

Total confirmed cases: **44,606** Total associated deaths: **2,898** Total recovered cases: **14,656** New cases: **3,111**

Indicators of screened, infected and death cases

Screening (since March 4 till March 31, 2020; 15:00 GMT)	Value
Number of services delivered for COVID-19	65.642.765
Target population required follow-up (%)	3.5
Eligible cases that are followed-up by HWs (%)	62.3
Target population with symptoms (%)	1.45
Screened symptomatic cases referred to clinic (%)	0.2
Visited cases that required homecare (%)	24.3
Visited cases that received dual-medication (%)	0.6
Visited cases that referred to the hospital (%)	4.4
People visiting hospital and are admitted in the hospital (%)	31.3
Clients' satisfaction of the received services (%)	97.3

New lab-confirmed cases (in last 72 h)

Age mean (standard deviation)	52.7 (18.2)
Age median (inter-quartile range)	53 (38-66)
Sex distribution (%)	
Male	53.2
Female	46.8
Cases with at least one co-morbidity (%)	27
Cases admitted in ICU* (%)	11
Cases with more severe forms of the disease **	14

COVID-19 deaths (in last week)[§]

Age mean (standard deviation)	67.4 (17.4)
Age median (inter-quartile range)	71 (58-81)
Cases over 60 years (%)	71.3
Sex distribution (%)	
Male	56.5
Female	43.5
Cases with at least one co-morbidity (%)	41.6
Cases over 60 years/ with at least one co-morbidity (%)	81.8

* To the total number of hospitalized COVID-19 patients. ** Based on available data, we considered patients with death outcome, as well as those admitted to ICU or under mechanical ventilation as more severe cases. The information in this chart is based on hospitalized cases, and outpatients are not included in this calculation. Inclusion of outpatients and asymptomatic cases would decrease the proportion of severe cases. § To increase the sample size, analysis of death cases is done on the data in the last week.

Estimation of COVID-19 Cumulative Incidence in Iran: an Update of the Dynamic Models

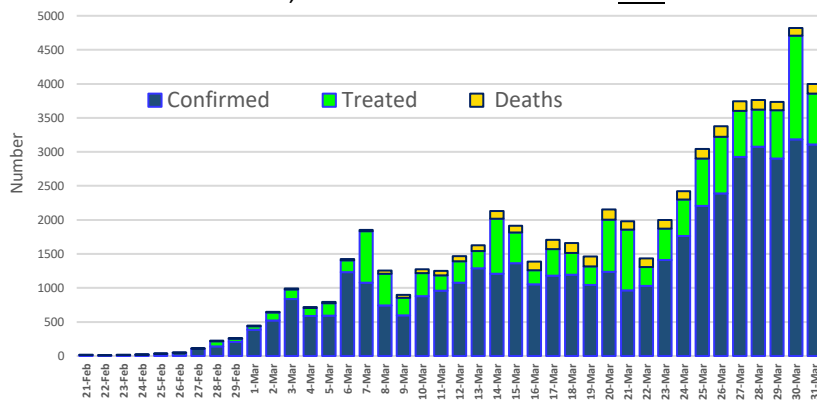
To update our dynamic models, five scenarios were considered in which different levels and durations of intervention lead to different isolation rates. In each scenario, the number of COVID-19 new cases per day is modeled between January 21 and June 20, 2020.

Basic scenario (no interventions): No intervention by the government and the public is assumed, leading to 0% isolation. This would yield a relatively rapid spread of the epidemic, resulting in **65,200 new cases per day by June 20, 2020 (95% uncertainty level [UL]: 14,000, 145,000 / day).**

Only public attention: this would lead to 10% isolation, persisted uniformly throughout the abovementioned period. This would still result in a relatively rapid growth of the epidemic by mid-April, leading to **12,200 new cases per day by June 20, 2020 (95% UL: 2,000, 33,000 per day).**

Minimum-level of governmental intervention: community education by the government is assumed; leading to 10% isolation during January 21-February 20, 15% isolation during February 20-March 10, and 20% isolation from March 11 till June 20, 2020. In this scenario, the epidemic would experience moderate growth rate early in April, and then the epidemic growth rate would slow down till **June 20, 2020, with 3,550 new cases per day (95% UL: 450 – 11,000).**

Confirmed, Treated and Death Cases in Iran



Intermediate-level of governmental intervention: more intense interventions introduced by the government include social distancing, closure of sports, cultural and religious events, universities and schools, and the restriction of human mobility. The interventions lead to 10% isolation during January 21-February 20, 15% isolation during February 20-March 10, and 30% isolation from March 11 till June 20, 2020. In this scenario, the epidemic growth rate would increase till April 10 and then start decreasing, leading to 1,200 new cases per day in **June 20, 2020 (95% UL: 100 – 4,200).**

High-level of governmental intervention: interventions are more intense than scenario IV, but they still lack military interventions. The added interventions include ban of within/between city transportations, city quarantine, and isolation and contact tracing of suspected cases. The interventions lead to 10% isolation during January 21-February 20, 15% isolation during February 20-March 10, and 40% isolation from March 11 till June 20, 2020. In this scenario, the epidemic growth rate would considerably decrease **early in April, leading to 450 new cases per day from this time on (95% UL: 25 – 1,800).**

Conclusions

Interventions leading to increased isolation rate have a profound effect on the spread of infection and epidemic growth rate.

Maximum interventions require harmonized intra/inter sectoral collaborations.

The more severe the interventions become, the slower the incidence of the disease and the slope of the epidemic curve will be.

New Cases in July 20, 2020

