



Coronavirus Disease 2019 (COVID-19)

National Surveillance Report as of 31/03/2020

Data of publication: 02/04/2020

Produced by the Epidemiological Surveillance Unit of the Ministry of Health

Contributors: Annalisa Quattrocchi, Ioannis Mamais, Valentinos Silvestros, Anna Demetriou, Maria Athanasiadou, Theopisti Kyprianou, Androulla Stylianou, Sotiroula Sotiriou, Fani Theofhanous, Christos Charalambous, Ioanna Gregoriou, Maria Koliou, Georgios Nikolopoulos and Elisavet Constantinou

Scientific Committee: Elisavet Constantinou, Constantinos Constantinou, Niki Paphitou, Georgios Nikolopoulos, Maria Koliou, Leondios Kostrikis, George Panos, Eirini Christaki, Zoi - Dorothea Pana, Constantinos Tsioutis, Peter Karayiannis, George Petrikkos, Petros Agathangelou, George Mixides

Suggested citation: Epidemiological Surveillance Unit of the Ministry of Health, Cyprus. National Situation Report. Coronavirus Disease 2019 (COVID-19), 31 March 2020.



Summary

- As of March 31st, 267 COVID-19 cases and 8 associated deaths (case fatality rate: 3.0%) have been reported in the Republic of Cyprus.
- Among these cases, 25% are health-care workers (n = 67), of which 6% physicians (n = 15), 13% nurses (n = 35), 4% other health occupations (n = 11), and 2% auxiliary staff (n = 6).
- The median age of cases is 48.5 years (interquartile range - IQR: 35-62 years); 53% are male.
- Overall, locally acquired infections (index cases and close-contacts of confirmed cases) were 183 (69%), of which 20% (n = 37) were related to a health-care facility (General Hospital in Pafos) and 17.5% (n = 32) were reported in Aradippou municipality.
- In total, 30% (n = 81) of cases received hospital care, of which 29 (36%) have been discharged alive from the hospital. Median age of all hospitalized patients is: 62 years (interquartile range: 52-75 years), and 72% are males.
- Nine (11% of all hospitalized patients) patients are currently in intensive care units.
- A total of 7,397 tests have been performed as of March 31st (844.5 per 100,000 population).



Epidemiological surveillance in the Republic of Cyprus

Analyses are based on laboratory-confirmed cases notified to the Epidemiological Surveillance Unit of the Ministry of Health.

As of March 31st, 267 laboratory-confirmed cases of coronavirus disease 2019 (COVID-19) have been reported (including four in the British Bases) (Figure 1 and 2).

The median time between symptoms onset and date of sampling was 4 days (IQR: 2-7 days). It should be noted that for four cases the date of sample collection was before the onset of symptoms, as a result of immediate testing of contacts of possible and laboratory-confirmed cases.

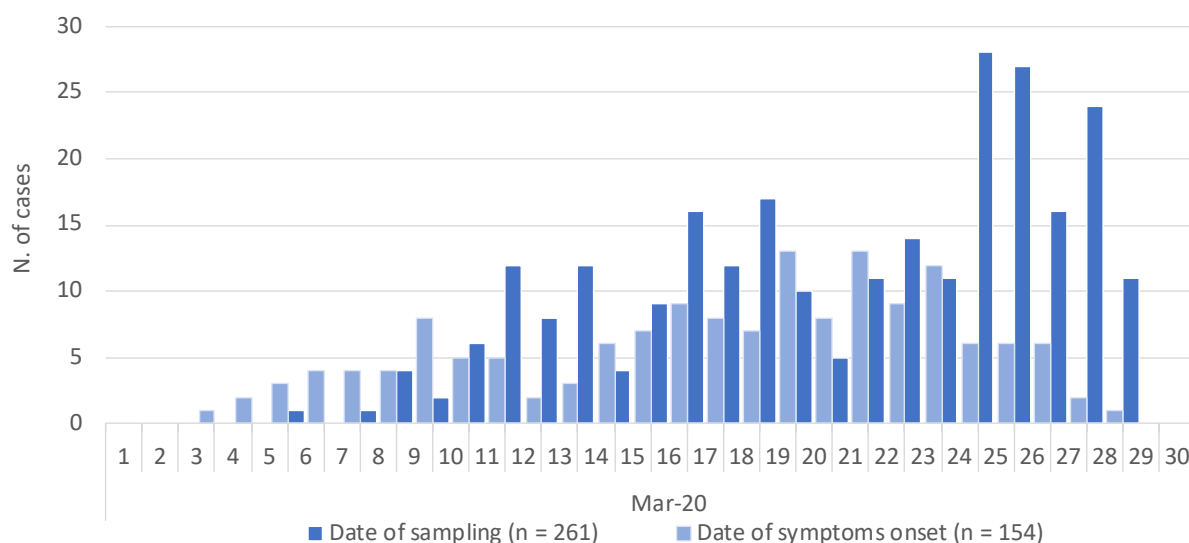


Figure 1: Number of laboratory-confirmed COVID-19-cases in Cyprus since 01/03/2020 by date of sample collection and date of symptoms onset (n = 261 and n = 154 with data available, respectively).

Recent data should be interpreted with caution due to the possibility that cases with date of onset within the reporting period have not yet been diagnosed.



ΥΠΟΥΡΓΕΙΟ ΥΓΕΙΑΣ

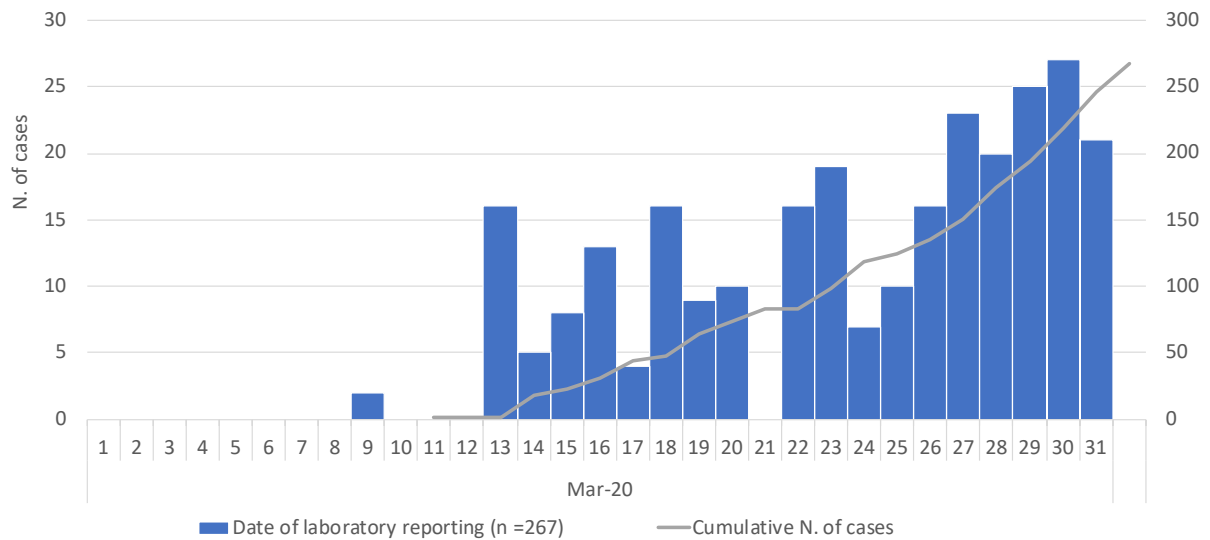


Figure 2: Number and cumulative number of laboratory-confirmed COVID-19-cases in Cyprus since 01/03/2020, by date of laboratory reporting (n = 267).

Recent data should be interpreted with caution due to the possibility that cases with date of onset within the reporting period have not yet been diagnosed.



ΥΠΟΥΡΓΕΙΟ ΥΓΕΙΑΣ

Among these cases, 53% are male (n = 141) and 47% female (n = 125), while for one case sex has not been recorded at the moment.

The median age of cases is 48.5 years (interquartile range: 35-62 years). By age groups, cases included 11 children and adolescents aged 0-17 years-old (4%), 175 adults aged 18-59 years (66%), and 78 persons aged 60 years and older (30%). The age of 3 notified cases has not been recorded at the moment (Figure 3).

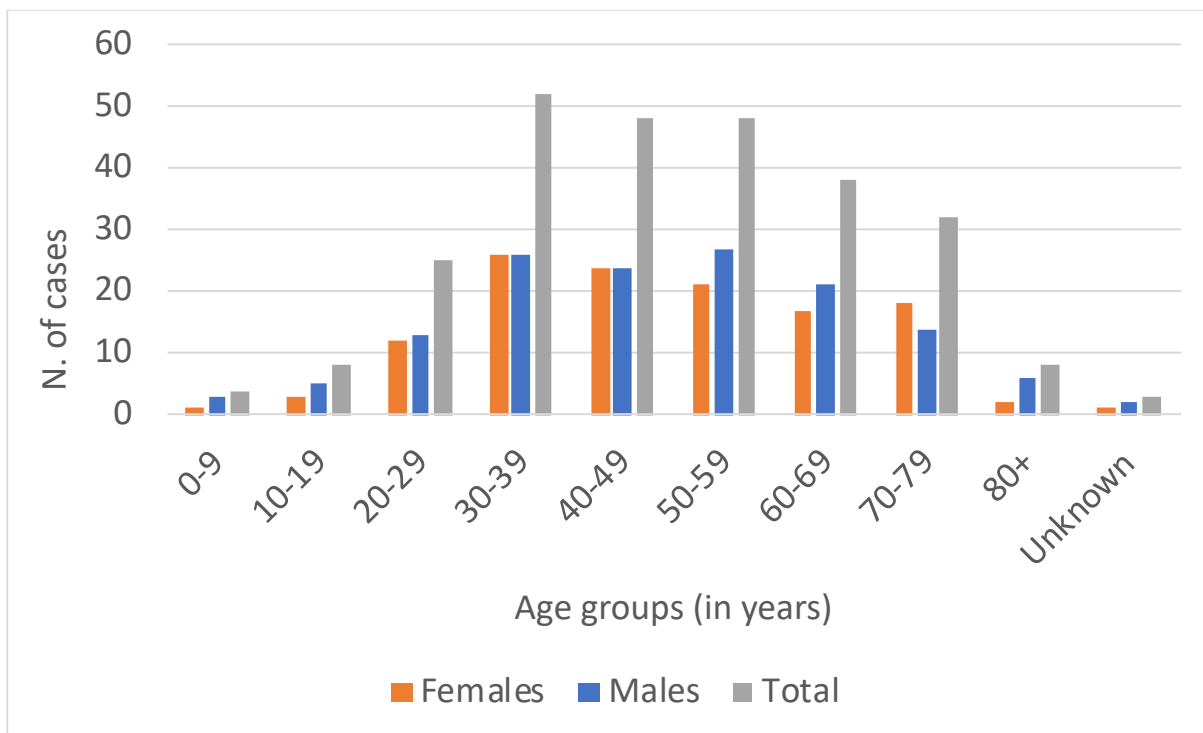


Figure 3: Laboratory-confirmed COVID-19-cases in Cyprus by sex and age groups (n=263 cases with data available).



Characteristics of the cases

Among all cases, 77 (29%) were reported in Nicosia district, 75 (28%) in Larnaka, 61 (23%) in Pafos, 30 (11%) in Limassol, 16 (6%) in Ammochostos, 4 (2%) in British bases and 1 case was reported in a traveler from Germany (Figure 4). Information was not available at the moment for three cases.

Notably, 39 cases (15%) were reported in Aradippou, a municipality in Larnaka district. Cases in Aradippou are mainly females (59%; n = 23) and the median age is 61 years (interquartile range: 51-73 years).

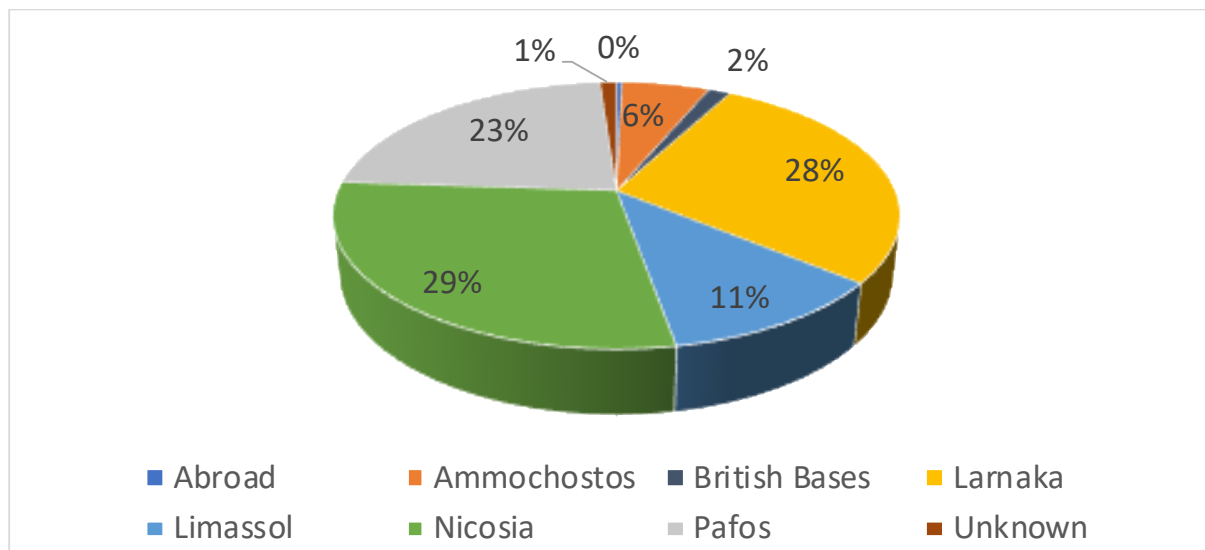


Figure 4: Laboratory-confirmed COVID-19-cases in Cyprus by district of residence (n=264 cases with data available).



ΥΠΟΥΡΓΕΙΟ ΥΓΕΙΑΣ

Among these 267 cases, 25% are health-care workers¹ (n = 67), of which 6% physicians (n = 15), 13% nurses (n = 35), 4% other occupations (n = 11), and 2% auxiliary staff (n = 6).

Table 1 shows the distribution of health-care workers by district of residence.

District	Health-care worker	Physicians	Nurses	Other health occupations	Auxiliary staff
Ammochostos	3	0	1	1	1
Larnaka	9	2	3	4	0
Limassol	6	1	2	2	1
Nicosia	15	5	6	2	2
Pafos	34	7	23	2	2
Total	67	15	35	11	6

Table 1: Health-care workers by district of residence (n=67)

¹ The term “health-care worker” is based on the occupation and not on the place of exposure. Health-care workers are defined as all health care professionals, allied health workers, and auxiliary health workers.



Epidemiological link

As of March 31st, place of exposure is available for 253 cases (95%), and 14 cases are under investigation.

In total, 28% (n = 70) of laboratory-confirmed COVID-19-cases had history of travel or residence abroad during the 14 days prior to symptom onset (imported). These cases have a direct link to the UK and Greece, mainly.

Locally acquired infections (index cases and close-contacts of confirmed cases) occurred in 72% (n =183) of the cases, of which 20% (n =37) were related to a health-care facility (General Hospital in Pafos).

In Aradippou (Larnaka district) 32 cases were locally-acquired and 3 imported. For four cases in Aradippou the epidemiological link was not recorded at the moment. Table A1 in appendix shows the number and the rate (per 100,000 population) of locally-acquired cases by district of residence.

Deaths

As of March 31st, 8 COVID-19-related deaths were reported in Cyprus (Case Fatality Rate - CFR: 3.0%). The mortality rate for COVID-19 is 0.9 per 100,000 population. Seven deaths occurred in men; the median age of all deaths was 68.5 years (IQR: 60.5-76.5 years). Three deaths were reported among residents in Pafos, two in Nicosia and Larnaka, respectively and one in Limassol (Appendix Table A2). Figure 5 reports the number of deaths by date.

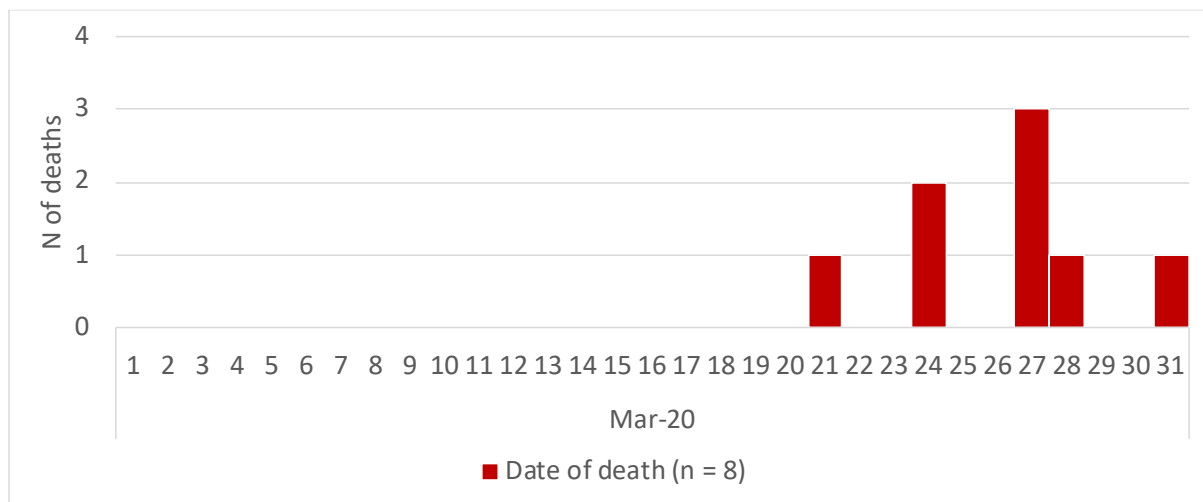


Figure 5: Number of COVID-19 associated deaths in Cyprus by date of death (n = 8)



Clinical features

Of the 267 laboratory-confirmed COVID-19-cases, clinical information is available for 91% (n = 242), of which 13% (n = 32) reported no symptoms and 87% (n = 210) reported at least one symptom. The most commonly reported symptom was cough (n = 118; 52%), followed by fever (n = 116; 50%), myalgia (n = 70; 31%), and sore throat (n = 65; 28%). Other reported symptoms were shortness of breath, diarrhoea, and headache.

Hospitalization and intensive care unit (ICU) admissions

In total, 30% (n = 81) patients received hospital care, and 29 patients (36%) have been discharged alive from the hospital.

When age was available (n = 79), the median age of hospitalized patients was 62 years (interquartile range: 52-75 years). Hospitalized cases were mainly males (n = 58; 72%).

Overall, 14 cases (17% of all hospitalized patients) have been admitted to ICU², of which 9 (11% of all hospitalized patients) are currently in ICU (as of March 31st). The median age of patients admitted to ICU was 68 years (interquartile range: 61-75 years). The number of cases in ICU is 1.0 per 100,000 population. For comparison, Italy reported a rate of 6.8 per 100,000 population (n = 4,023)

(<http://www.salute.gov.it/portale/nuovocoronavirus/dettaglioContenutiNuovoCoronavirus.jsp?lingua=italiano&id=5351&area=nuovoCoronavirus&menu=vuoto>).

Figure 6 shows the number of patients in ICU by day.

Table A3 in Appendix shows the total number of ICU admissions by date.

² Intensive care unit (ICU) refers only to the ICU in Limassol General Hospital and to the ICU in Nicosia General Hospital

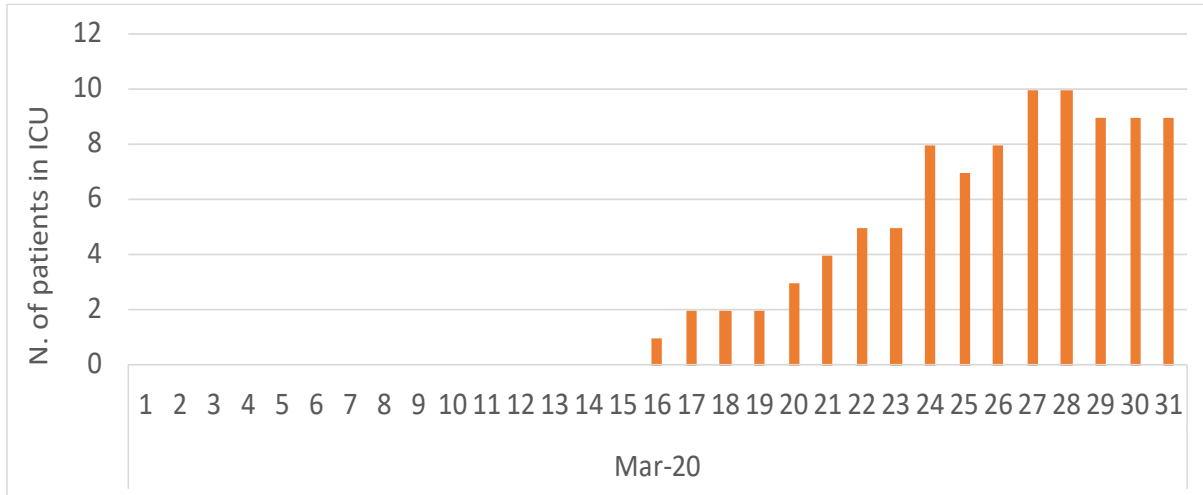


Figure 6: Number of laboratory-confirmed COVID-19 cases currently in ICU by day



Comparison with selected countries

As of March 31st, in Cyprus the reporting rate was 30.5 cases per 100,000 population, the mortality rate was 0.9 deaths per 100,000 population and the CFR 3%.

Table 2 shows COVID-19 indicators for Cyprus and other selected countries.

Figure A1 in appendix reports the rates of cumulative tests and cases (per 100,000 population) in Cyprus and other selected countries. In Cyprus the testing rate is 844.5 per 100,000 population.

It should be noted that the number of cases, tests and deaths for Cyprus are aggregated and include people from abroad and the British bases, while the total population does not include inhabitants from abroad or from the British bases.

Country	N. of cases [^]	N. of cases (per 100,000 pop)	N. of tests [§]	N. of tests (per 100,000 pop)	N. of deaths [^]	CFR [°] (%)	Mortality rate (per 100,000 pop)	Population (in thousands)
Cyprus	267	30.5	7,397	844.5	8	3.0	0.9	875,9*
Italy	105792	178.0	506,968	853.1	12,430	11.7	20.9	59,430 [†]
USA	189618	58.9	1,048,971	325.6	4,079	2.2	1.3	322,180 [†]
UK	25150	38.2	143,186	217.6	1,789	7.1	2.7	65,789 [†]
Greece	1314	11.7	15,961	142.7	49	3.7	0.4	11,184 [†]
Malta	167	38.9	4,462	1,040.1	0	0.0	0.0	429 [†]
Sweden	4435	45.1	24,500	249.0	180	4.1	1.8	9,838 [†]
Netherlands	12595	74.1	46,747	275.2	1,039	8.2	6.1	16,987 [†]

Table 2: COVID-19 indicators by selected countries, as of 31/03/2020

[^]Number of cases and number of deaths as reported by WHO at https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200401-sitrep-72-covid-19.pdf?sfvrsn=3dd8971b_2

[§]Data for Cyprus: internal communication; data for other countries: <https://www.finddx.org/covid-19/test-tracker/>

[°] CFR: Case fatality ratio

* Data from Statistical Service of the Republic of Cyprus, 2018 ([Statistical Service of the Republic of Cyprus](#))

[†] Data from WHO, 2016 (<https://www.who.int/data/gho/data/themes/topics/indicator-groups/indicator-group-details/GHO/population>)



Appendix

Table A1: COVID-19 locally-acquired infections by district of residence (n = 183)

District	N. of cases	Population	N of cases (per 100,000 population)
Ammochostos	9	48,200	18.7
Larnaka	60	147,000	40.8
<i>Aradippou</i>	32	19,228	166.4
Limassol	10	244,900	4.1
Nicosia	51	341,700	14.9
Pafos	52	94,100	55.3
Unknown	1		
Total	183	875,900	20.9

Table A2: Characteristics of COVID-19 associated deaths (n = 8)

Characteristics	N	%
Male	7	87.5
Median age in years (IQR*)	68.5 (60.5-76.5)	
District		
Ammochostos	0	0
British Bases	0	0
Larnaka	2	25.0
Limassol	1	12.5
Nicosia	2	25.0
Pafos	3	37.5

*IQR: Interquartile Range



ΥΠΟΥΡΓΕΙΟ ΥΓΕΙΑΣ

Table A3: Number of ICU admissions by date (n = 14)

<u>First ICU admission date</u>	<u>N</u>
09/03/2020	
10/03/2020	
11/03/2020	
12/03/2020	
13/03/2020	
14/03/2020	
15/03/2020	
16/03/2020	1
17/03/2020	1
18/03/2020	
19/03/2020	
20/03/2020	1
21/03/2020	1
22/03/2020	1
23/03/2020	
24/03/2020	3
25/03/2020	1
26/03/2020	2
27/03/2020	1
28/03/2020	2
29/03/2020	
30/03/2020	
31/03/2020	

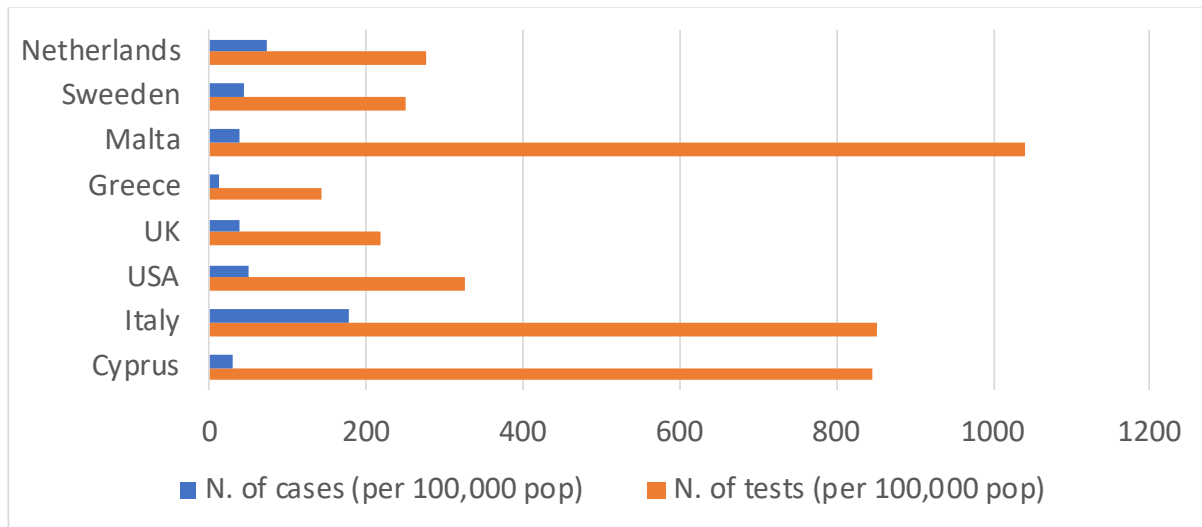


Figure A1: Cumulative tests and cases per 100,000 population in Cyprus and other selected countries (Updated: 31/03/2020)

Data source for Cyprus: internal communication; data source for

other countries: <https://www.finddx.org/covid-19/test-tracker/>

That number of cases, tests and deaths for Cyprus are aggregated and include people from abroad and the British bases, while the total population does not include inhabitants from abroad or from the British bases.