



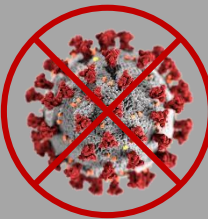
Առողջապահության  
Նախարարություն  
Ministry of Health of the Republic of Armenia



# COVID-19 preparedness and response: the Case of Armenia

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Minister of Health of Armenia

Yerevan  
14.05.2020



# Situation in the country as of 13.05.2020, 11:00 AM

First case: 1 March, 2020

100<sup>th</sup> case: 18 March, 2020

Total cases: 3860

Recoveries: 1572

Patients receiving treatment: 2218

Deaths: 49 from COVID

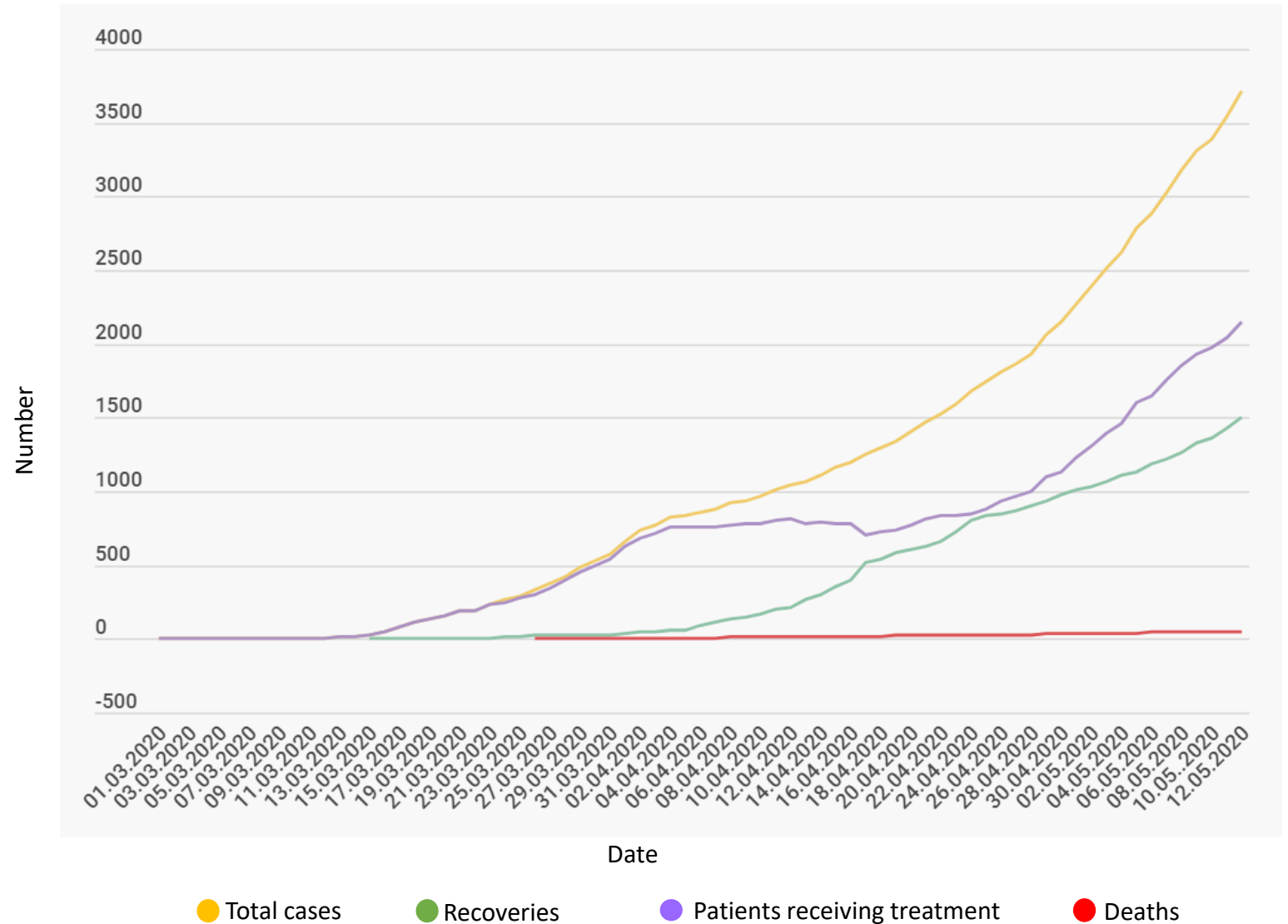
Deaths: 21 with COVID

Total number of tests: 36000

Vents in use: 6

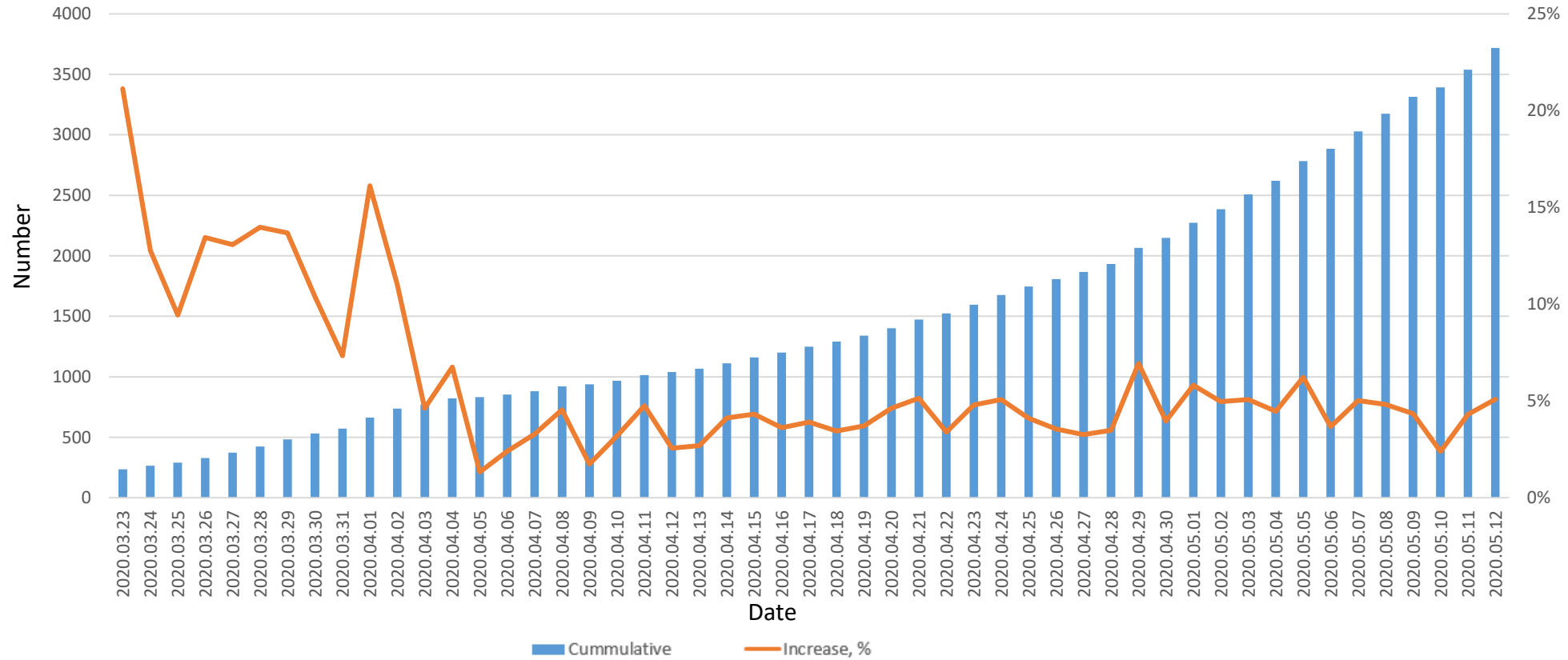
Severe cases: 66

Average fatality age: 71,4



# COVID-19 cases: rate of increase

Cases since 23.03.2020



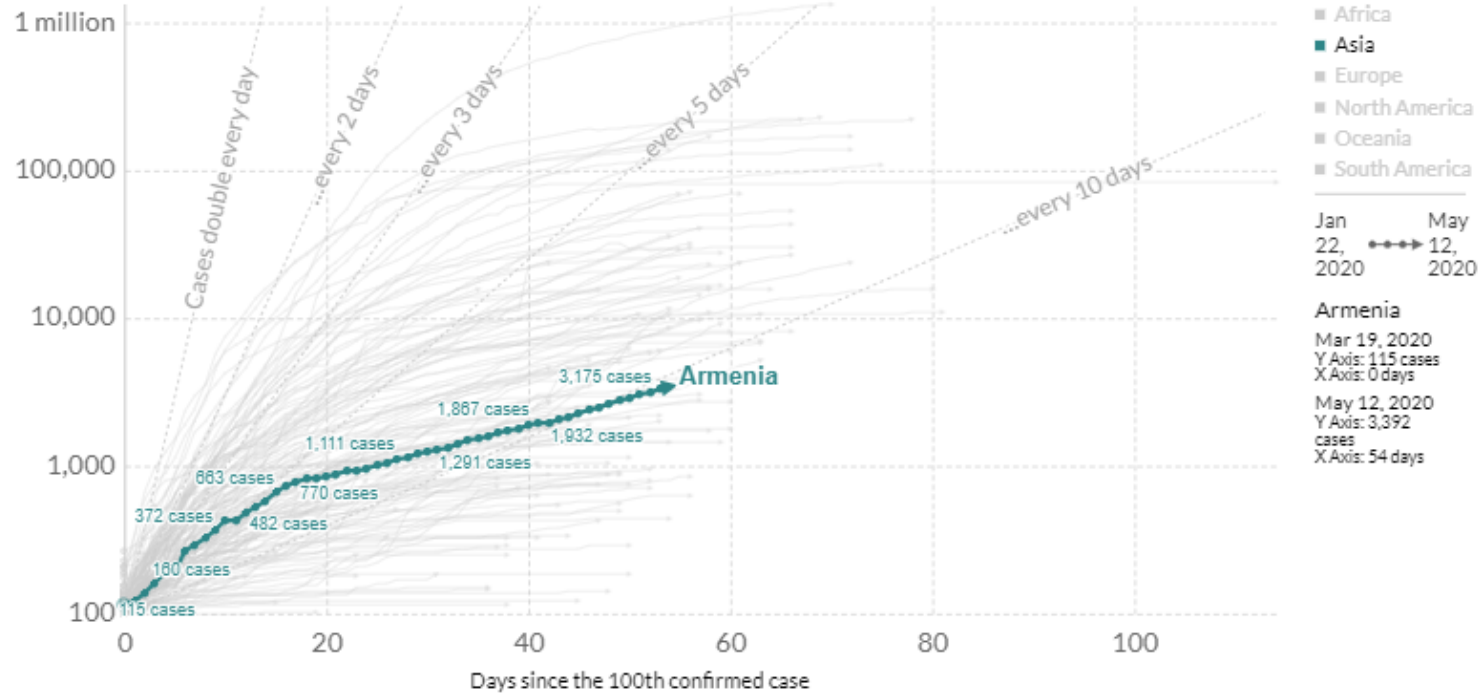
# Total confirmed COVID-19 cases: how rapidly are they increasing?

- Incidence doubles in 15 days

## Total confirmed COVID-19 cases: how rapidly are they increasing?

The number of confirmed COVID-19 cases is lower than the number of total cases. The main reason for this is limited testing.

LOG



Source: European CDC - Situation Update Worldwide - Last updated 12th May, 11:15 (London time)

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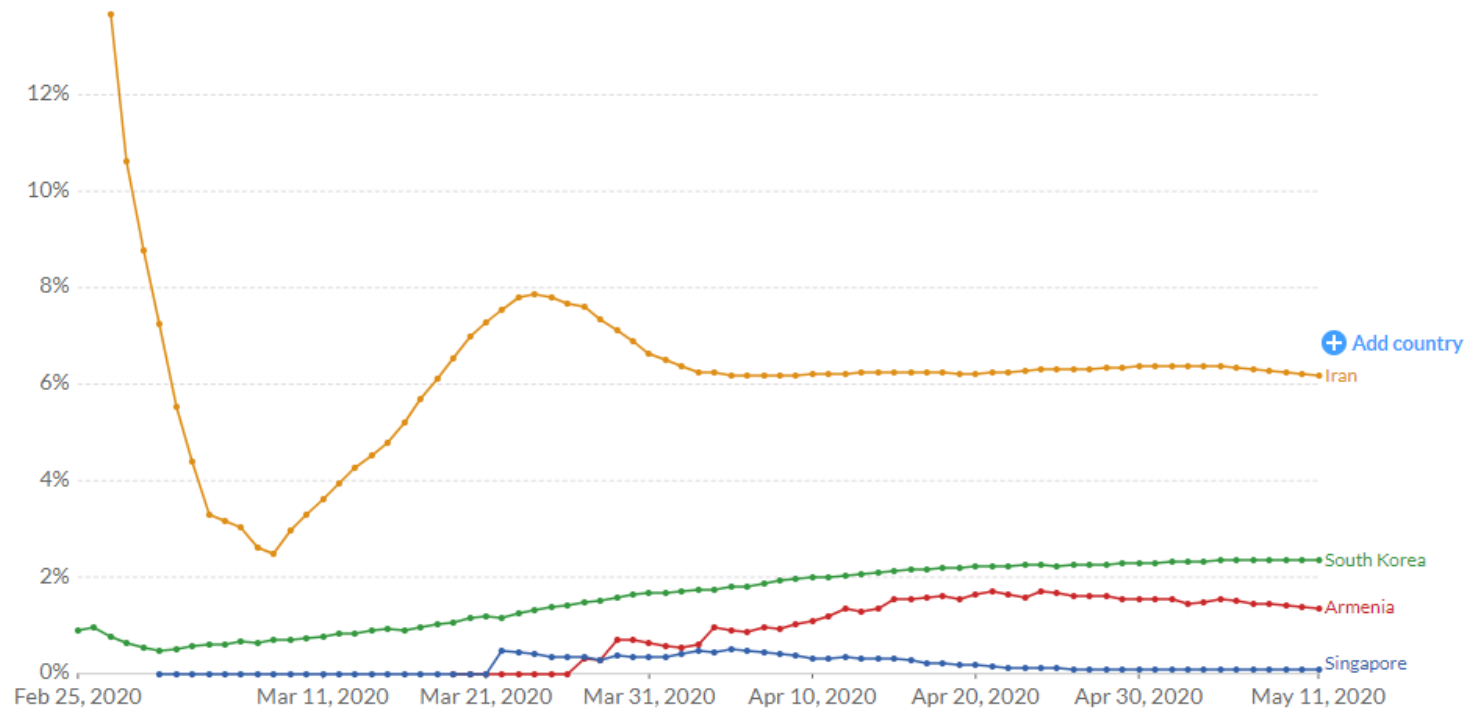
▶ Jan 21, 2020  May 12, 2020

# Case fatality rate of the ongoing pandemic

## Case fatality rate of the ongoing COVID-19 pandemic

The Case Fatality Rate (CFR) is the ratio between confirmed deaths and confirmed cases. During an outbreak of a pandemic the CFR is a poor measure of the mortality risk of the disease. We explain this in detail at [OurWorldInData.org/Coronavirus](https://OurWorldInData.org/Coronavirus)

Our World  
in Data



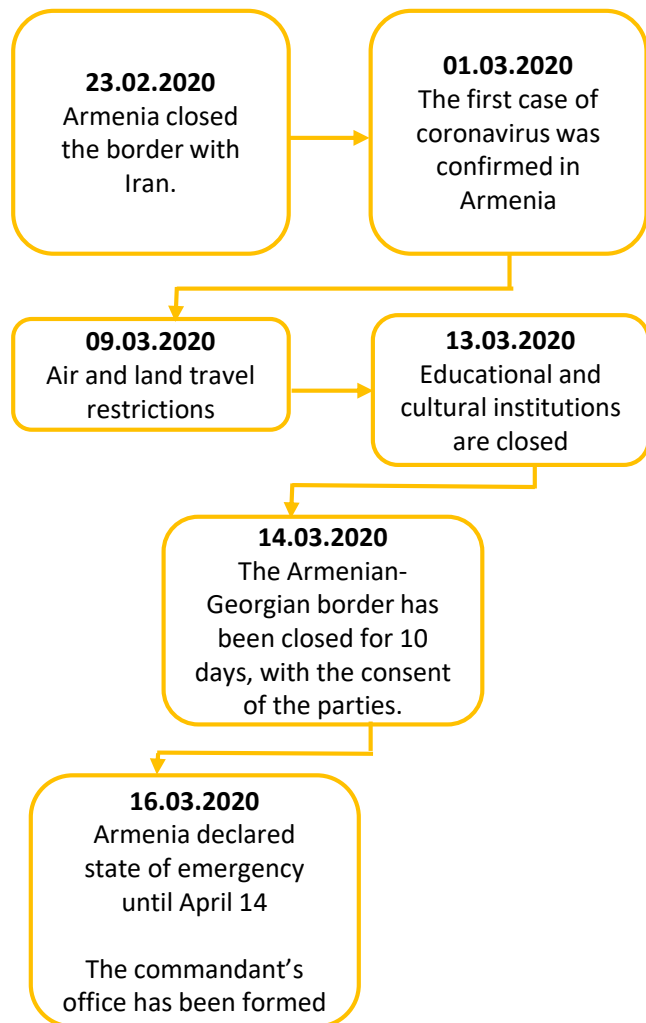
Source: European CDC - Situation Update Worldwide - Last updated 11th May, 11:15 (London time)  
Note: Only countries with more than 100 confirmed cases are included.

OurWorldInData.org/coronavirus • CC BY

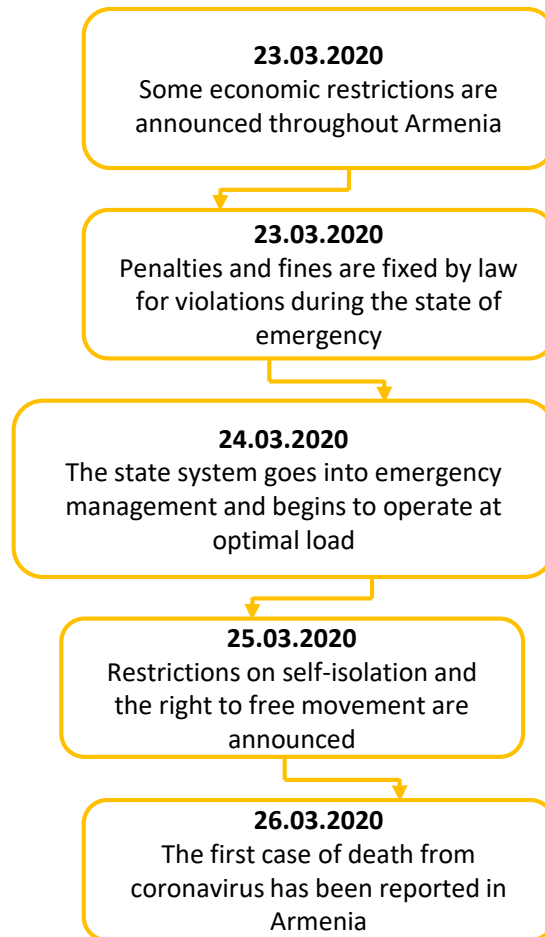
▶ Feb 21, 2020  May 11, 2020

# Pillar 1: Country-level coordination, planning, and monitoring (1)

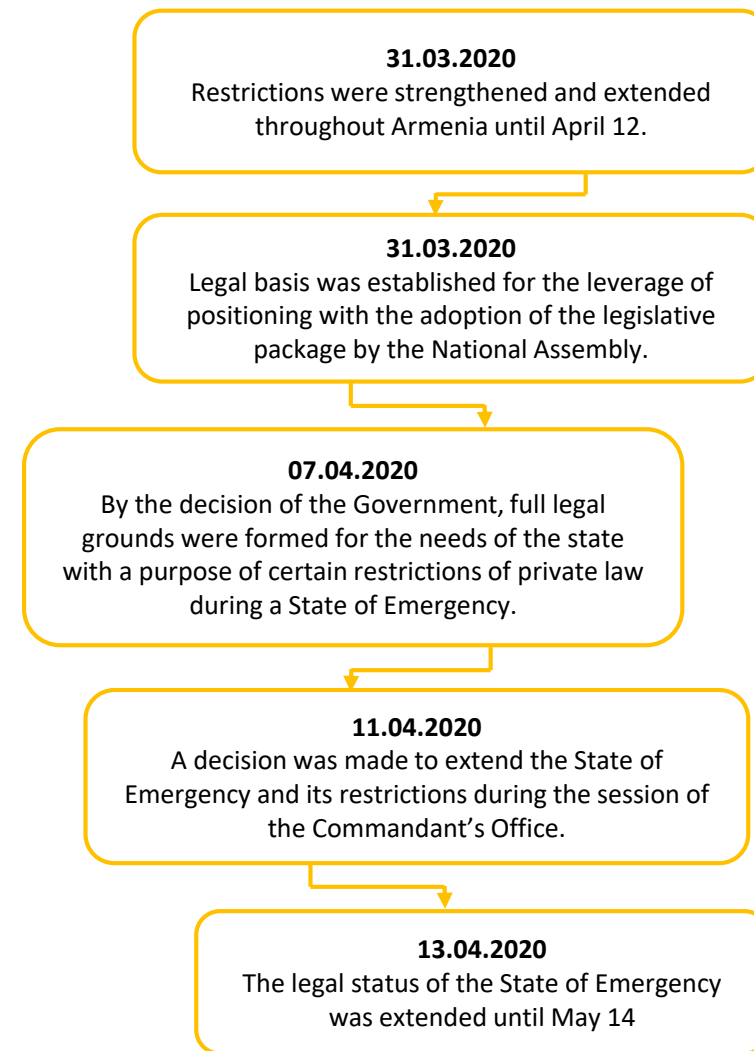
## Phase 1: Soft restrictions



## Phase 2: Strict restrictions

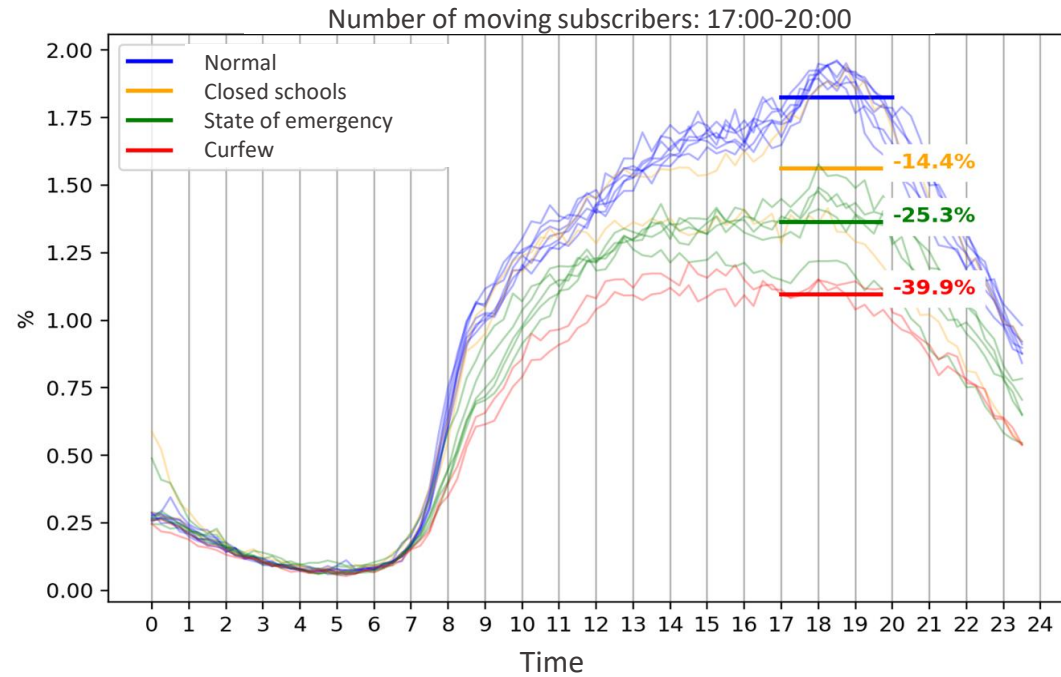


## Phase 3: Strict restrictions + positioning

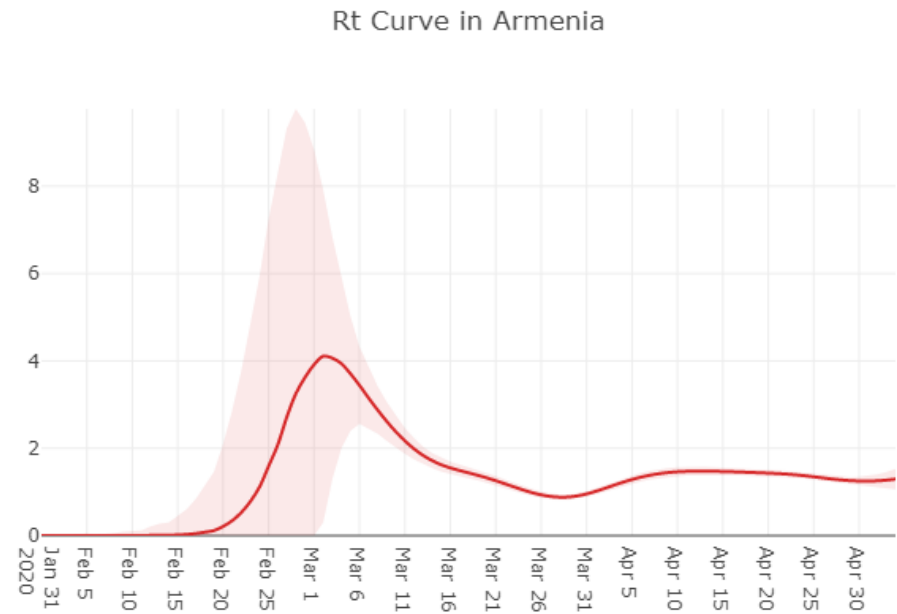


# Pillar 1: Country-level coordination, planning, and monitoring (2)

- Results of strict restrictions



Population movement dynamics as a result of restrictions



Dynamics of infection reproduction coefficient

# Pillar 1: Country-level coordination, planning, and monitoring (3)

**January 2020:** Intersectoral commission



**March 2020:** Commandant Office



The Ministry of Health



national response to COVID-19 leading



The National Center for Disease  
Control and Prevention  
(NCDC)



communications and  
international reporting  
surveillance coordination



**Resource allocation**



- ✓ Emergency funds
- ✓ Fundraising activities
- ✓ Humanitarian Funds activated for the COVID-19 response



# Pillar 1: Country-level coordination, planning, and monitoring (4)

## Other sectors response

### Social welfare

- ✓ 18 financial assistance packages for socially vulnerable households
- ✓ loan repayment holidays

### Financial support / guarantees for businesses

- ✓ assistance package for small- and medium-sized businesses in tourism, agriculture, food and manufacturing industries

### Home education support

- ✓ distance learning platform for schools
- ✓ an electronic platform for teachers

# Pillar 2: Risk communication and community engagement



## Health communication through all media (starting in January 2020)

- ✓ Consistent and evidence-based messages by dedicated spokespersons on hand hygiene, respiratory etiquette, and social distancing
- ✓ Development, adaptation and dissemination of posters and videos based on WHO advice and guidance
- ✓ Single official information portal: Armenian Unified InfoCenter
- ✓ Daily press conferences and regular Facebook live streaming presenting statistics, health measures and public advice
- ✓ Hotlines by MOH/NCDC
- ✓ Government approved mobile application (Covid 19 Armenia) to deliver latest official news, statistics, orders, recommendations on infection control for the general public as well as a symptom checklist for evaluating against COVID-19 symptoms

# Pillar 3: Surveillance, rapid response teams, and case investigation



Rapid detection of cases among those entering Armenia

- ✓ Entry screening



Contact tracing

- ✓ Extensive contact tracing using trained rapid response NCDC teams
- ✓ Number of contacts investigated **7.500** (in quarantine) and **16.500** (self isolated)
- ✓ 600 positive cases identified among people in quarantine upon ending the **14 day (9-10 %)**
- ✓ Mobile phone tracking to support contact tracing.

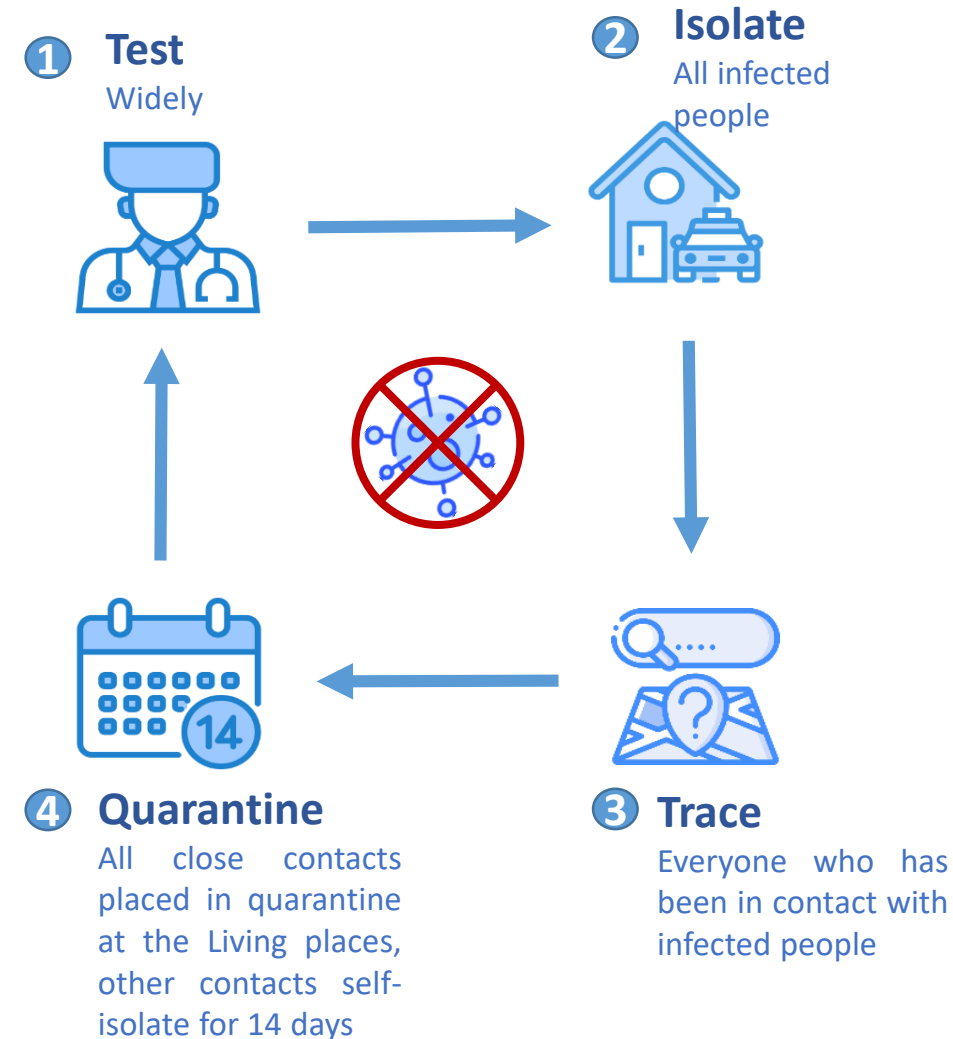


Case identification

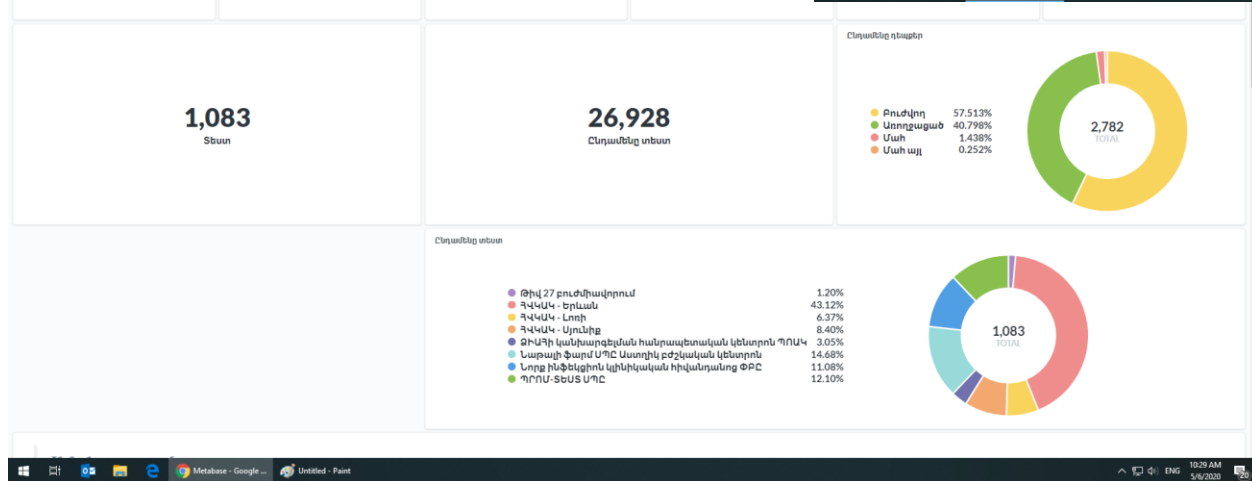
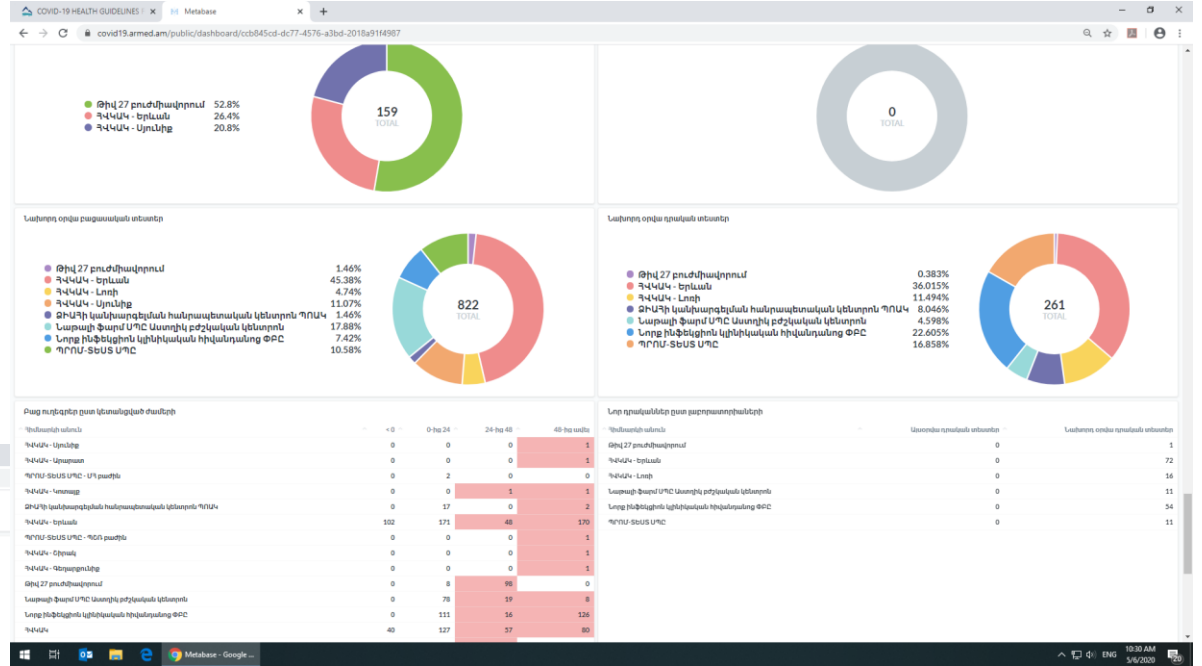
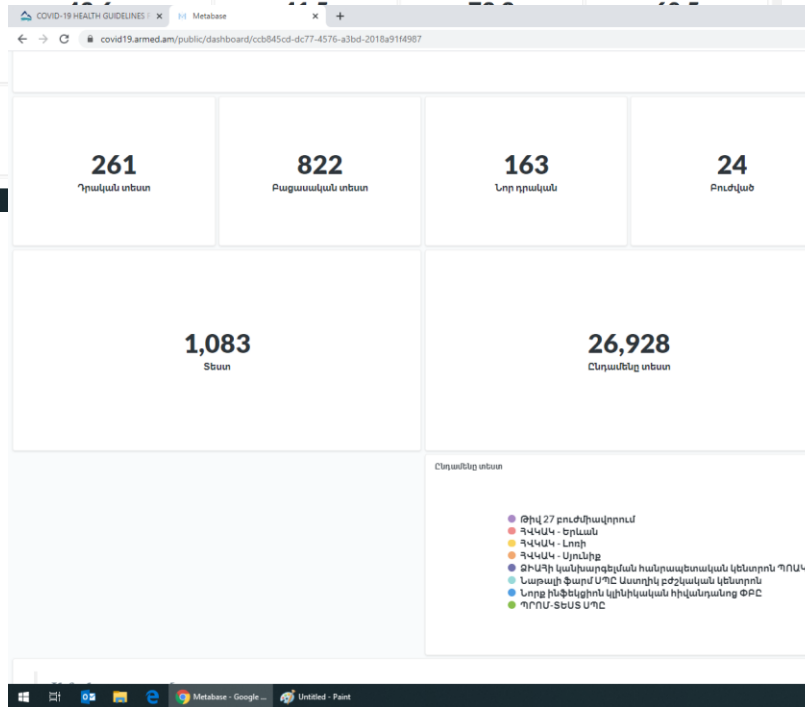
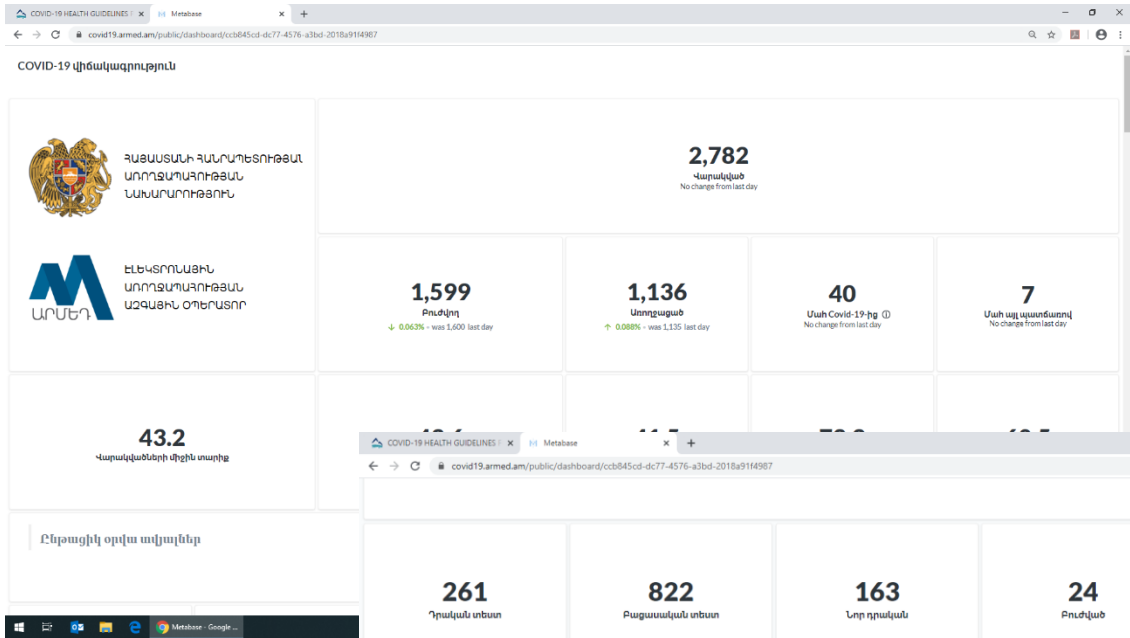
- ✓ Routine surveillance system of acute respiratory illness and pneumonia cases as well as hospital sentinel surveillance system for severe acute respiratory infection



Case Based Reporting to WHO implemented on daily basis



# Real-time surveillance: access to the dashboard



# Pillar 4: Points of entry

- ✓ points of entry public health emergency plan is developed and implemented
- ✓ standard operating procedures, equipped and trained staff of Health inspectorate are managing ill passengers/drivers
- ✓ isolation facilities for arrivals with coronavirus-like symptoms are in place at the entries of borders, transportation to designated regional and Yerevan infectious disease hospitals
- ✓ information about COVID-19 to travellers have been communicated
- ✓ Regularly monitoring the effectiveness of readiness and response measures at points of entry, and adjusting plans to the changing policies
- ✓ Entry to foreigners is restricted except cargo drivers
- ✓ Except for a few flights the borders were closed for passengers/citizens (16 March 2020)
- ✓ All returning citizens are put under a mandatory 14-day quarantine in dedicated facilities/hotels on arrival

# Pillar 5: National laboratories (1)

- The national testing strategy

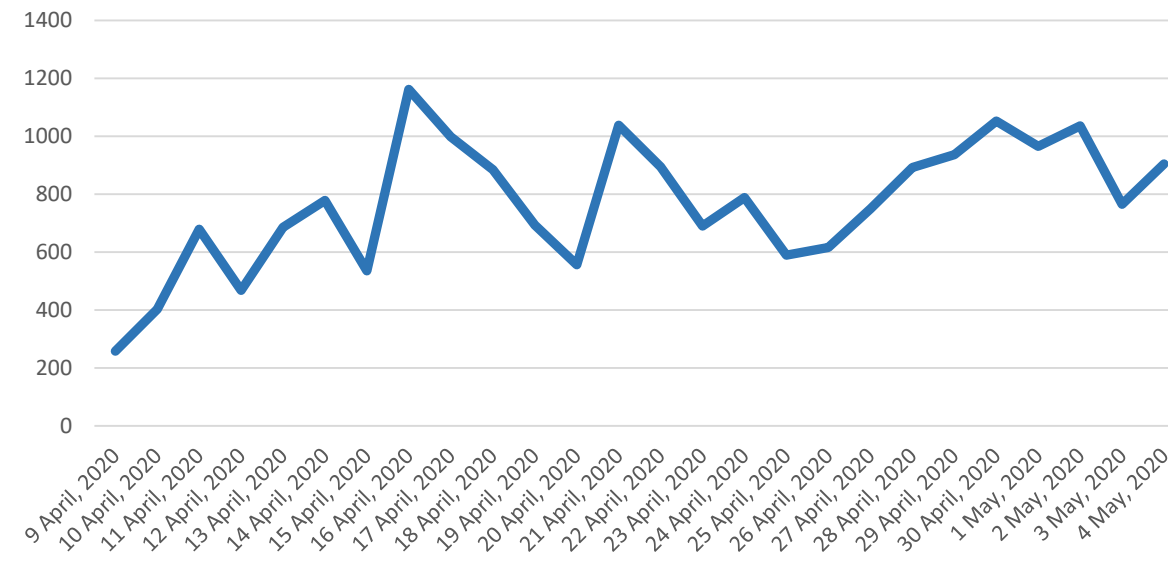
- ✓ symptomatic cases with travel history to affected areas
- ✓ symptomatic cases with close contact with COVID-19 positive patient
- ✓ SARI cases where the illness is not explained by other causes are tested

- Anybody with acute respiratory symptoms can request testing through their primary health care provider which in turn assess the need for testing.

- ✓ Once considered eligible the mobile team is taking the swabs from patients at home.
- ✓ The swabs are also taken at the all medical facilities.



Increase in testing capacity (number of tests per day)



# Pillar 6: Infection prevention and control (1)

- Infection Prevention and Control guidelines are adopted
- Health workers from primary healthcare facilities, hospitals, and repurposed for COVID-19 health facilities and quarantine hotels are trained
- Only urgent medical services are allowed in medical centers
- Supportive supervision is implemented to provide support for medical facilities on infection prevention and control measures by mobile teams
- Prevention guidelines for different sectors are adopted: transport, workplaces, home, healthcare facilities, and hand hygiene promotion

# Pillar 6: Infection prevention and control (2)

- Physical distancing

- ✓ Full lockdown and mandatory self-isolation for everyone
- ✓ Limitations of free movement until May 4
- ✓ Suspended public transport, excluding the railway network starting March 24
- ✓ Activities of all educational institutions and childcare facilities have been suspended for the entire period of the state of emergency, except for those providing distance learning

- Isolation and quarantine

- ✓ All suspected cases quarantined in dedicated health facilities until test results received
- ✓ Those with positive test results further quarantined in health facilities or hotels depending on symptoms
- ✓ All contacts of positive cases quarantined in dedicated hotels



# Pillar 6: Infection prevention and control (3)

- COVID in Special settings
- Inter-ministerial multidisciplinary Task Force (MoH, CDC, Min of Labor and Soc Affairs, Min of Justice, Military, Law enforcement) is leading the COVID 19 response and cooperation with local government and community action to address COVID19 issues in vulnerable populations, with apparently clear lines of command down to the first level of interaction,
- -Guidelines and instructions for measures, guidance are being shared through the lines/chain of command; capacity building and trainings provided by MoH to the function in the chain of command of the TF
- -Protocols for use of testing in institutions and referrals in place
- -Measures are implemented for staff and inhabitants of closed facilities and prisons successfully to prevent outbreaks, incl allocation of tests to confined facilities and prisons, and availability of guidance
- -Focusing on a variety of vulnerabilities (mental health, retirement homes, long term care facilities, disability, orphanages, vulnerable migrants, homeless, older people in the community)

# Pillar 7: Case management (1)

**WHO treatment guideline translated, updated, and disseminated among relevant health professionals**

## Physical infrastructure

- Improved hospital capacity through **10** repurposed hospitals designated for treatment of COVID-19, with overall:
  - ✓ **10** hospitals with total **1700** beds
  - ✓ **180** ICU beds

# Pillar 7: Case management (2)



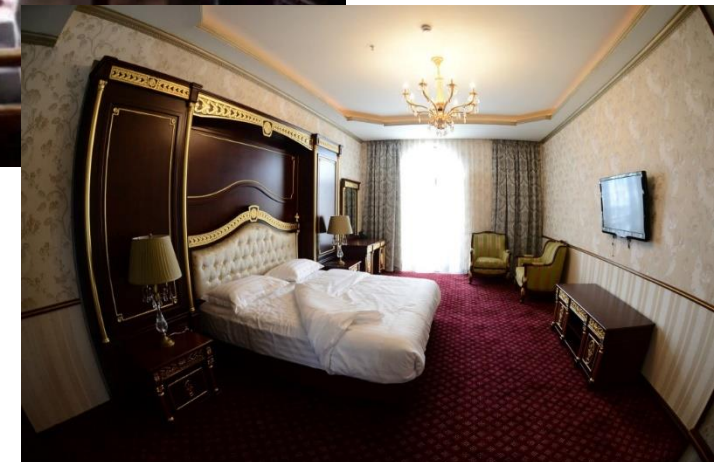
## Workforce

- ✓ Workforce of newly designated ten hospitals
- ✓ ICU specialists from other health facilities repurposed to designated health facilities to treat COVID-19 patients
- ✓ Extra health workers (volunteers with medical education, including nursing and medical students) retrained and repurposed for COVID-19
- ✓ The National Institute of Health trained **1782** health providers throughout the country to recognize and treat COVID-19 patients
  - **40%** physicians, **60%** nurses and other support staff
  - **15%** from Yerevan, **85%** from regions

# Pillar 7: Case management (3)

Living and Treatment Support Centers

Every positive COVID-19 patient hospitalized, those without symptoms placed in hotels with medical services



# Pillar 8: Operational support and logistics



- PPE available in all health facilities of the country quantified and repurposed for COVID-19
  - ✓ Government and humanitarian partners procured certain quantities of PPE, ventilators, and tests
  - ✓ National production of PPE organized
  - ✓ National production of PCR tests planned



*However, documented shortage of ventilators, ICU equipment, PPE, lab reagents and supplies*

# Thank you

