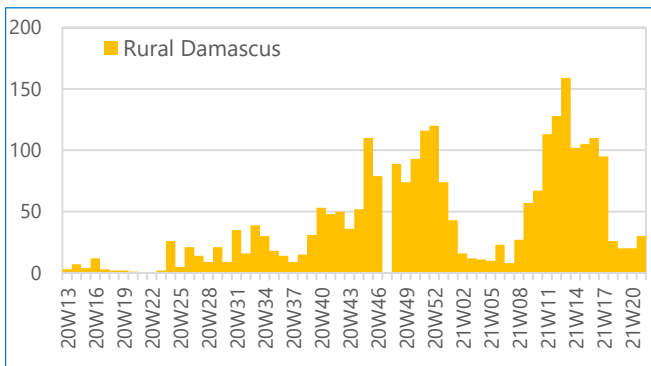
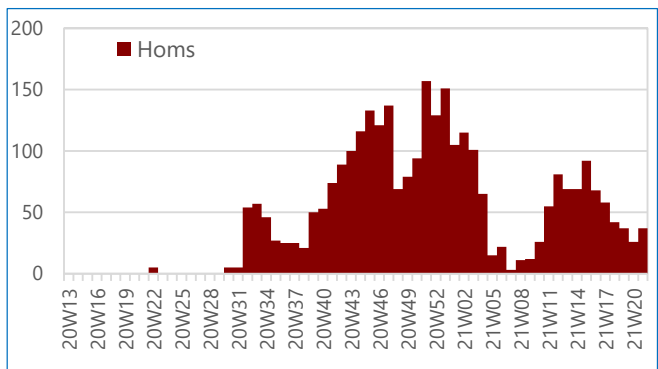
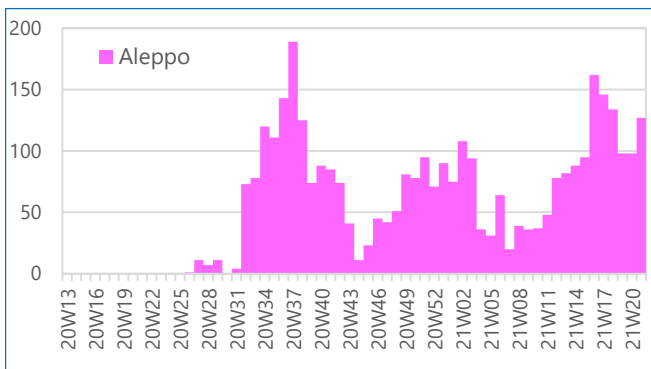
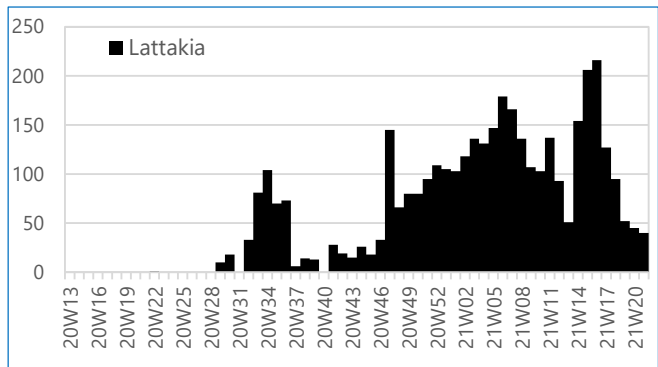
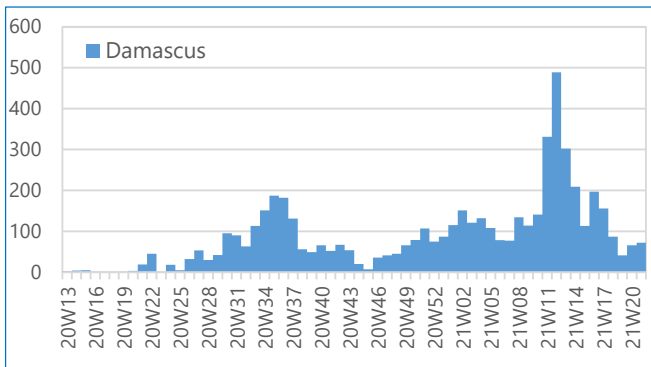


As of 03 June 2021, geographical distribution of confirmed reported COVID-19 cases was available on **100%** of cases (**24,440/24,440**). Of all cases, **22.1% (5,413)** reported from the **Damascus** governorate, followed by **15.5% (3,784)** from **Lattakia**, then **Aleppo - 14.4% (3,518)**; **Homs - 12.0% (2,931)**; **Rural Damascus - 10.3% (2,524)**; **Tartous - 7.5% (1,828)**; **Dar'a - 5.3% (1,287)**; **As-Sweida - 5.2% (1,127)**; **Hama - 4.3% (1,063)**; **Quneitra – 1.9% (476)**, and the remaining **0.9%**. **0.4%** and **0.1%** are from **Deir-ez-Zor**, **Al-Hasakeh**, and **Ar-Raqqa** governorates, respectively.

The figure below is showing the daily distribution of reported confirmed COVID-19 cases per selected governorate, 23 March 2020 – 03 June 2021, Syria.

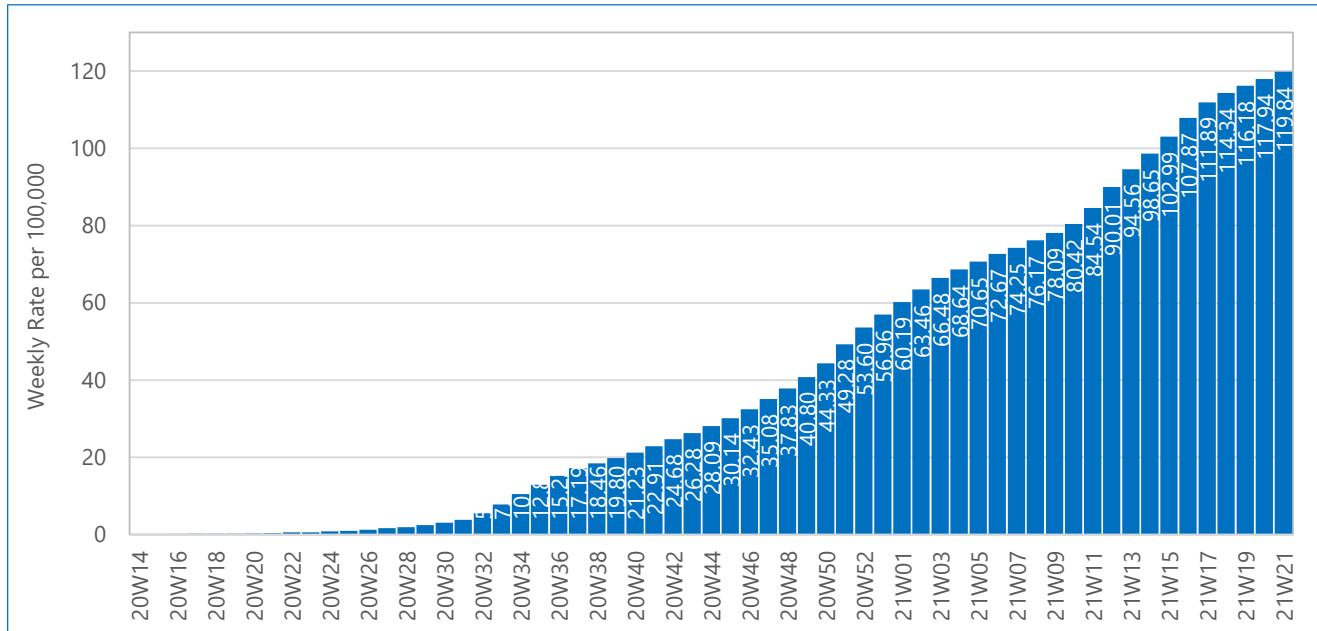


The figures below are showing the daily distribution of reported confirmed COVID-19 cases and rolling seven-day average in selected governorates, 23 March 2020 – 03 June 2021, Syria.



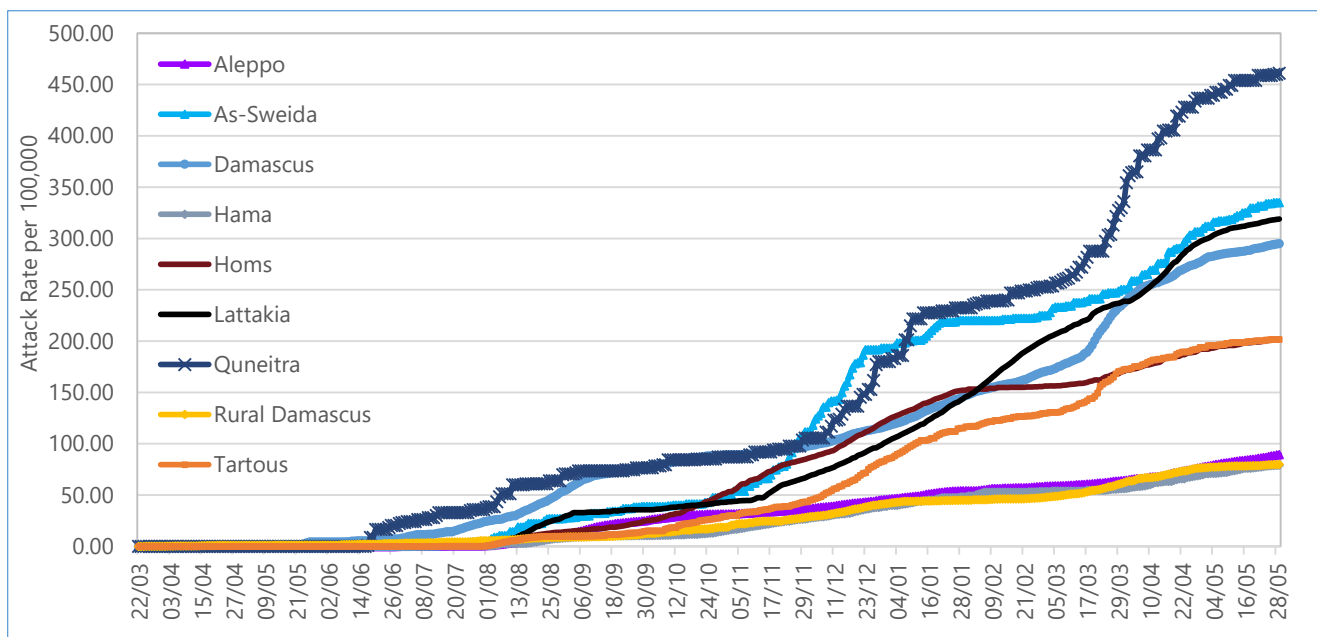
As of 03 June 2021, the overall attack rate (AR) in Syria is **321.6** per 100,000 and **100% (13/13)** of governorates, with the total population of 20,393,662 people, have reported confirmed COVID-19 cases. In the epidemiological week 21/2021, COVID-19 weekly AR increased by **1.6%** in comparison to the previous week (**119.84** and **117.94**) respectively.

The figure below is showing the weekly COVID-19 attack rate (AR) per 100,000, 23 March 2020 – 03 June 2021, Syria.



The highest AR is reported from **Quneitra (460.93/100,000)**, followed **As-Sweida** by governorate (**334.94/1,000,000**), **Lattakia** governorate (**318.92/100,000**), **Damascus** governorate (**294.93/100,000**), **Homs** governorate (**201.99/100,000**), **Tartous** governorate (**201.69/100,000**), **Dar'a** governorate (**126.76/100,000**), **Aleppo** governorate (**89.44/100,100**), **Rural Damascus** (**79.86/100,000**), **Hama** governorate (**79.20/100,000**), **Deir-ez-Zor** governorate (**30.22/100,000**), **Al-Hasakeh** governorate (**09.26/100,000**), and the lowest attack rate (**2.90/100,000**) in **Ar-Raqqa** governorate.

The following figure is showing the COVID-19 attack rate per 100,000 population in selected governorates, 23 March 2020 – 03 June 2021, Syria.



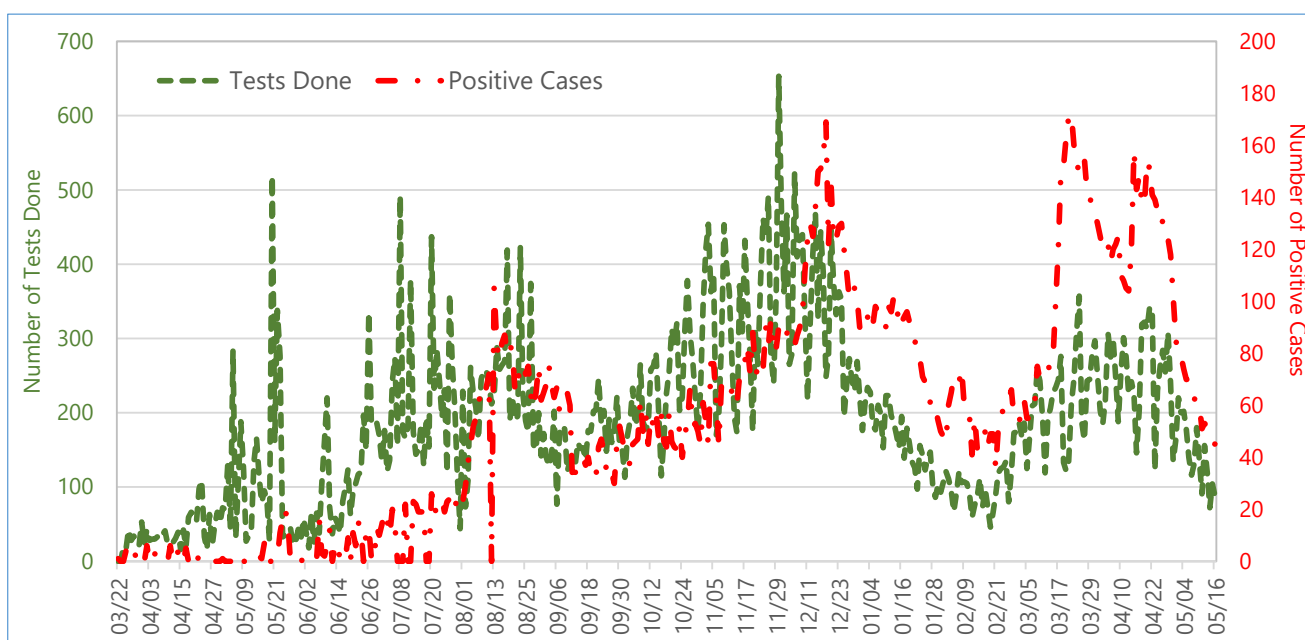
As of 03 June 2021, there are 24 functional ⁶RPC machines in 17 COVID-19 laboratories, out of them 8 COVID-19 laboratories (12 PCR machines) in public health facilities Syria, 3 laboratories (7 PCR machines including one GeneXpert) in NES + one laboratory at Qamishli hospital, and 5 laboratories (5 PRC machines) in NWS.

The table below is showing the geographical distribution of COVID-19 laboratories, 23 March 2020 – 03 June 2021, Syria

	Governorate/Location	Laboratory	Functional PCR Machine	TOTAL PCR Machines
GoS	Damascus	CPHL	4	5
		Al-Moujtahed hospital	1	
	Rural Damascus	Gdeidhet Yabous	1	2
		Gedeideit Artouz center	1	
	Homs	Homs	1	1
	Lattakia	MoHE collaboration with MoH	1	2
	Aleppo	Aleppo	2	2
	Hama	Hama	1	1
	Tartous	Tartous	0	1
Al-Hassaka	Qamishly	1	1	
Total 9 Functioning Laboratories			13	15
NES	Al-Hassaka	Qamishli National Hospital	1	5
		Qamishli	4	
	Aleppo	Tal Rafaat	1	1
Total 3 Functioning Laboratories			6	6
NWS	Idleb	Idleb	3	3
		Afren	1	
	Aleppo	Jarables	1	2
Total 5 Functioning Laboratories			5	5
Syria Total 17 Functioning Laboratories			24	26

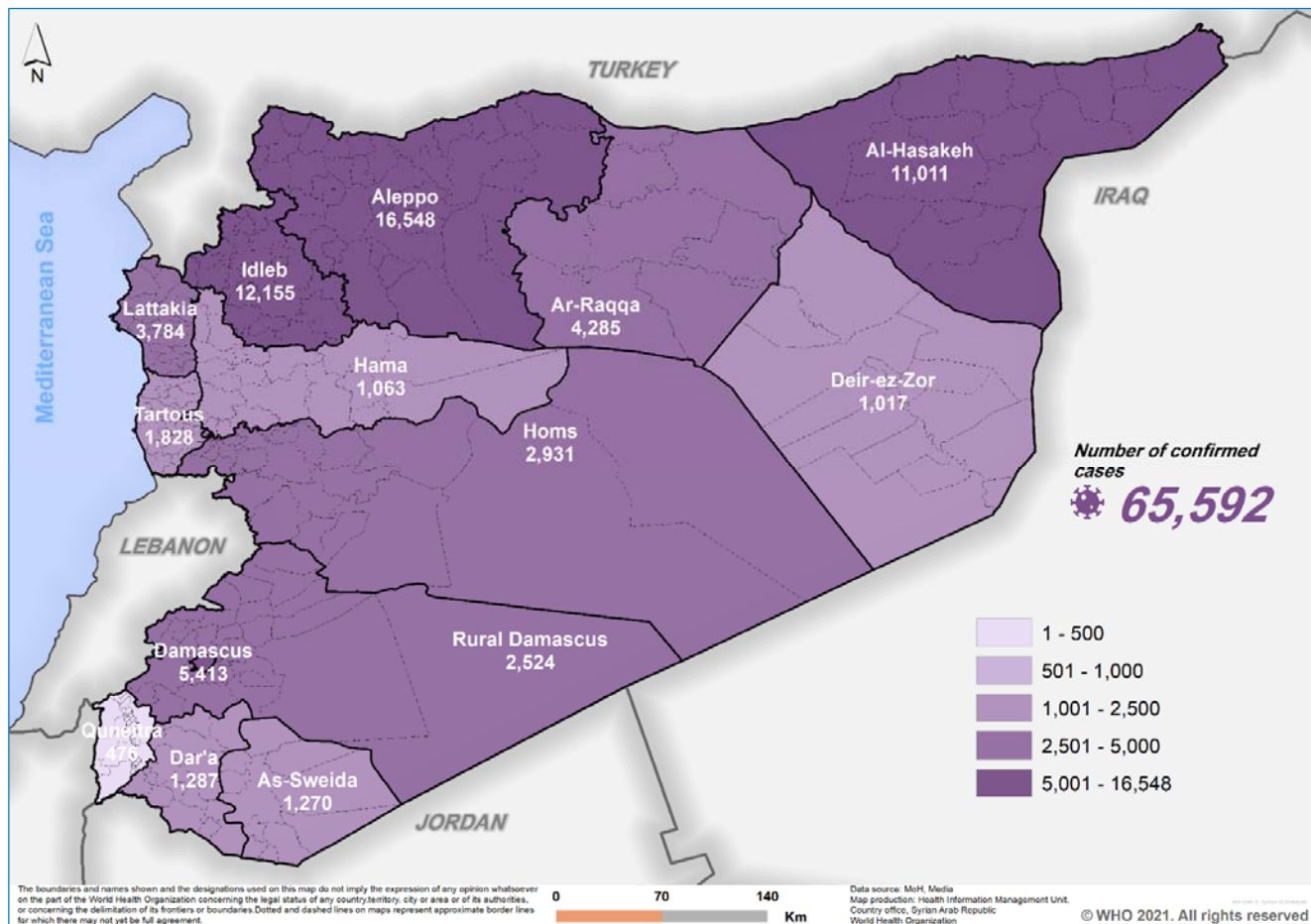
According to the available date, between 23 March 2020 and 03 June 2021, a total of **263,882** COVID-19 tests with the overall positivity rate of **24.9%** and with overall testing rate of **1,199/100,000** in **whole of Syria**. Out of them **51.5%** (**135,878/263,882**) tested in **NWS**, **30.2%** (**79,630**) in **Syria** and **18.3%** (**48,374**) in NES. The analysis of data on the two variables (weekly number of tests and number of confirmed cases) in Syria showed correlation coefficient (**R**) between the two variables as **0.532**.

The graph below is showing the number of Samples tested and Positive samples, 23 March 2020 – 16 May 2021, Syria.



⁶ One PCR is not functional in Tartus, and 1 PCR is not functional in Lattakia

The map below is showing the distribution of reported confirmed COVID-19 cases by governorates, 23 March 2020 – 03 June 2021, Syria.



4. Useful COVID-19 links:

WHO Syria, COVID-19 Dashboard (English)

<https://app.powerbi.com/view?r=eyJrIjoiaNmY5OGYzNDYtNjZhMy00MWlyLWlyMzctYzc4MmI3ZDNIODk5IiwidCI6ImY2MTBjMGI3LWJkMjQ0NGIzOS04MTBiLTNkYzI4MGFmYjU5MCIslmMiOjh9>

WHO Syria, COVID-19 Dashboard (Arabic):

<https://app.powerbi.com/view?r=eyJrIjoiaNTA0NWxZmYtMDJiMCO0ZDU0LTlNTktZTViZjYwYThjZmUzIiwidCI6ImY2MTBjMGI3LWJkMjQ0NGIzOS04MTBiLTNkYzI4MGFmYjU5MCIslmMiOjh9>

COVID-19 situation in EMRO Region reports: <http://www.emro.who.int/health-topics/corona-virus/index.html>

Latest global WHO Weekly epidemiological update on COVID-19 - 01 June 2021:

<https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---1-june-2021>

WHO COVID-19 Vaccines: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/covid-19-vaccines>

WHO COVID-19 Country and Technical Guidance: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>

WHO COVID-19 Online Training: <https://openwho.org/channels/covid-19>.