Iran COVID-19 epidemic models situation report No 52 – 2022-04-08

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Combine and visualize international periodically updated estimates of COVID-19 pandemic at the country level, countries without subnational level estimates Iran

Based on uptake 20220408 in https://github.com/pourmalek/covir2 Study update dates in uptake 20220408:

DELP 20220408, IHME 20220322, IMPE 20220131, SRIV 20220408

Days old: DELP 0, IHME 18, IMPE 68, SRIV 0

Summary 20220408:



Daily official reported cases have already bounced up since late March 2022.¹

Daily official reported deaths are starting to bounce up as of end of March 2022.²

The latest available predictions update of the IHME model is 18 days old, and that of the IMPE model is 68 days old. An example among the assumptions used by models is the assumption by IHME that percent of population using masks will continue onwards on a horizontal line with constant value equal to its value in early March 2022³. This assumption simply does not hold true.

¹ See "graph (00) Iran Daily reported cases, JOHN, all times" below.

² See "graph (0) Iran Daily reported deaths, JOHN, all times" below.

³ See "graph (16) Iran Daily mask use, 2 scenarios, all time, IHME" below.

Strengths and weakness of the international and periodically update COVID-19 pandemic models are discussed here.

The New Year ceremonies and travels increase number of contacts and probability of transmission and spread the virus across the country. These factors are not fully included in the models. As such, a *new surge* is folding out in Iran in April 2022.

Considerable proportions of the COVID-19 cases and deaths that will occur in the new-coming 7th wave can be prevented by Non-Pharmaceutical Interventions (NPIs) and vaccination.

Premature release of mandates for using masks and physical distancing serves the political and economic purposes of the governments, not the public health and survival needs of the populations.

People will die. Do something now, Ministry of Health and Medical Education.

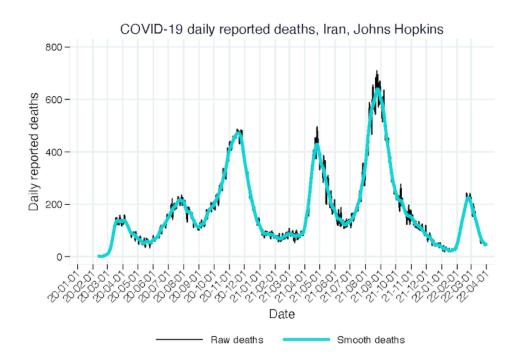
If a new variant with more separability and fatality occurs, the 8th wave might cause one of the highest or the highest daily deaths, in summer 2022 (solar Hijri year 1401).

Names of models/studies in Farsi:

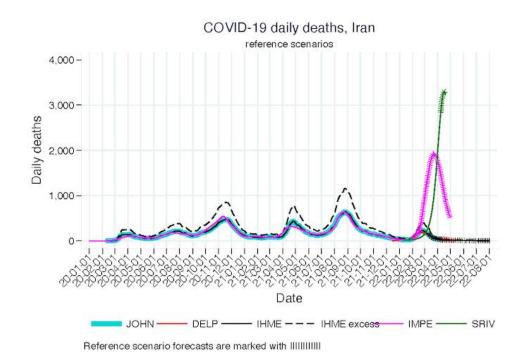
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(DELP) مطالعه دلفی، انستیتوی فناوری ماساچوست کمبریج (منحنی قرمز رنگ)
(IHME) مطالعه موسسه آی اچ ام ای، دانشگاه واشنگتن سیاتل (منحنی سیاه رنگ)
(IMPE) مطالعه ایمپریال کالج لندن (منحنی صورتی رنگ)
(SRIV) مطالعه اسریواستاوا در دانشگاه کالیفرنیای جنوبی (منحنی سبز رنگ)
(JOHN) دانشگاه جانز هاپکینز، انعکاس گزارش های رسمی کشور ها به سازمان جهانی بهداشت (منحنی آبی رنگ)
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Selected graphs

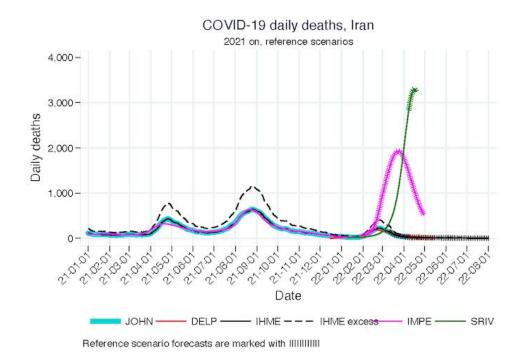
(0) Iran Daily reported deaths, JOHN, all times



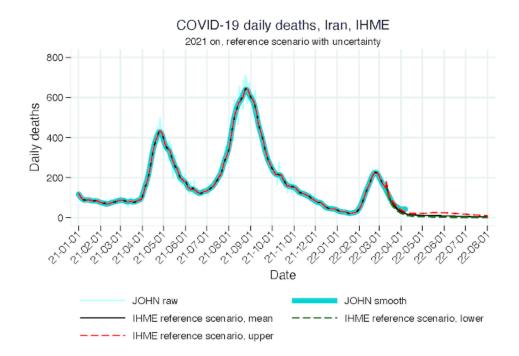
(1) Iran Daily deaths, all time



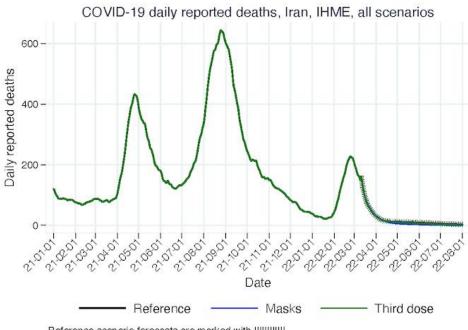
(2) Iran Daily deaths, 2021 on



(3) Iran Daily deaths, 2021 on, reference scenario with uncertainty, IHME

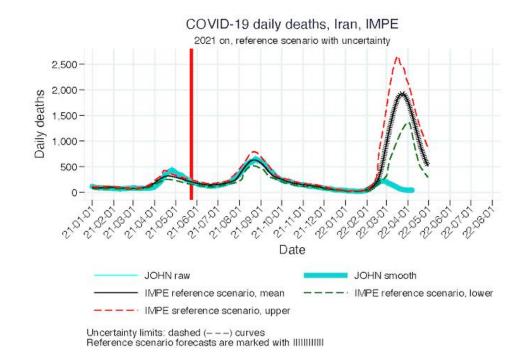


(4) Iran Daily deaths, 2021 on, all scenarios, IHME

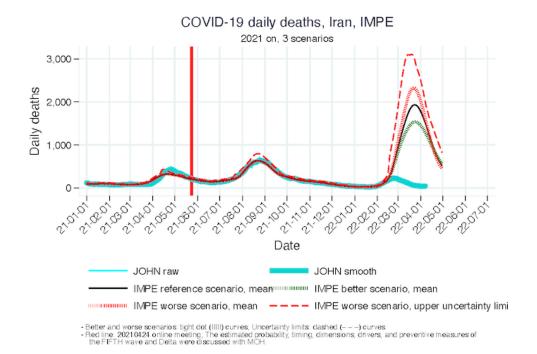


Reference scenario forecasts are marked with IIIIIIIIIII

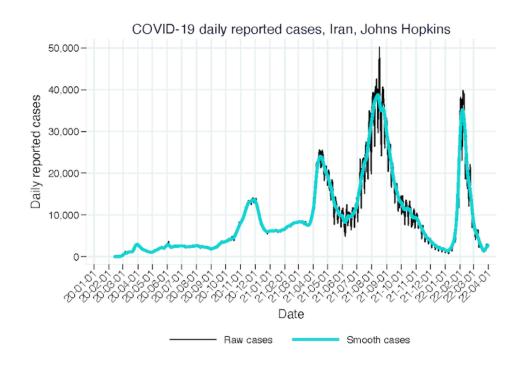
(5) Iran Daily deaths, 2021 on, reference scenario with uncertainty, IMPE



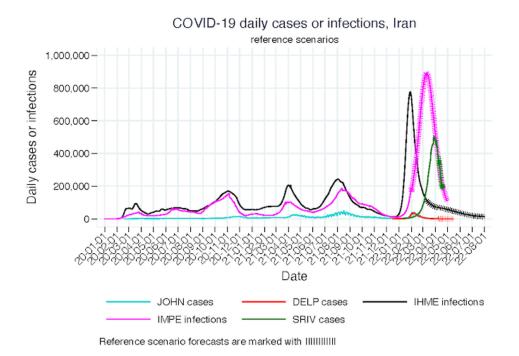
(6) Iran Daily deaths, 2021 on, 3 scenarios, IMPE



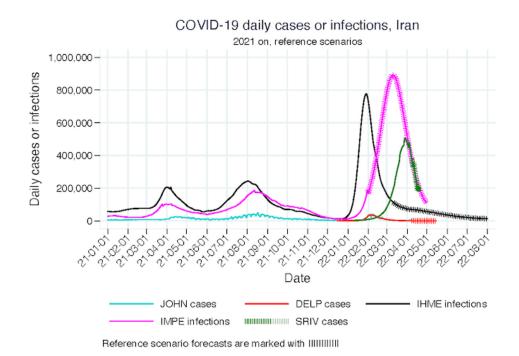
(00) Iran Daily reported cases, JOHN, all times



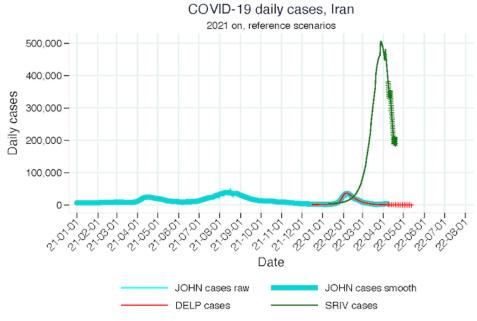
(7) Iran Daily cases or infections, all time



(8) Iran Daily cases or infections, 2021 on

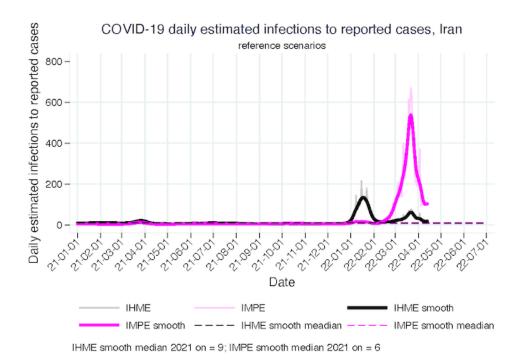


(8b) Iran Daily cases, 2021 on



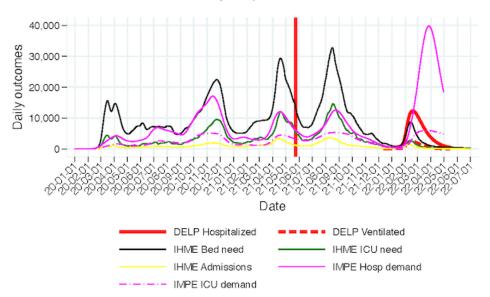
Reference scenario forecasts are marked with IIIIIIIIIII

(8c) Iran <u>Daily estimated infections IHME, IMPE to reported cases JOHN, main scenarios, 2021</u> on



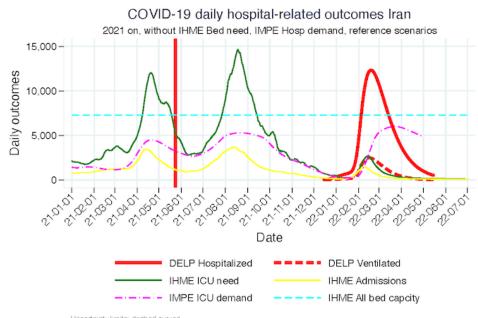
(9) Iran Hospital-related outcomes, all time





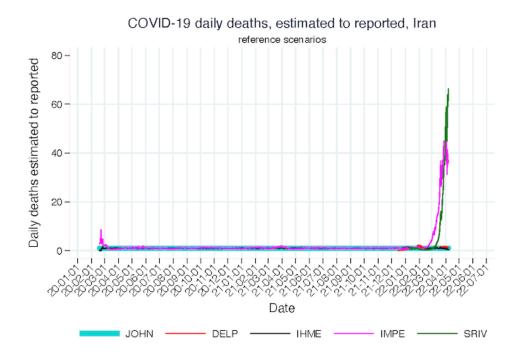
Red line: 20210424 online meeting. The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.

(10) Iran Hospital-related outcomes, 2021 on

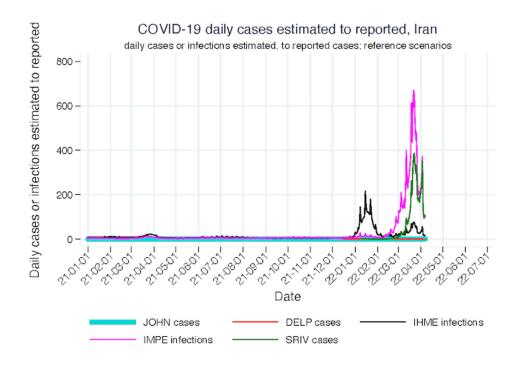


Uncertainty limits: dashed curves.
 Red line: 2021/0124 online meeting, The estimated probability, timing, dimensions, drivers, and preventive measures of the FIETH wave and Detia were discussed with MOH.

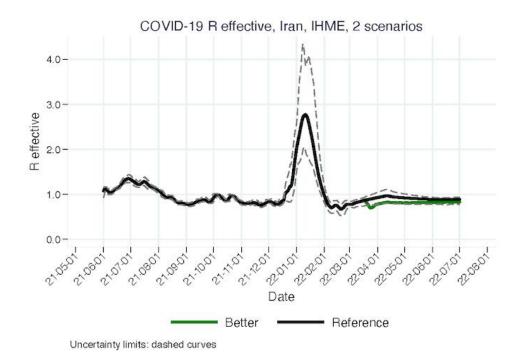
(11) Iran Daily deaths estimated to reported, all time



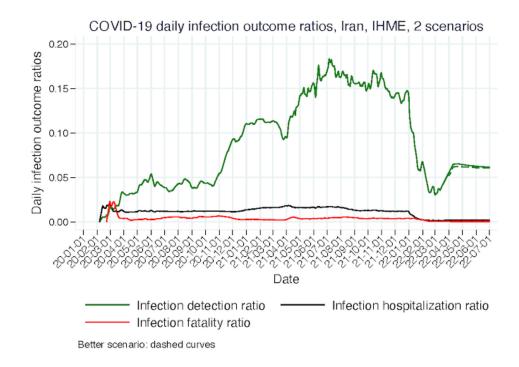
(12) Iran Daily cases or infections estimated to reported cases, 2021 on



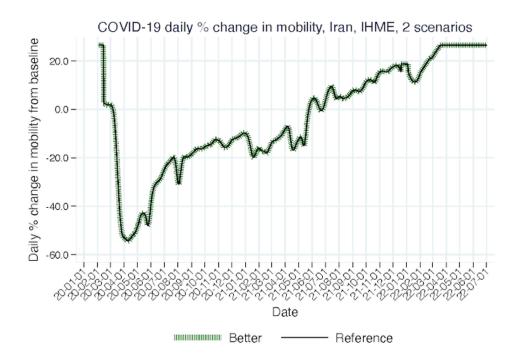
(13) Iran R effective, 2 scenarios, 2021 on, IHME



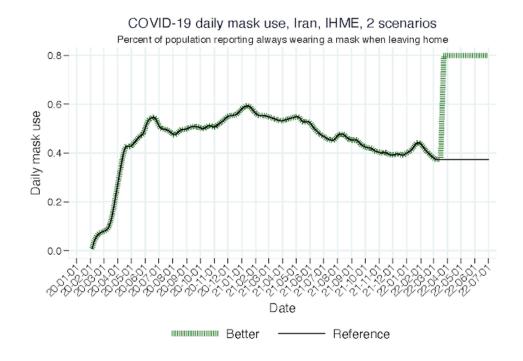
(14) Iran Daily Infection-outcome ratios, 2 scenarios, 2021 on, IHME



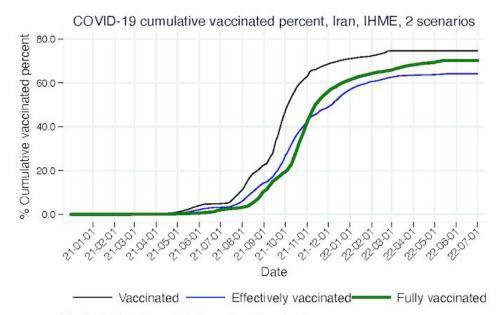
(15) Iran Daily mobility, 2 scenarios, all time, IHME



(16) Iran Daily mask use, 2 scenarios, all time, IHME



(17) Iran Percent cumulative vaccinated, 2021 on, IHME



Vaccinated: Initially vaccinated (one dose of two doses) Effectively vaccinated: one and two dose with efficacy Fully vaccinated: one of one and two of two doses