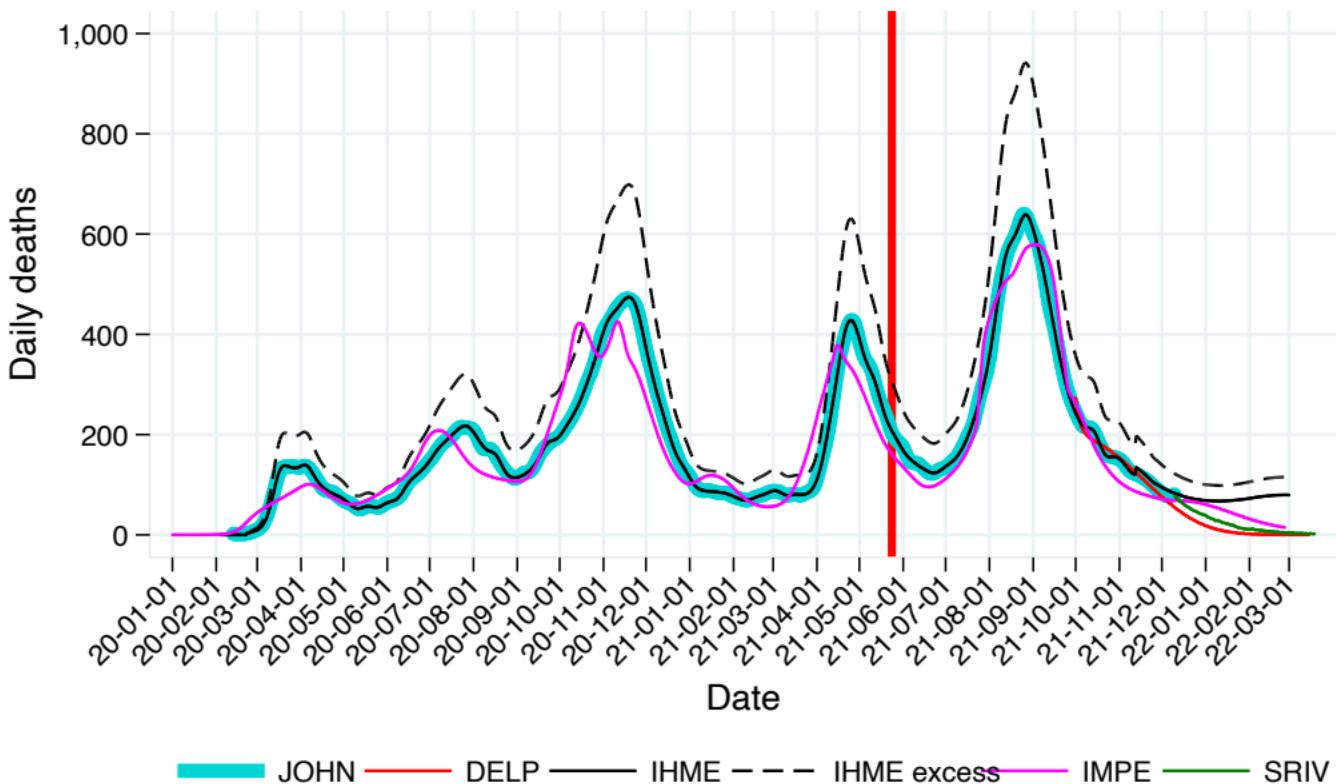


COVID-19 daily deaths, Iran

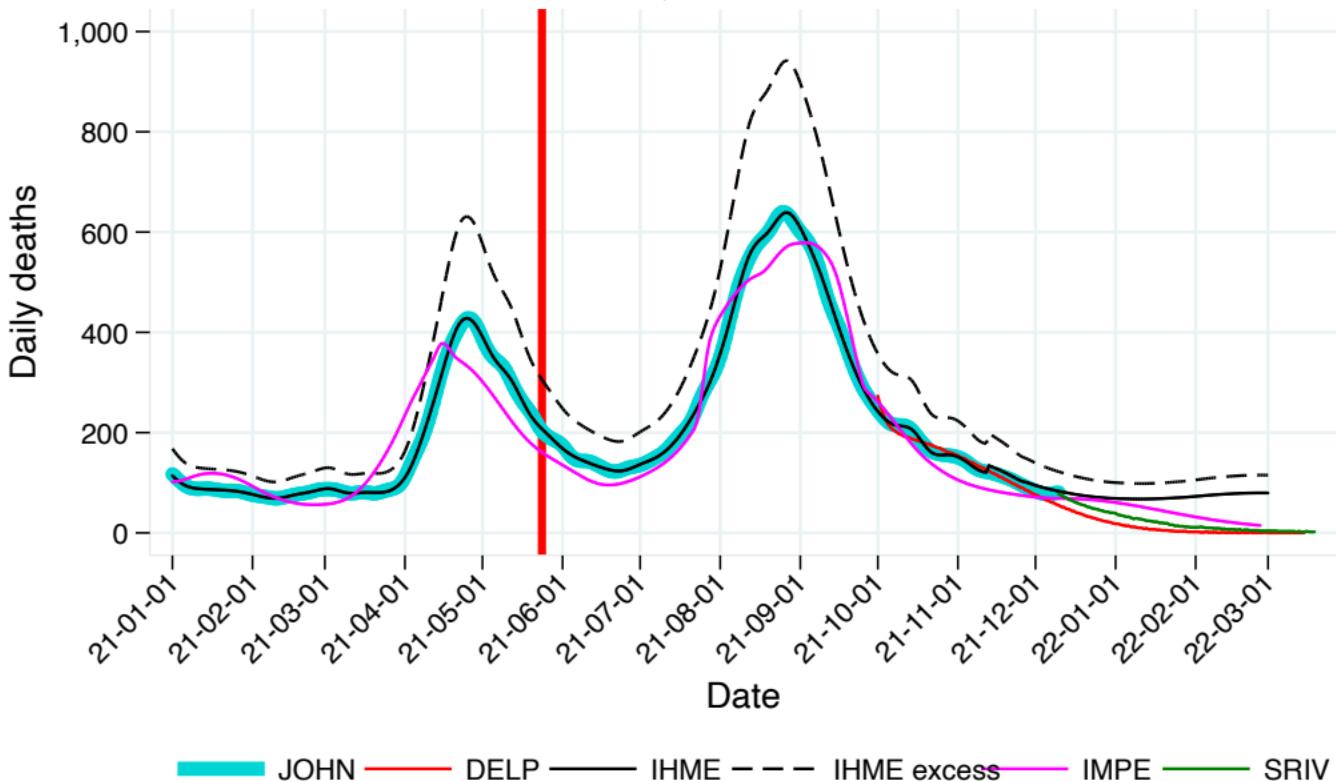
reference scenarios



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

COVID-19 daily deaths, Iran

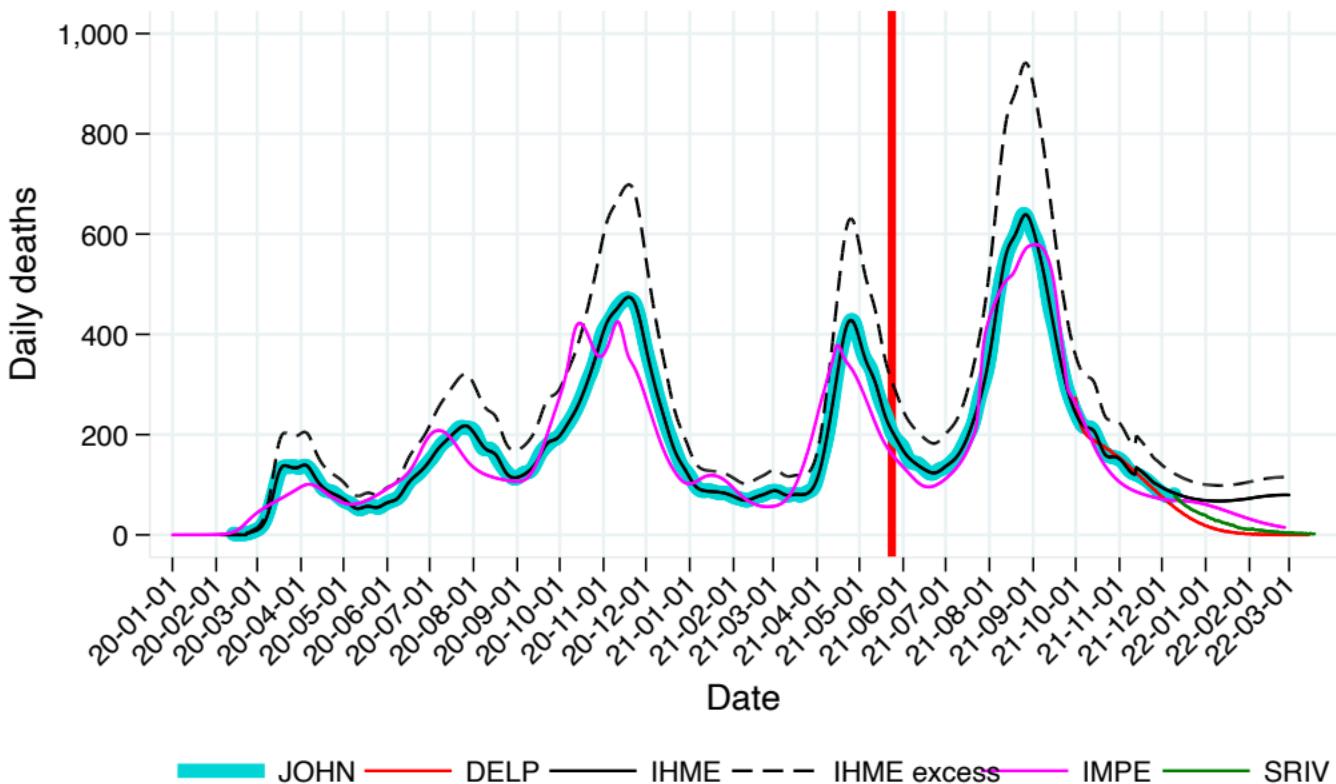
2021 on, reference scenarios



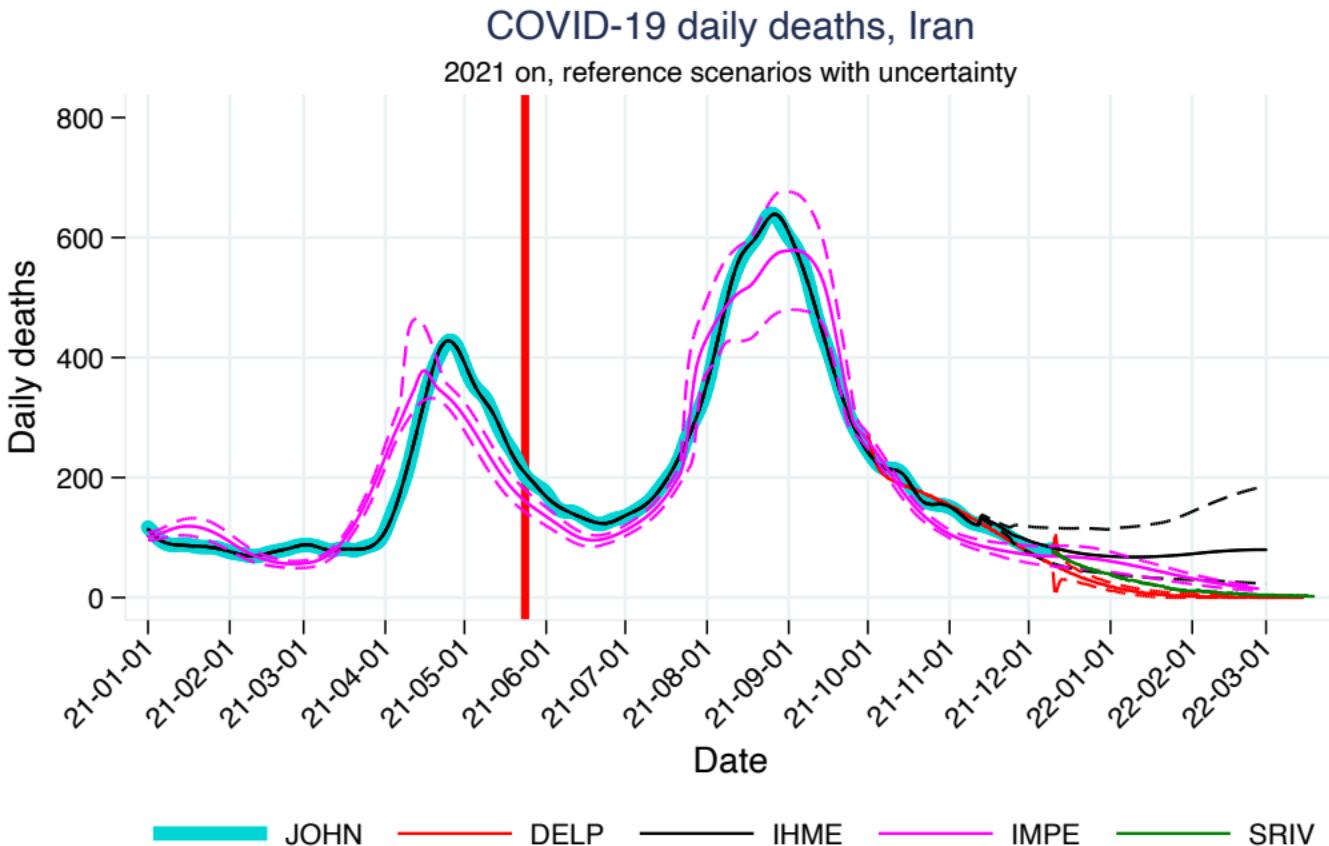
- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.

COVID-19 daily deaths, Iran

reference scenarios



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

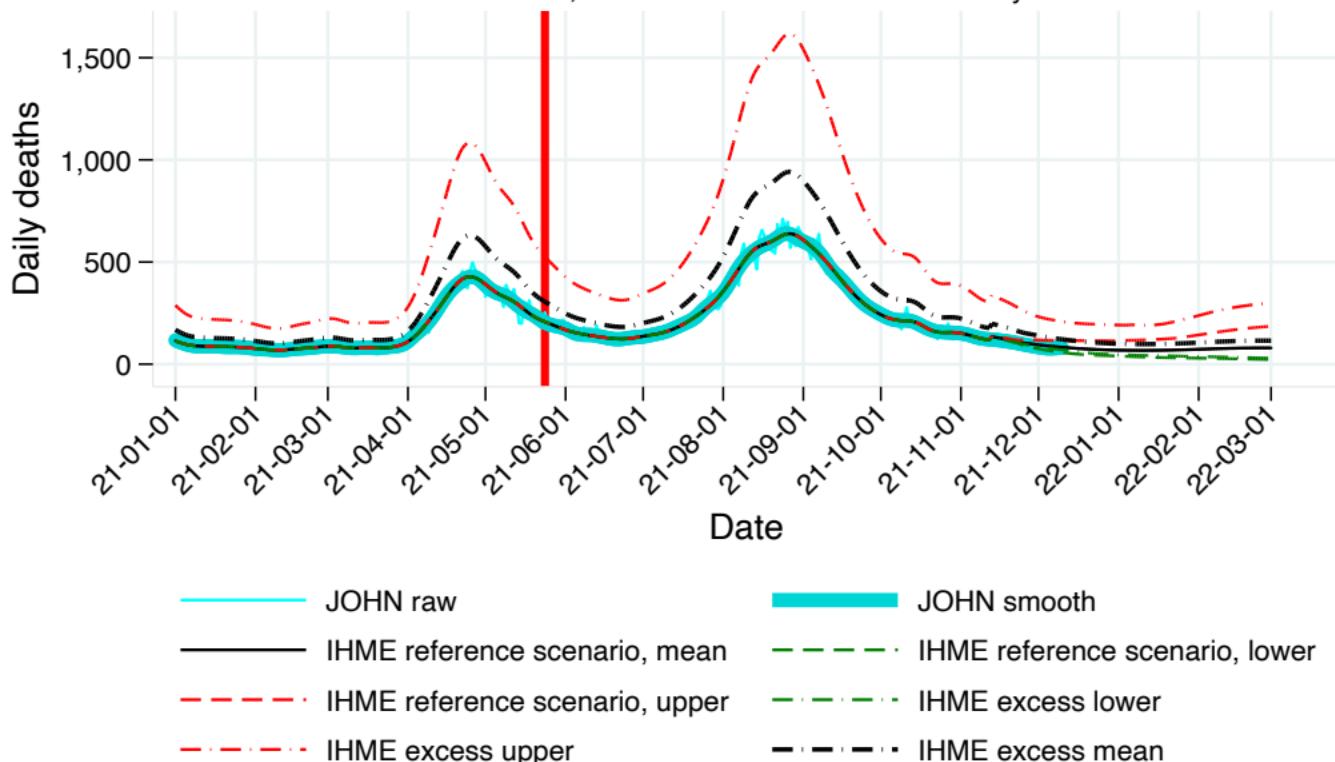


- Uncertainty limits: dashed curves

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

COVID-19 daily deaths, Iran, IHME

2021 on, reference scenario with uncertainty

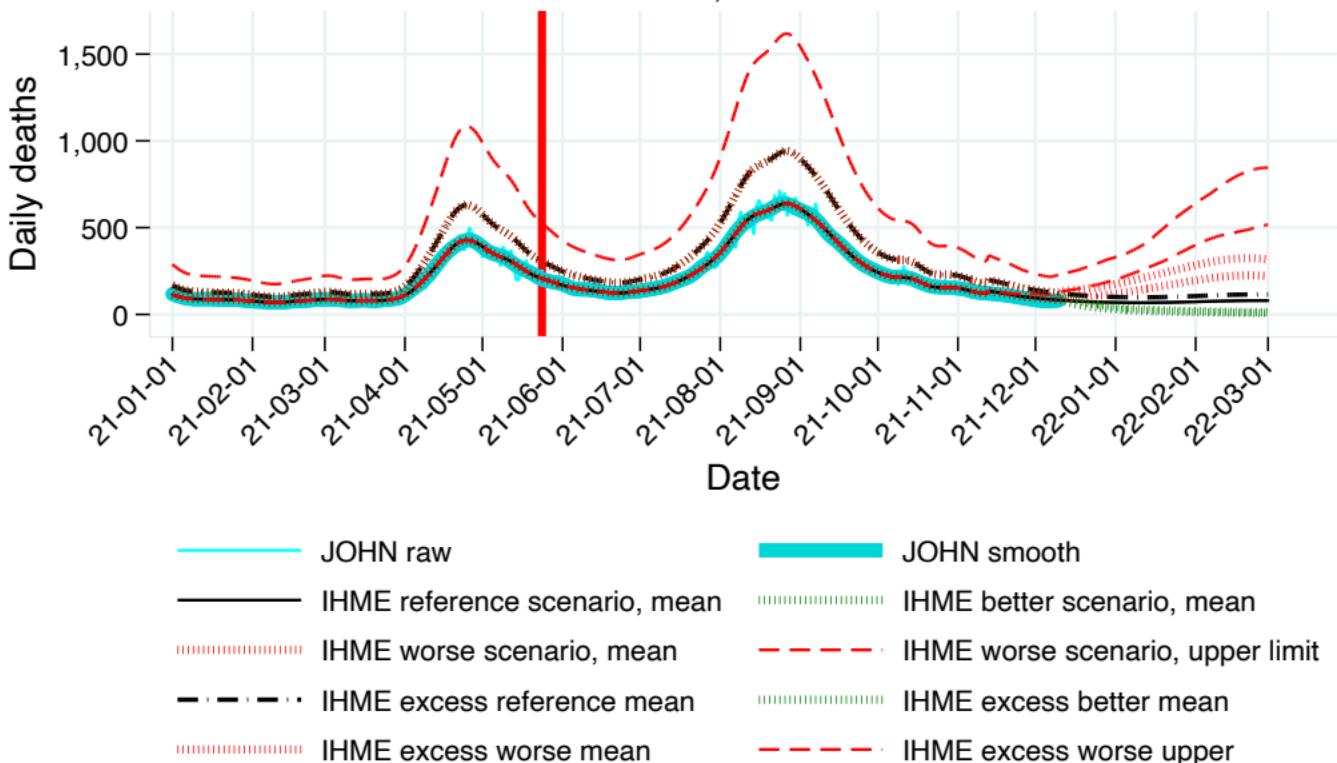


- Uncertainty limits: dashed (---) curves

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

COVID-19 daily deaths, Iran, IHME

2021 on, 3 scenarios

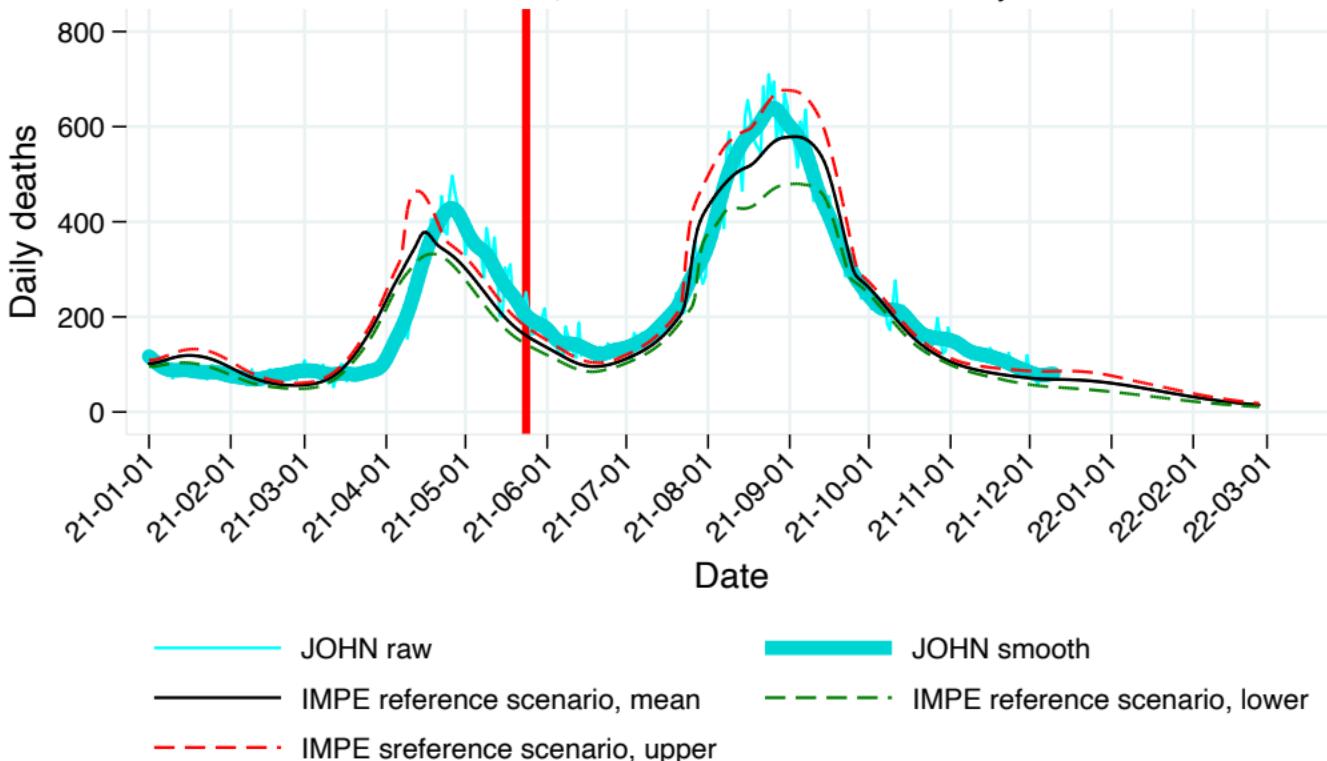


- Better and worse scenarios: tight dot (||||) curves; Uncertainty limits: dashed (---) curves.

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

COVID-19 daily deaths, Iran, IMPE

2021 on, reference scenario with uncertainty

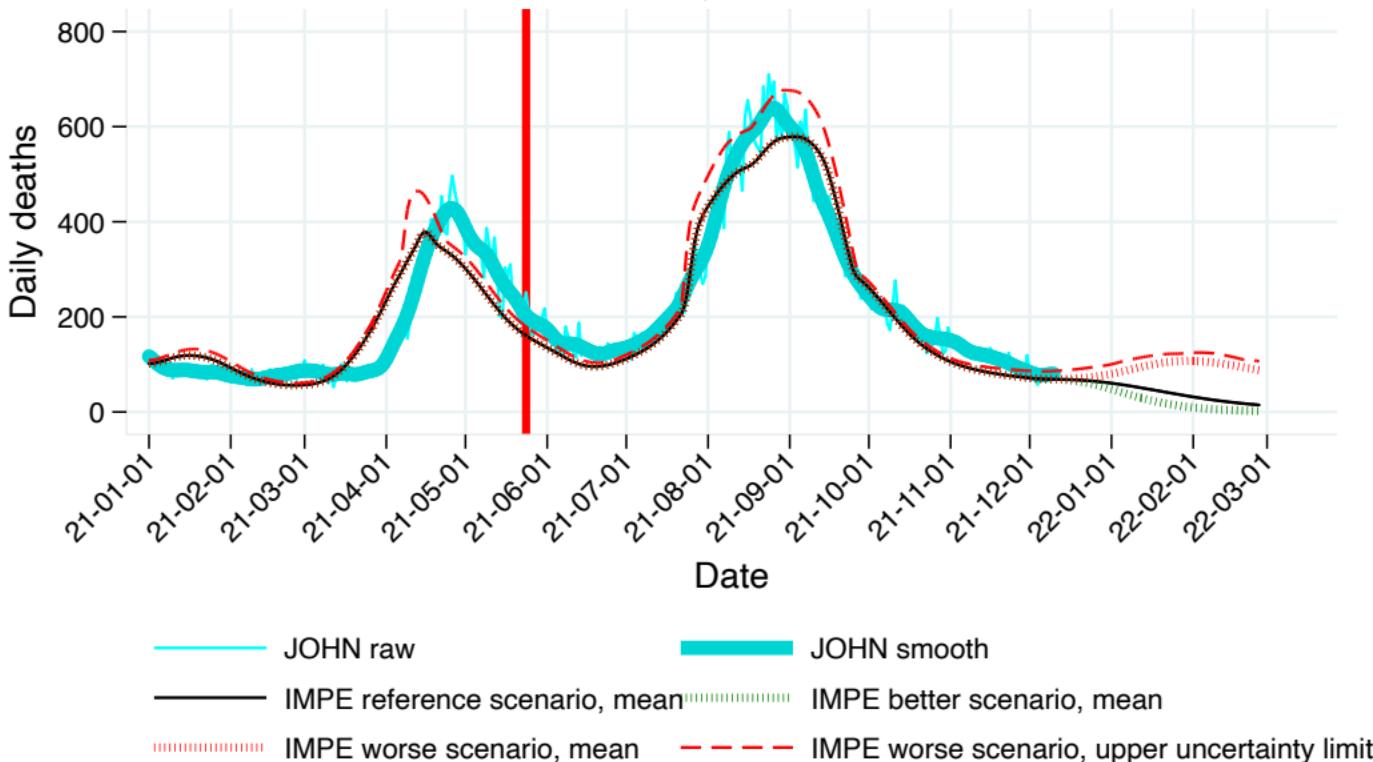


- Uncertainty limits: dashed (— —) curves.

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

COVID-19 daily deaths, Iran, IMPE

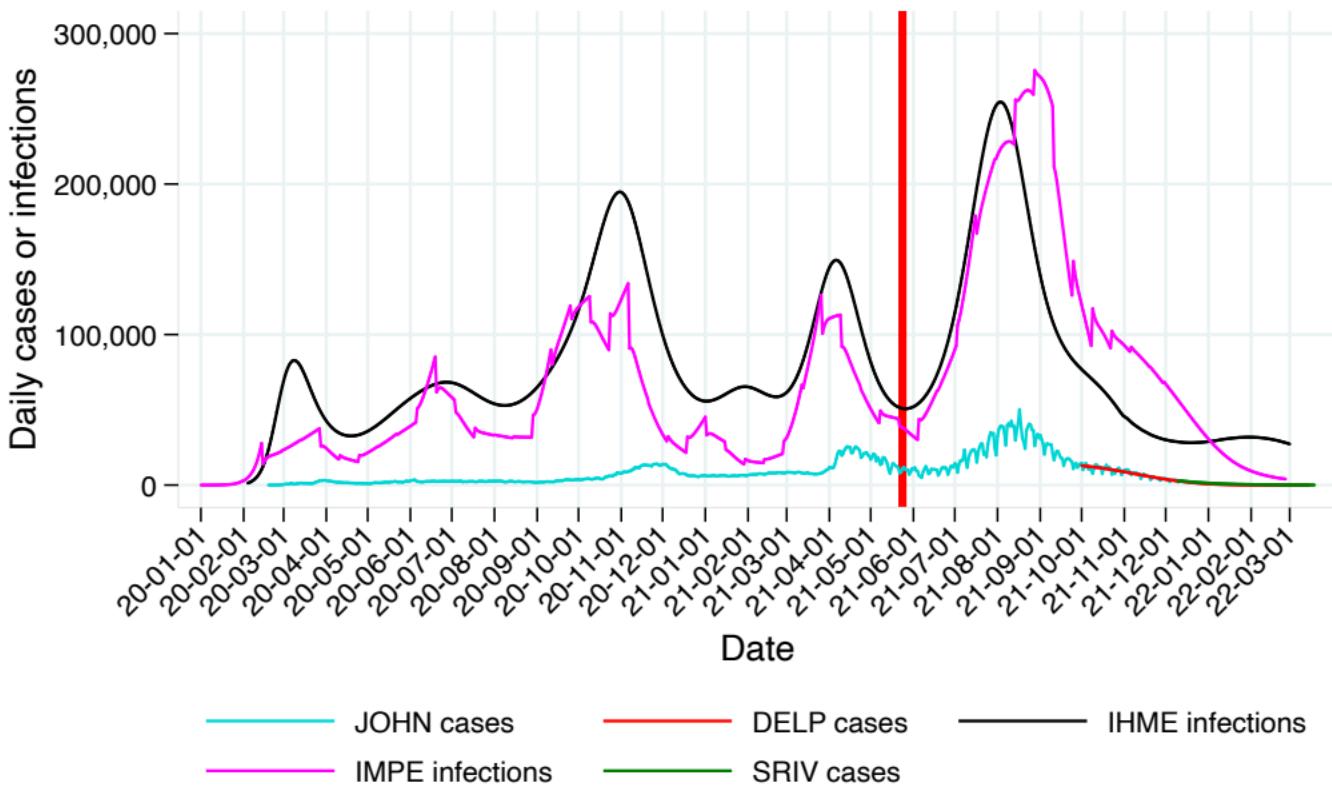
2021 on, 3 scenarios



- Better and worse scenarios: tight dot (||||) curves; Uncertainty limits: dashed (---) curves.
- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.

COVID-19 daily cases or infections, Iran

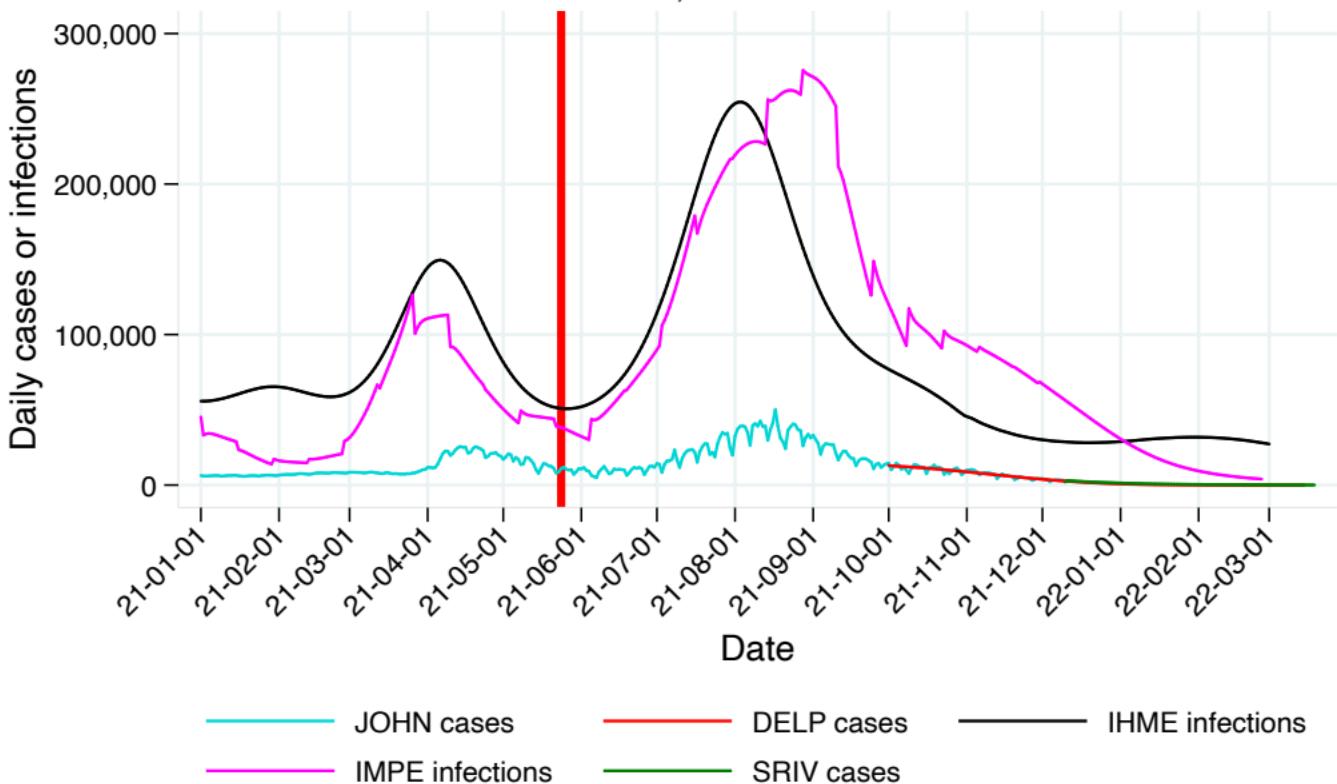
reference scenarios



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

COVID-19 daily cases or infections, Iran

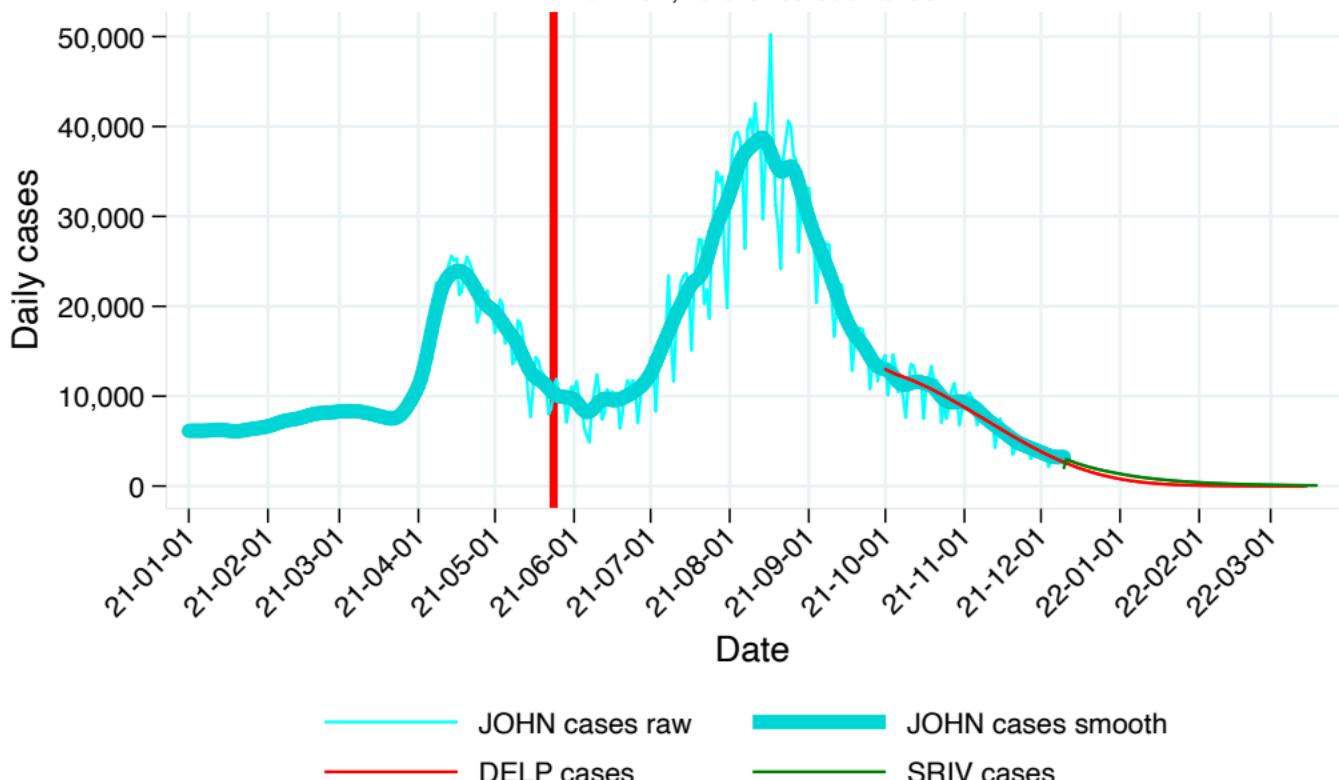
2021 on, reference scenarios



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

COVID-19 daily cases, Iran

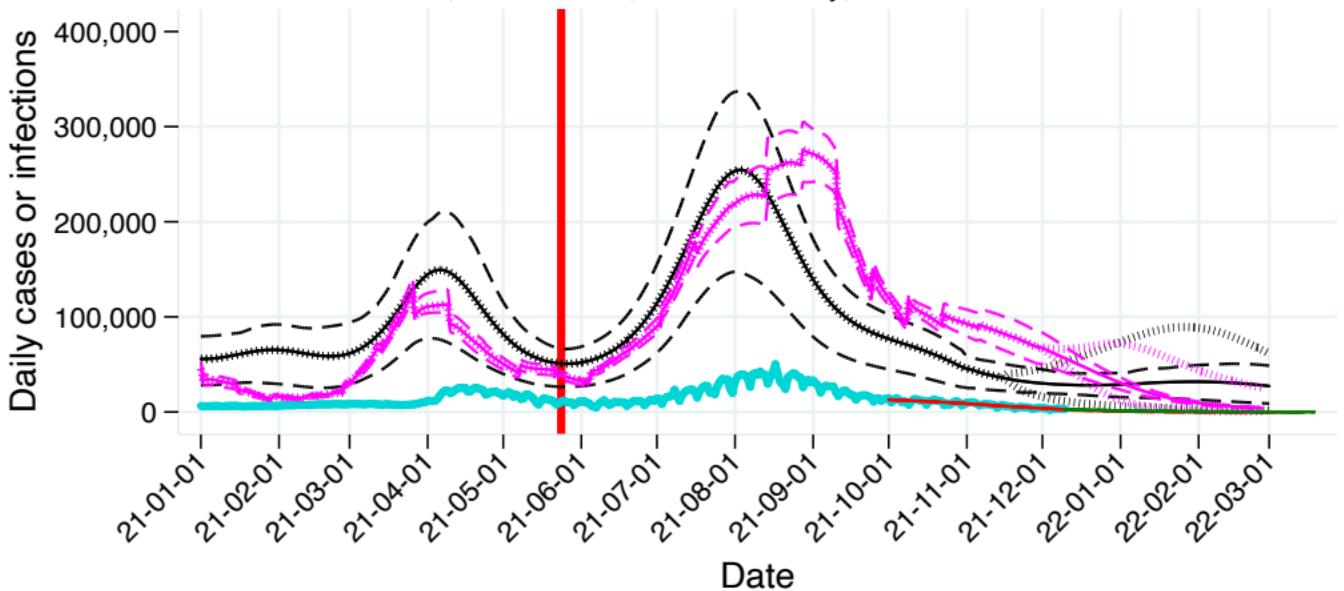
2021 on, reference scenarios



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

COVID-19 daily cases or infections, Iran

2021 on, full scenarios, with uncertainty; IHME & IMPE: infections

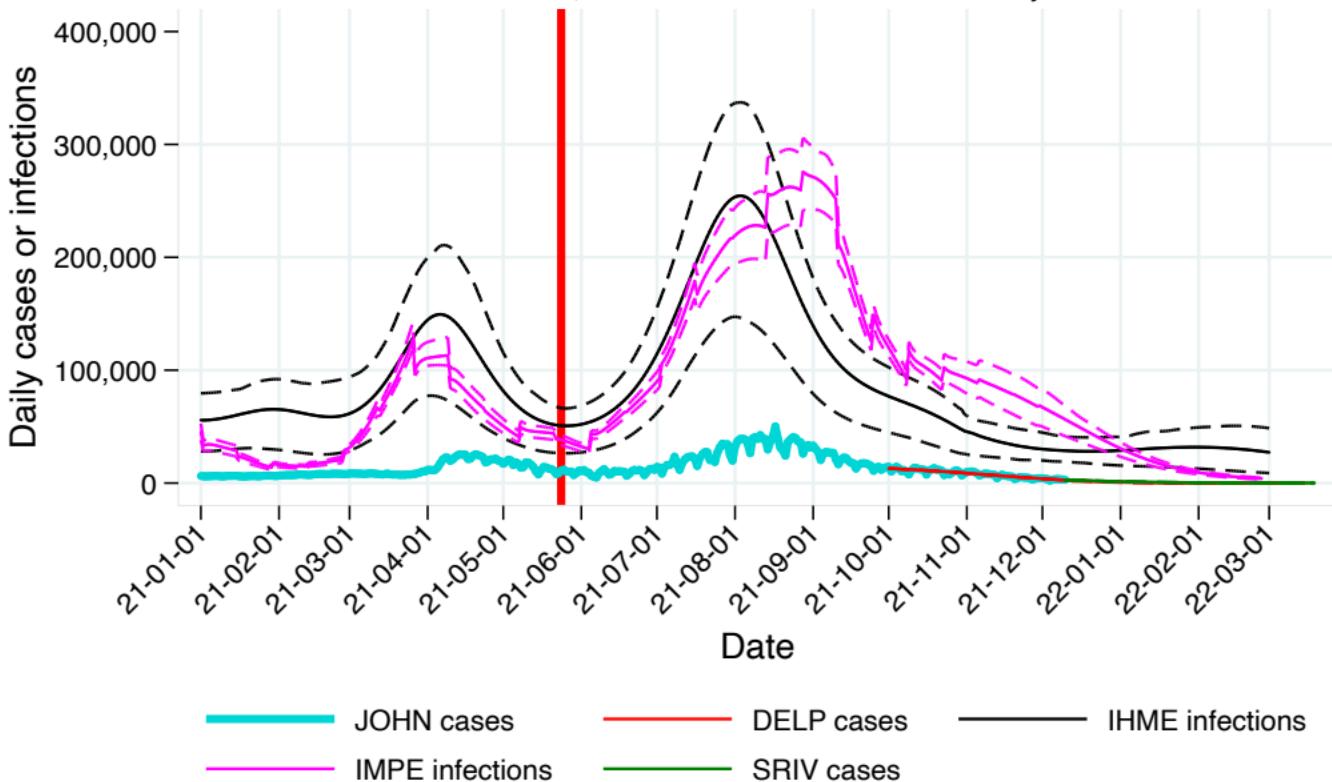


- Uncertainty limits: dashed (---) curves; Better and worse scenarios: tight dot (||||) curves.

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

COVID-19 daily cases or infections, Iran

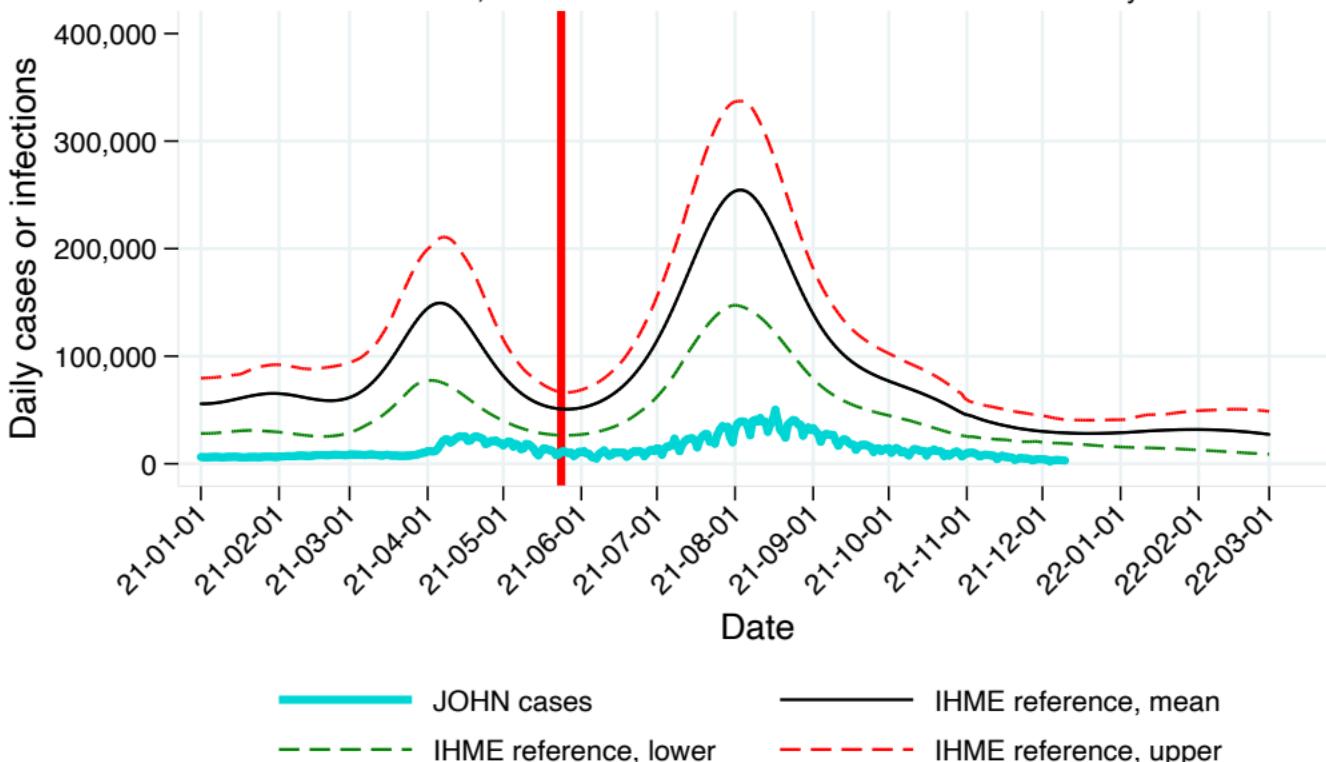
2021 on, reference scenarios with uncertainty



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

COVID-19 daily cases JOHN, and infections IHME, Iran

2021 on, IHME infections reference scenario with uncertainty

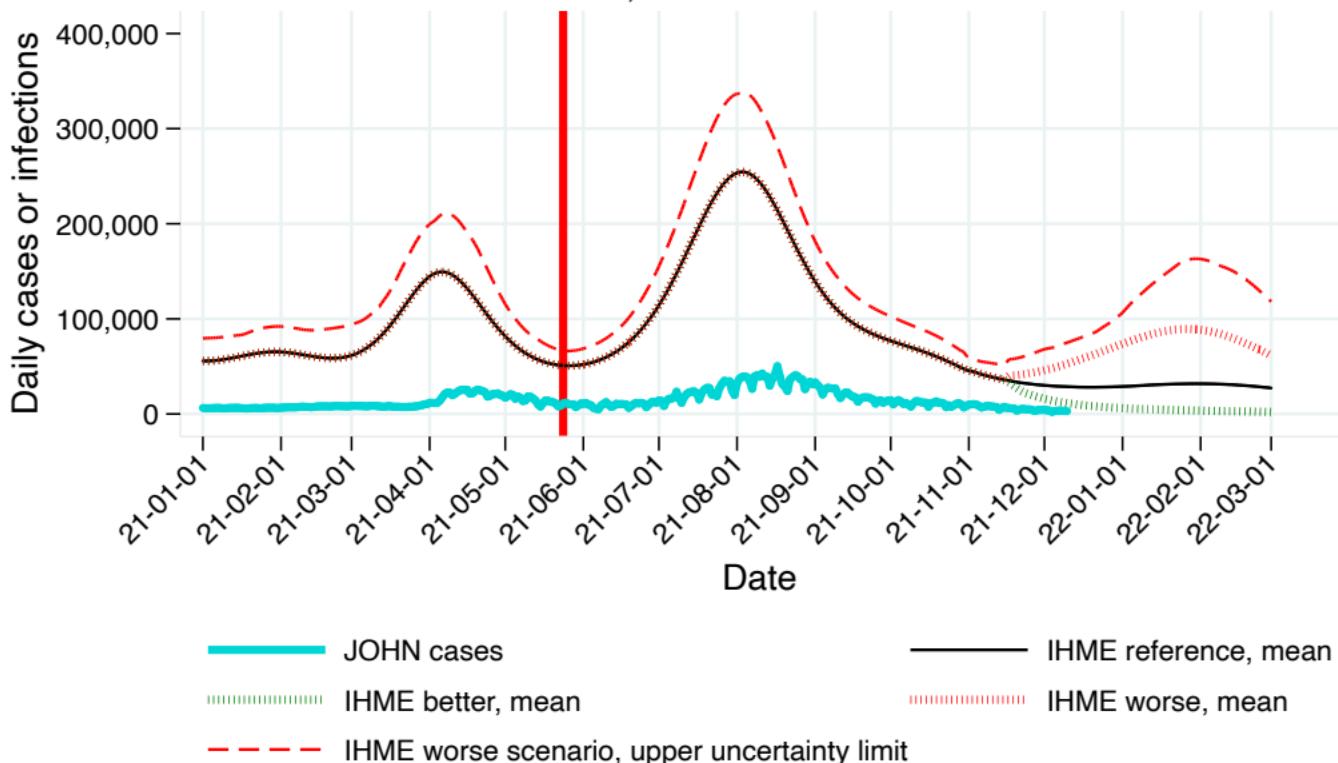


- Uncertainty limits: dashed (---) curves.

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

COVID-19 daily JOHN, and infections IHME, Iran

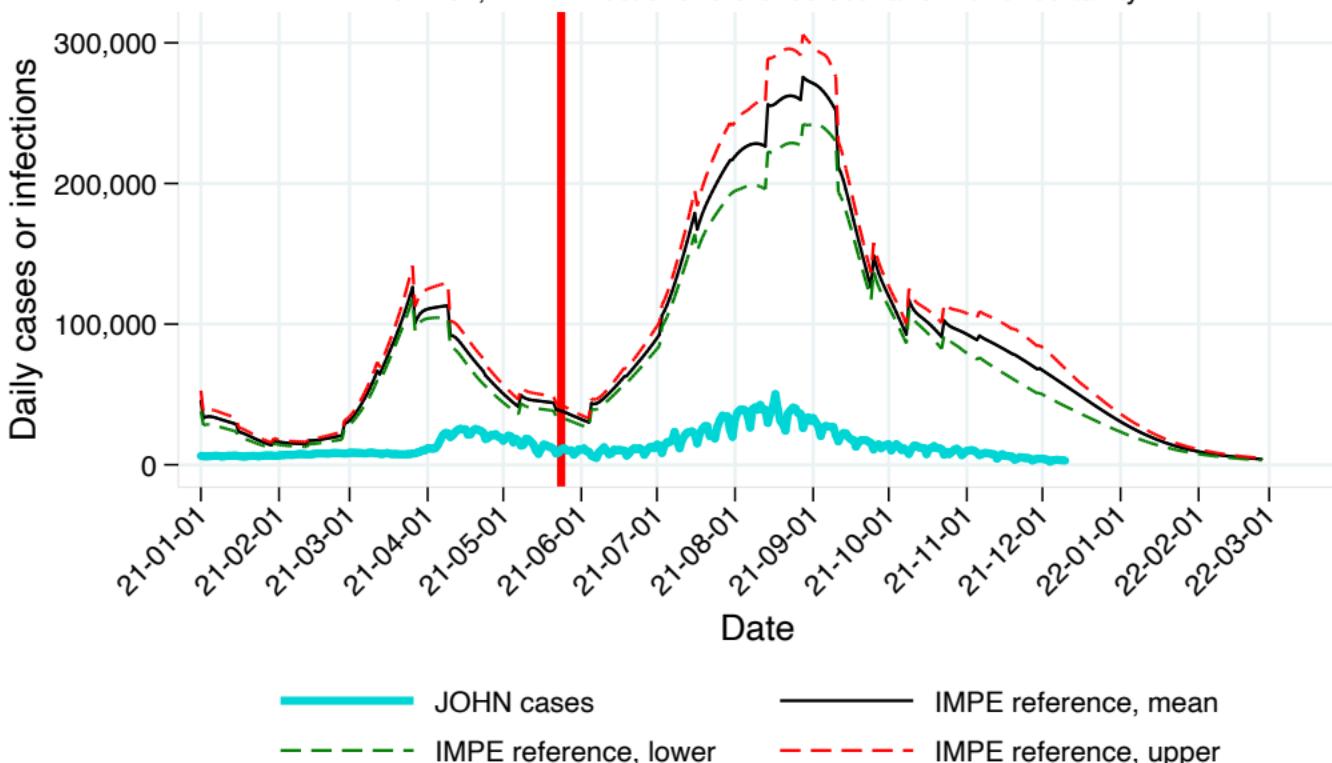
2021 on, IHME infections 3 scenarios



- Better and worse scenarios: tight dot (||||) curves; Uncertainty limits: dashed (---) curves.
- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.

COVID-19 daily cases JOHN, and infections IMPE, Iran

2021 on, IMPE infections reference scenario with uncertainty

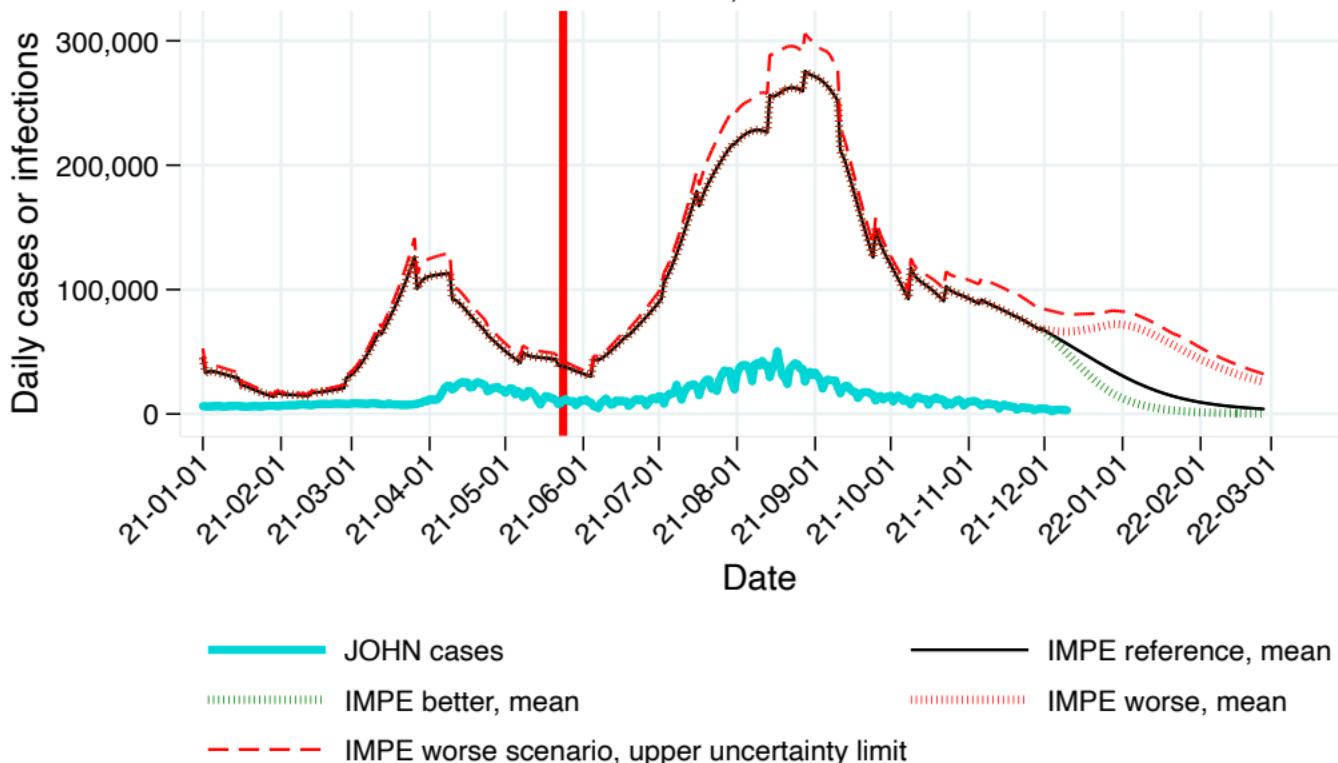


- Uncertainty limits: dashed (---) curves.

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

COVID-19 daily JOHN, and infections IMPE, Iran

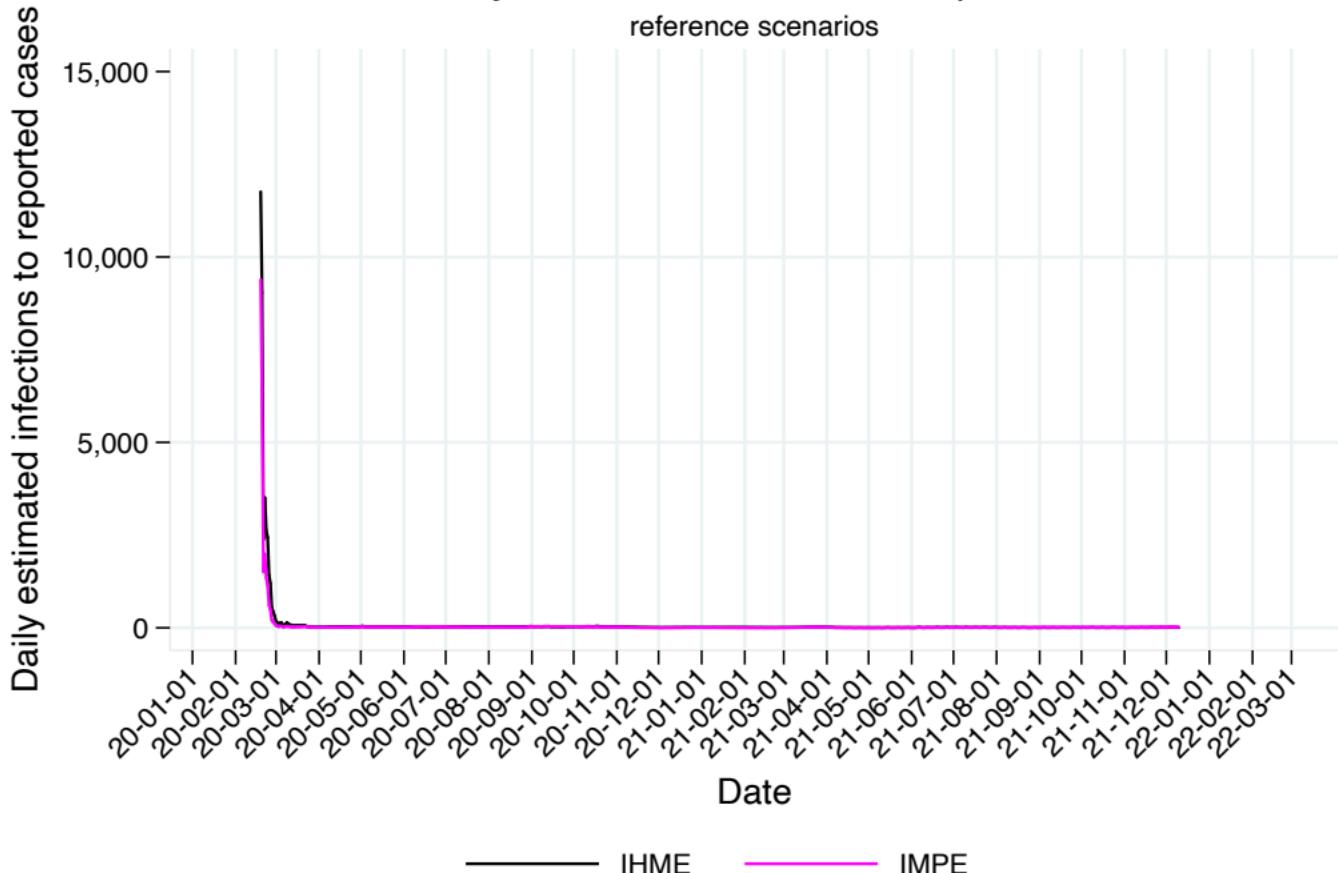
2021 on, 3 scenarios



- Better and worse scenarios: tight dot (||||) curves; Uncertainty limits: dashed (---) curves.
- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.

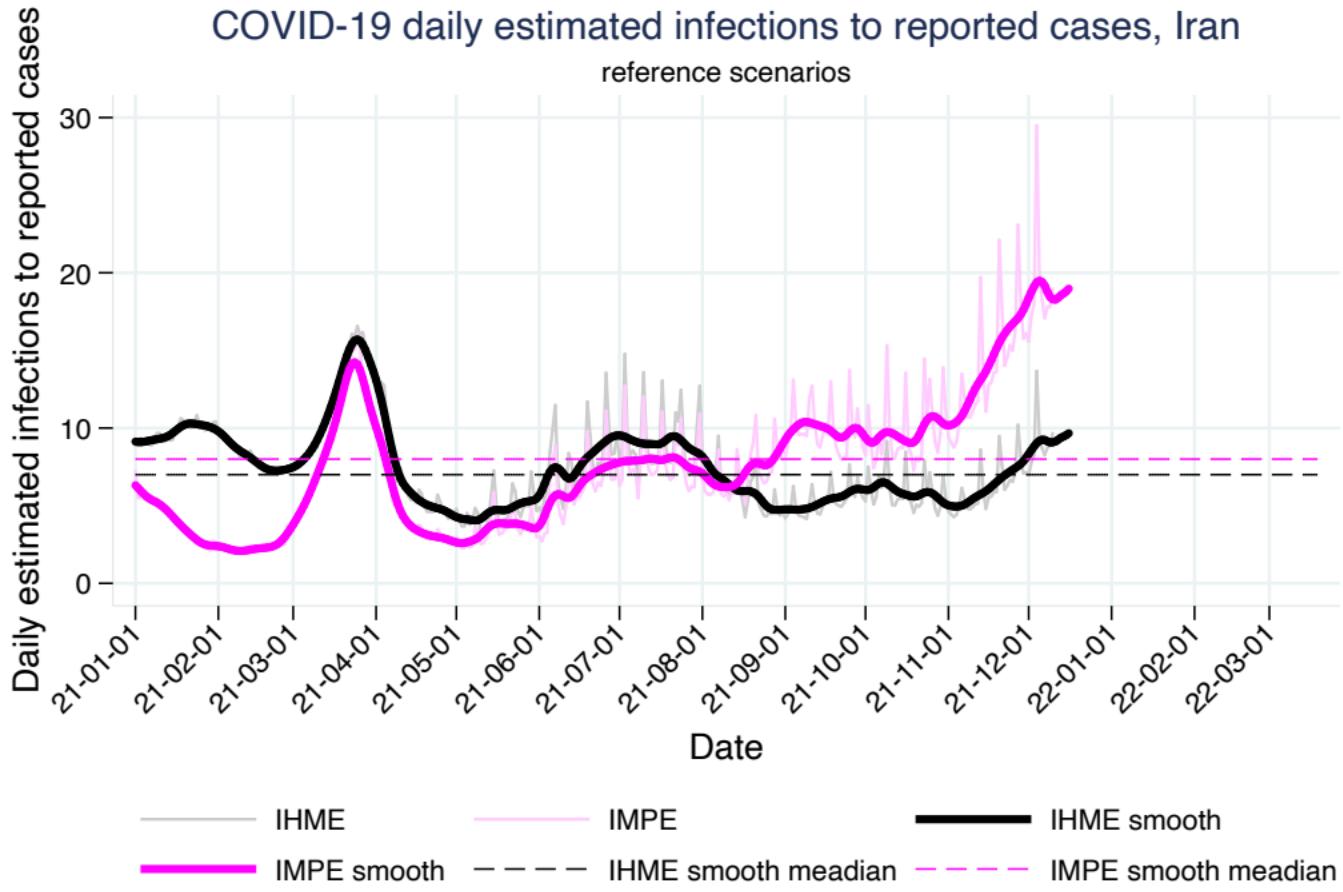
COVID-19 daily estimated infections to reported cases, Iran

reference scenarios



COVID-19 daily estimated infections to reported cases, Iran

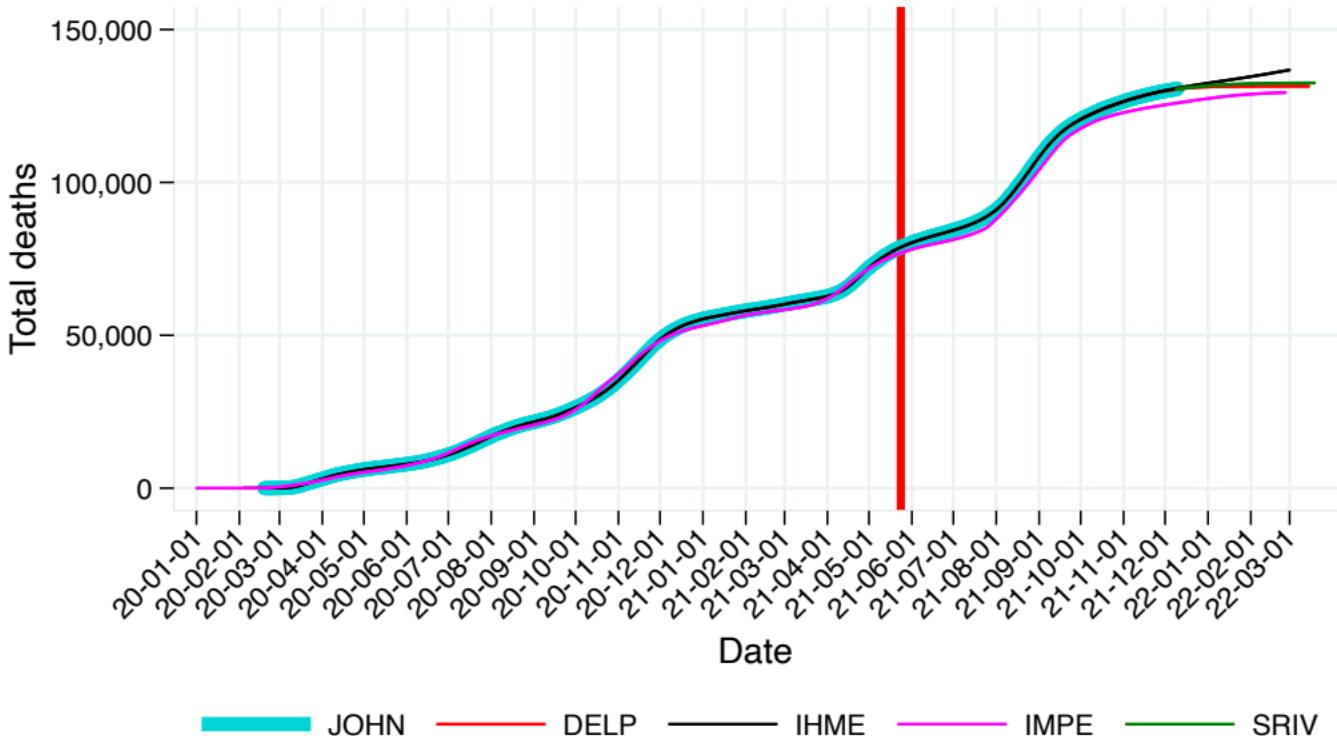
reference scenarios



IHME smooth median in 2021 = 7; IMPE smooth median in 2021 = 8

COVID-19 total deaths, Iran

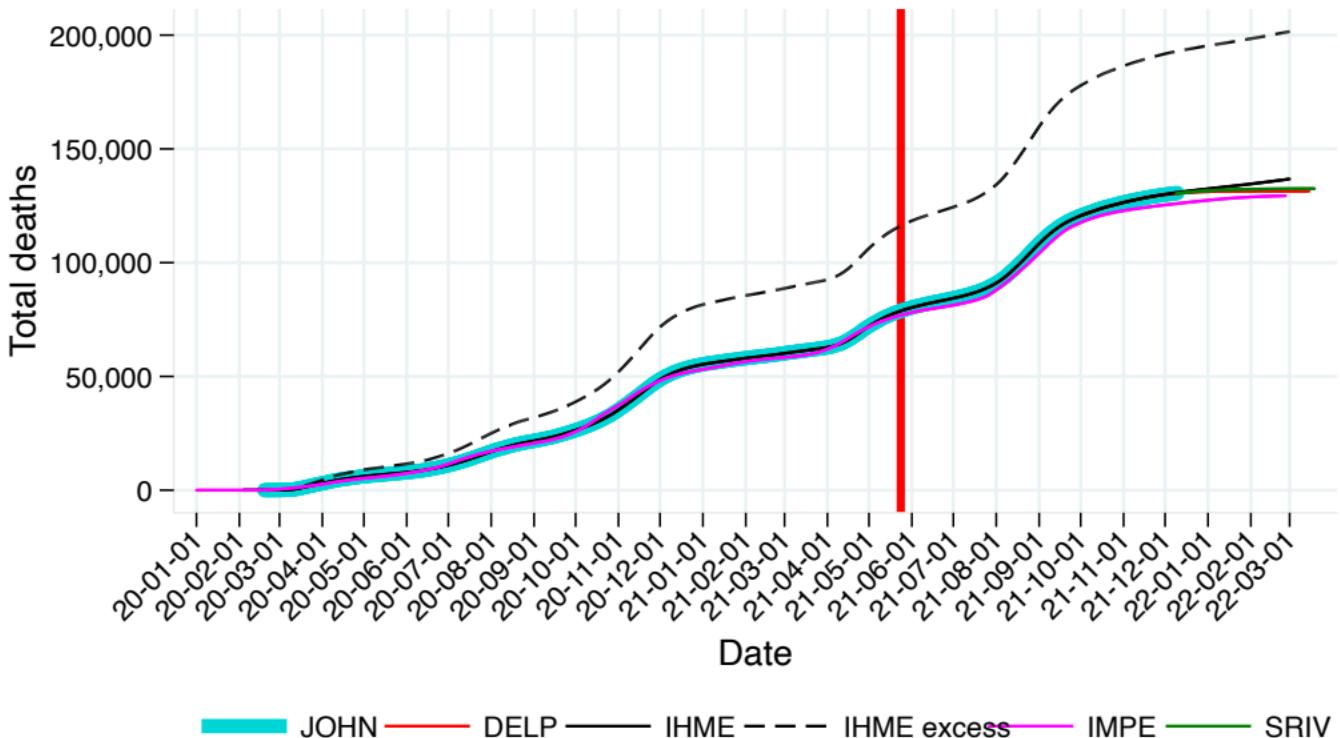
reference scenarios



- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.
- Cyan line: 20210910; Travel restrictions to Iraq, surveillance of variants, inter alia, to delay and attenuate the SIXTH wave, Lambda, and +/- Mu, relayed to the new MOH.

COVID-19 total deaths, Iran

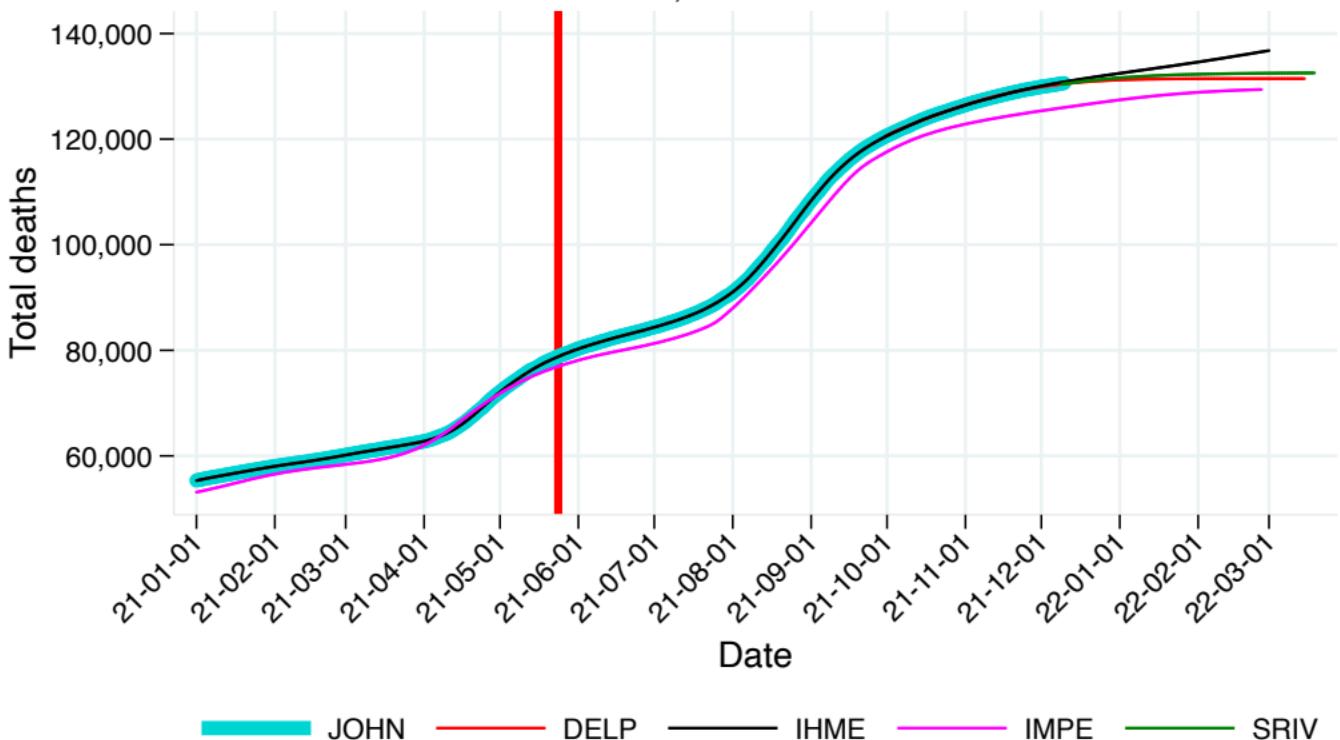
reference scenarios



- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.
- Cyan line: 20210910; Travel restrictions to Iraq, surveillance of variants, inter alia, to delay and attenuate the SIXTH wave, Lambda, and +/- Mu, relayed to the new MOH.

COVID-19 total deaths, Iran

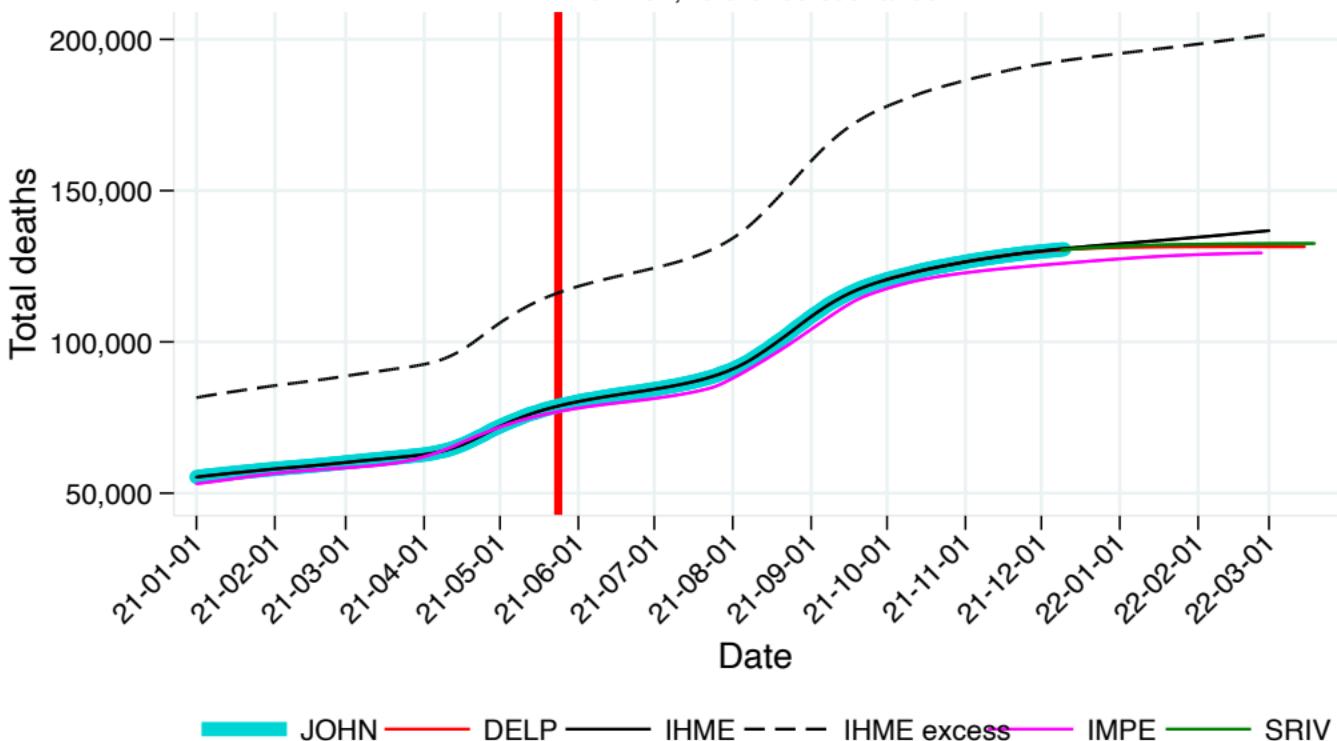
2021 on, reference scenarios



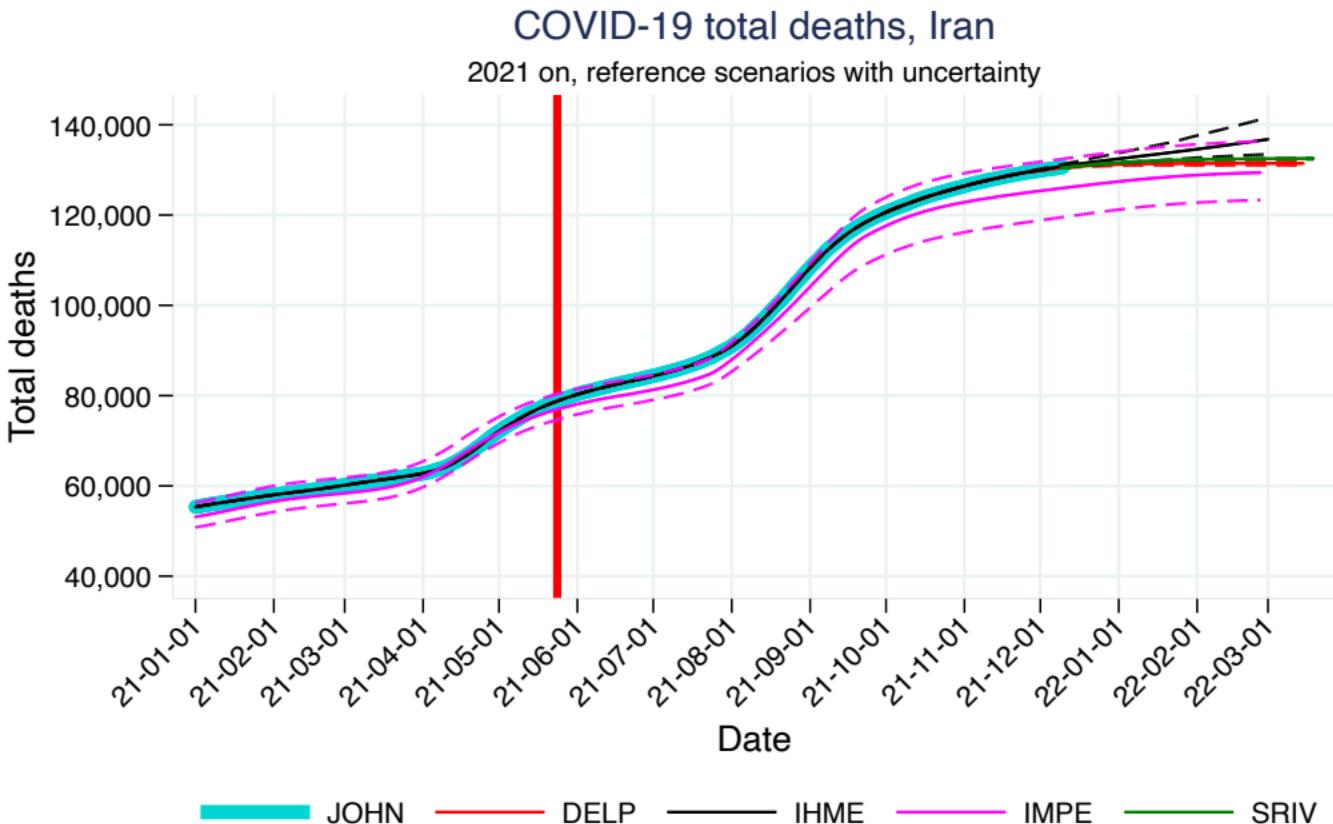
- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.
- Cyan line: 20210910; Travel restrictions to Iraq, surveillance of variants, inter alia, to delay and attenuate the SIXTH wave, Lambda, and +/- Mu, relayed to the new MOH.

COVID-19 total deaths, Iran

2021 on, reference scenarios



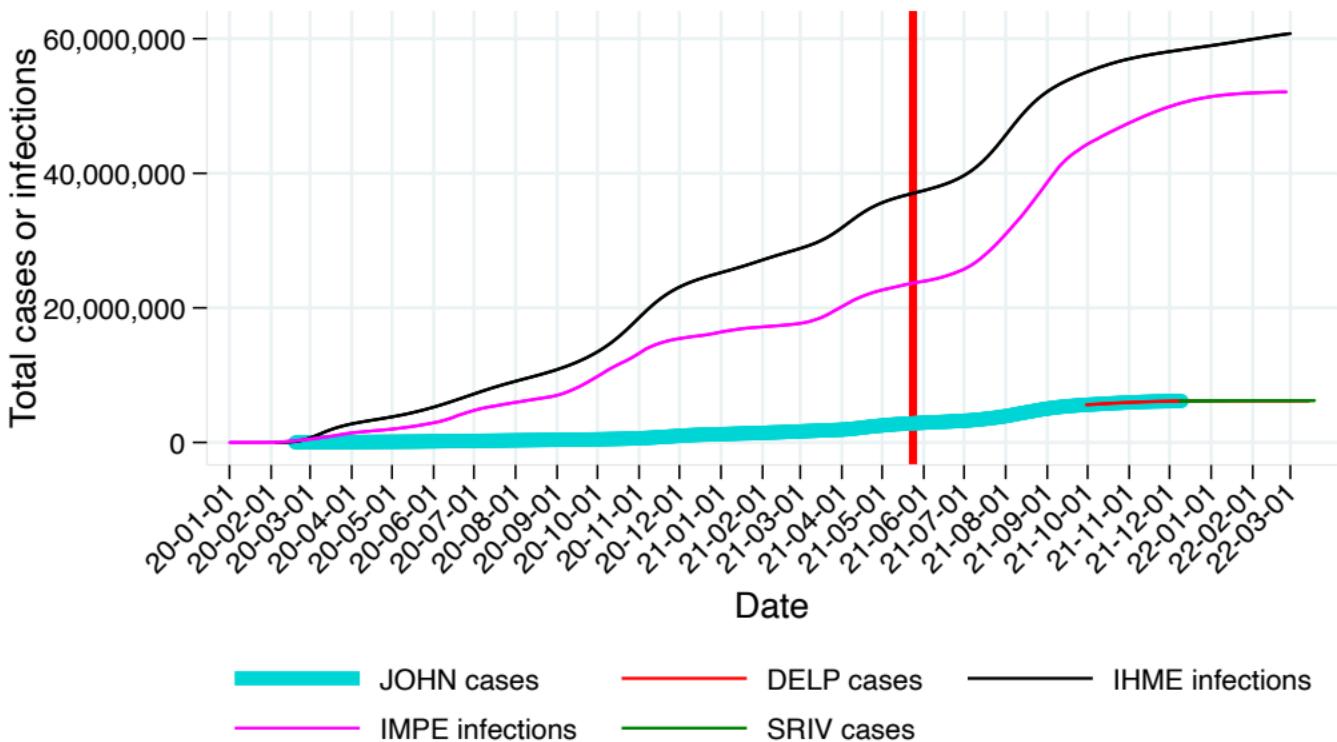
- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.
- Cyan line: 20210910; Travel restrictions to Iraq, surveillance of variants, inter alia, to delay and attenuate the SIXTH wave, Lambda, and +/- Mu, relayed to the new MOH.



- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.
- Cyan line: 20210910; Travel restrictions to Iraq, surveillance of variants, inter alia, to delay and attenuate the SIXTH wave, Lambda, and +/- Mu, relayed to the new MOH.

COVID-19 total cases or infections, Iran

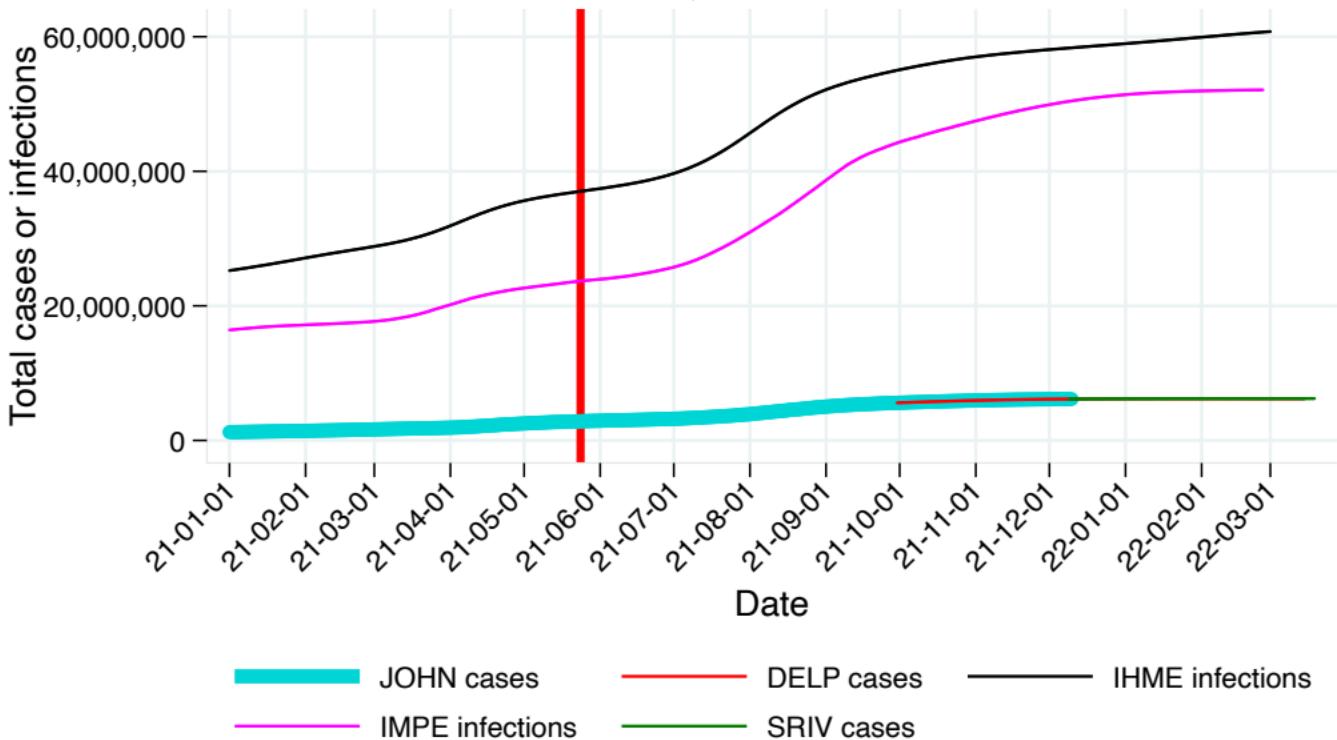
reference scenarios



- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.
- Cyan line: 20210910; Travel restrictions to Iraq, surveillance of variants, inter alia, to delay and attenuate the SIXTH wave, Lambda, and +/- Mu, relayed to the new MOH.

COVID-19 total cases or infections, Iran

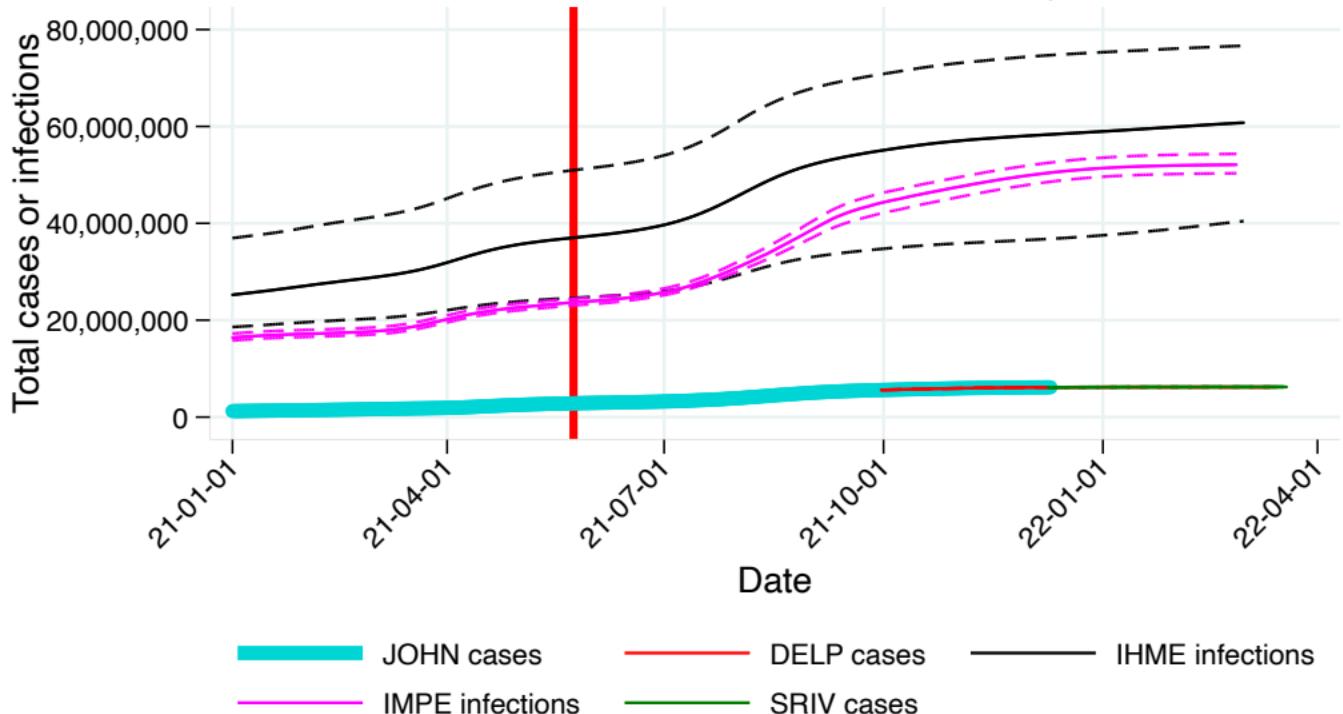
2021 on, reference scenarios



- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.
- Cyan line: 20210910; Travel restrictions to Iraq, surveillance of variants, inter alia, to delay and attenuate the SIXTH wave, Lambda, and +/- Mu, relayed to the new MOH.

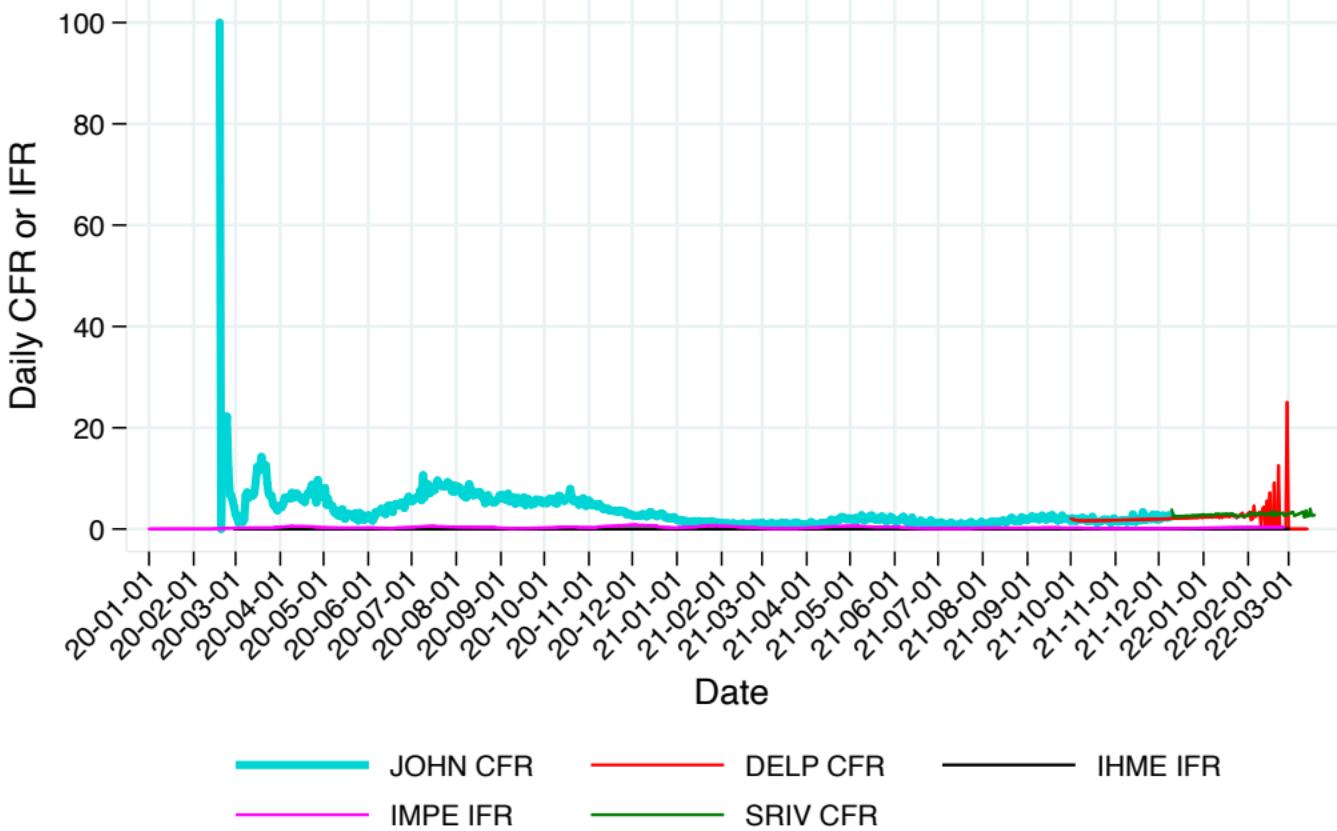
COVID-19 total cases or infections, Iran

2021 on, reference scenarios with uncertainty



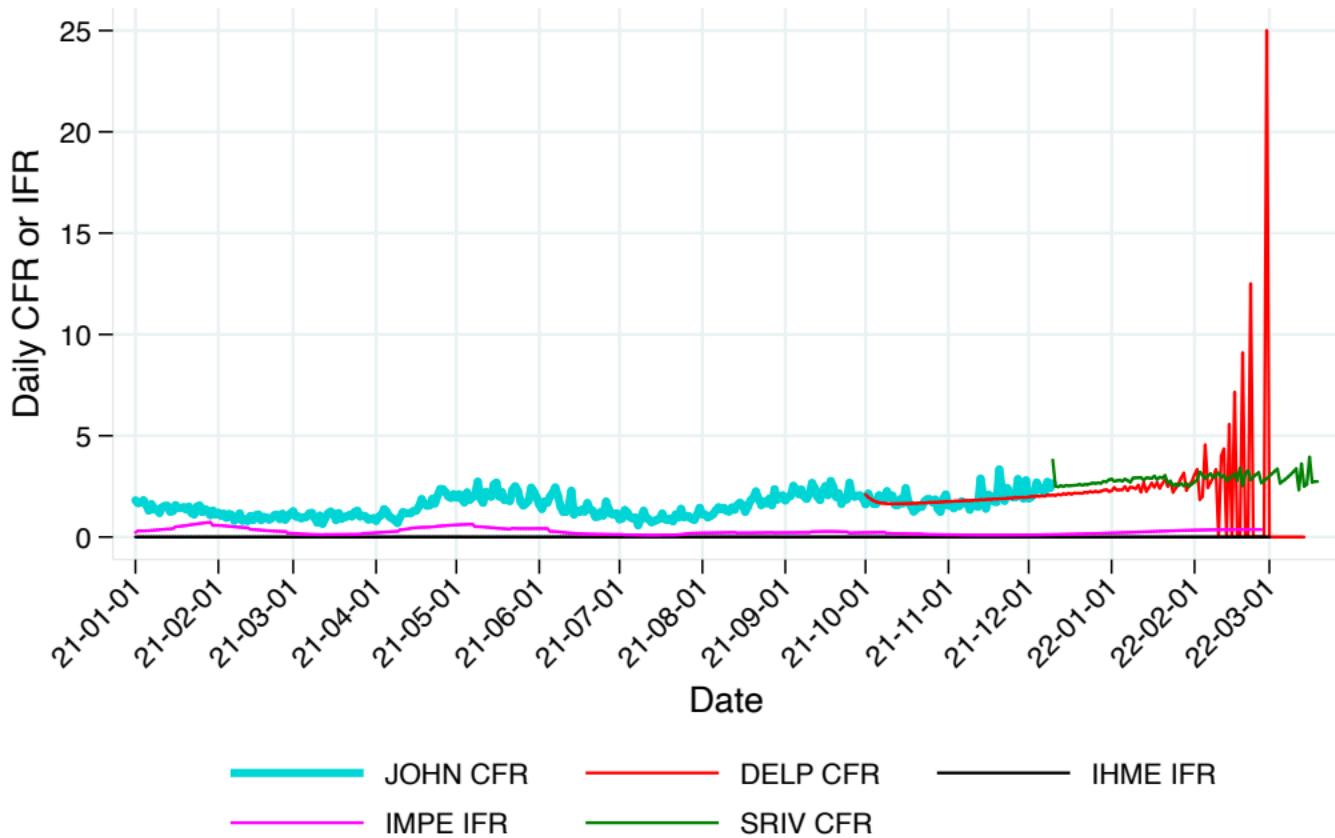
- Uncertainty limits: dashed curves.
- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.
- Cyan line: 20210910; Travel restrictions to Iraq, surveillance of variants, inter alia, to delay and attenuate the SIXTH wave, Lambda, and +/- Mu, relayed to the new MOH.

COVID-19 daily CFR or IFR, Iran

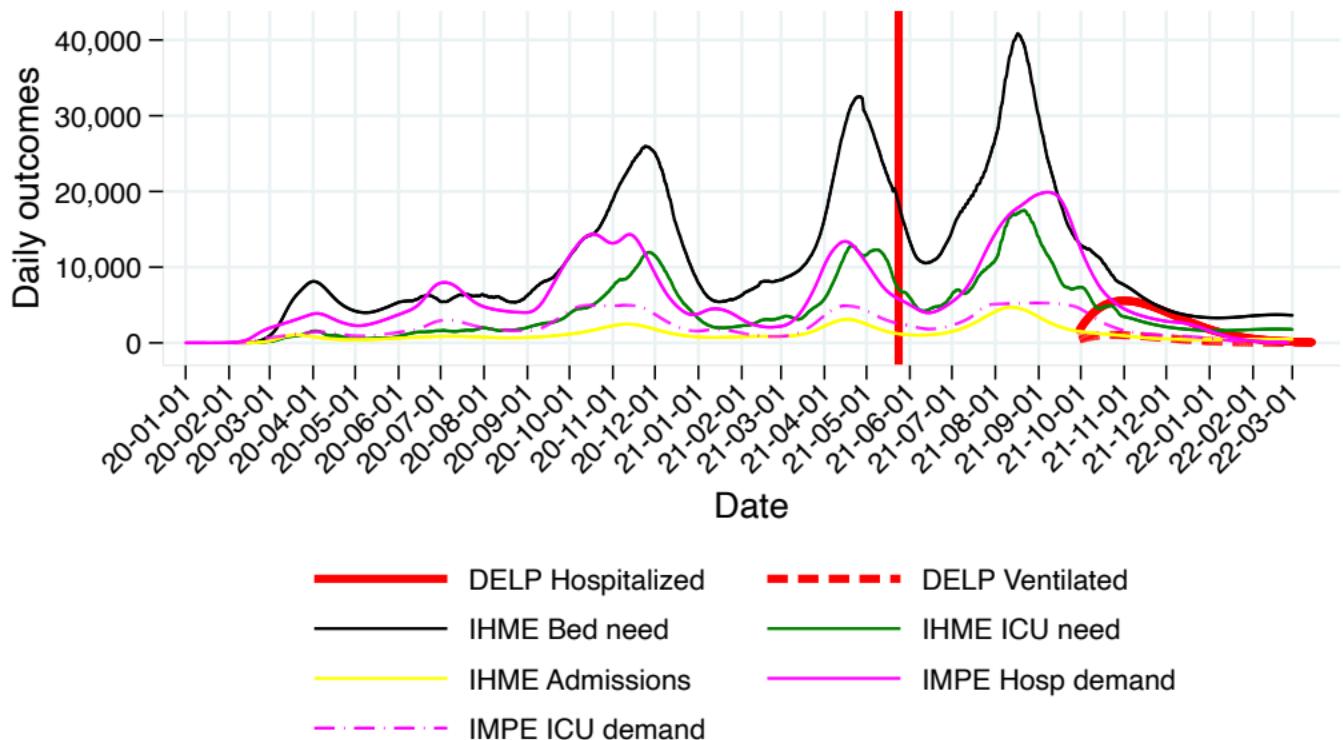


COVID-19 daily CFR or IFR, Iran

2021 on, reference scenarios

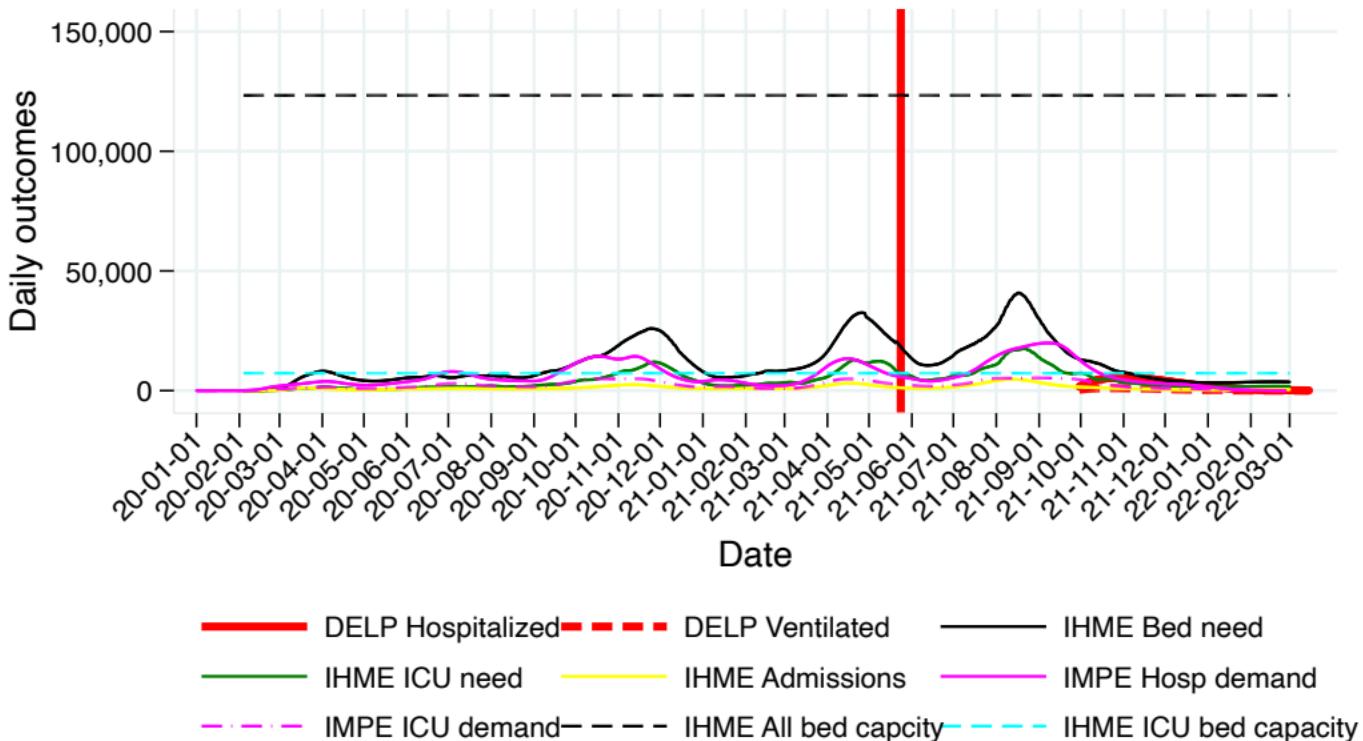


COVID-19 daily hospital-related outcomes Iran



- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.
- Cyan line: 20210910; Travel restrictions to Iraq, surveillance of variants, inter alia, to delay and attenuate the SIXTH wave, Lambda, and +/- Mu, relayed to the new MOH.

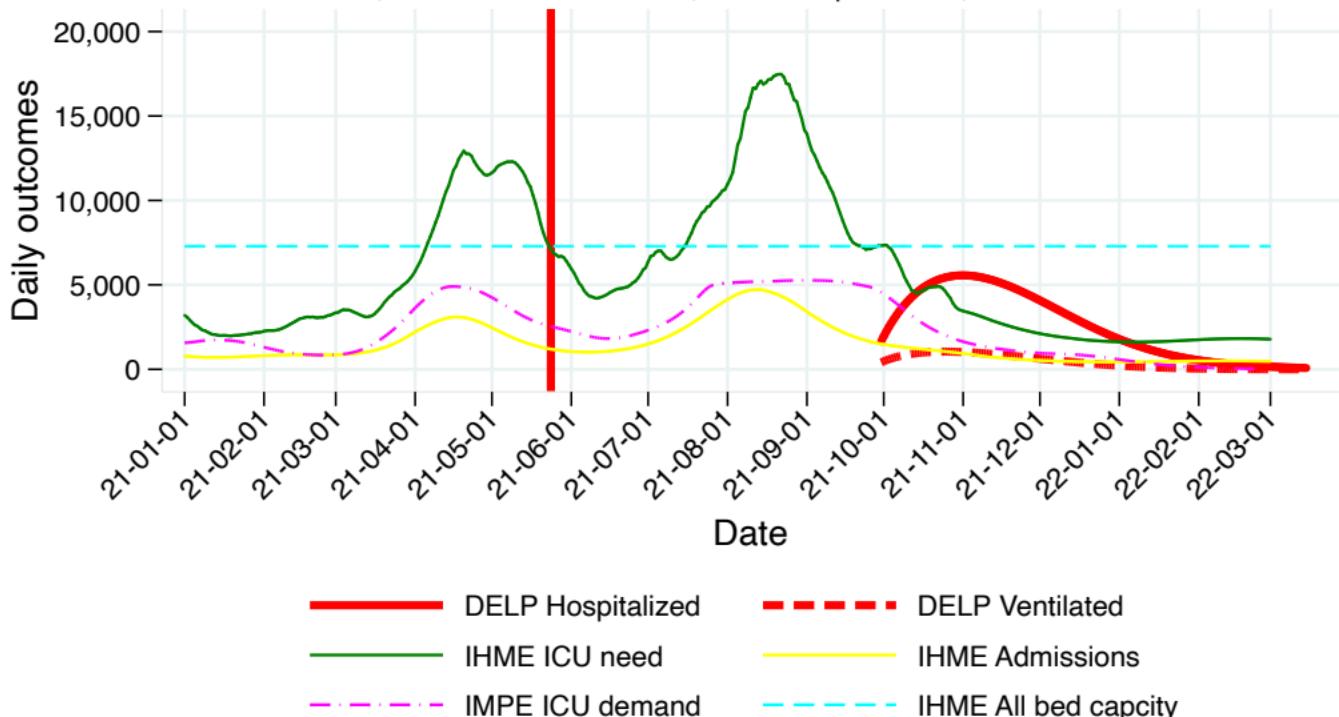
COVID-19 daily hospital-related outcomes Iran



- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.
- Cyan line: 20210910; Travel restrictions to Iraq, surveillance of variants, inter alia, to delay and attenuate the SIXTH wave, Lambda, and +/- Mu, relayed to the new MOH.

COVID-19 daily hospital-related outcomes Iran

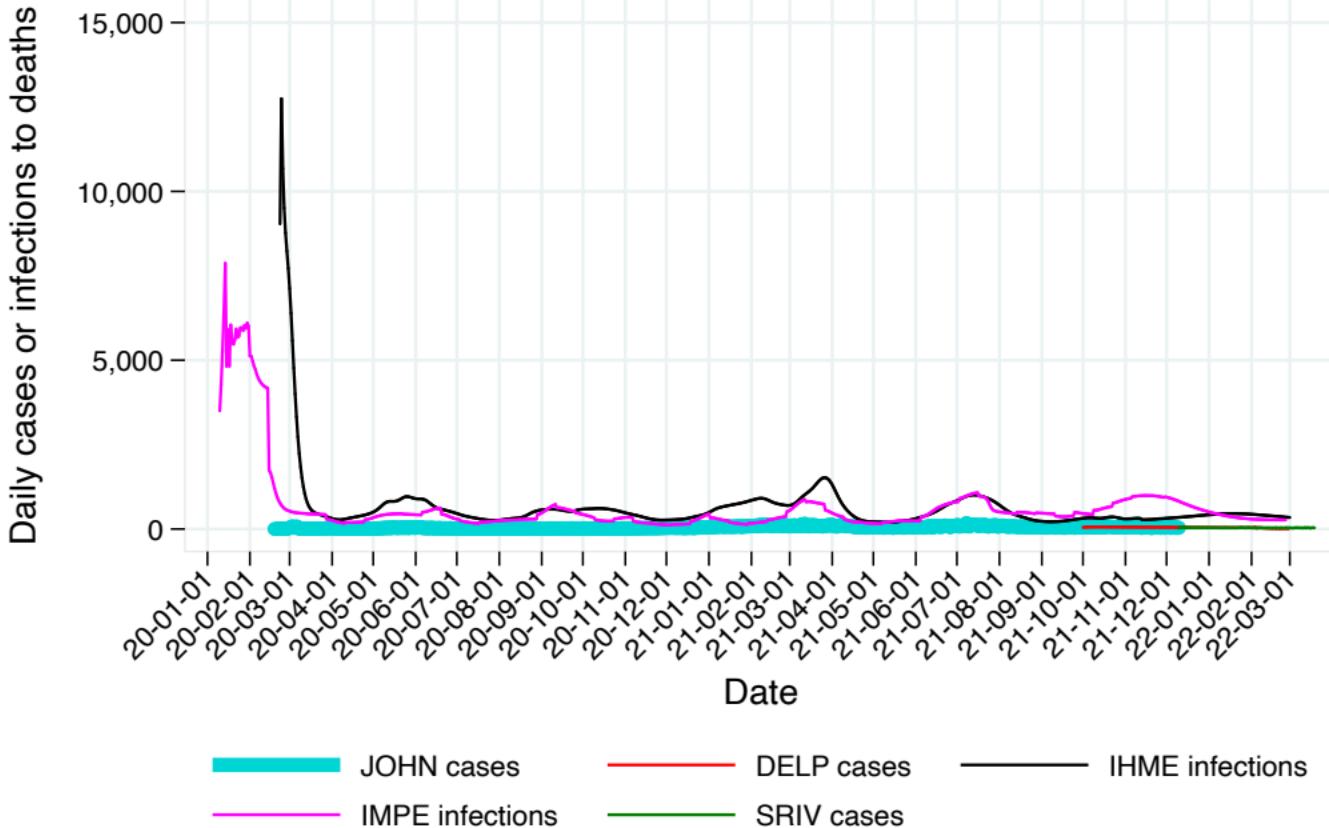
2021 on, without IHME Bed need, IMPE Hosp demand, reference scenarios



- Uncertainty limits: dashed curves.
- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.
- Cyan line: 20210910; Travel restrictions to Iraq, surveillance of variants, inter alia, to delay and attenuate the SIXTH wave, Lambda, and +/- Mu, relayed to the new MOH.

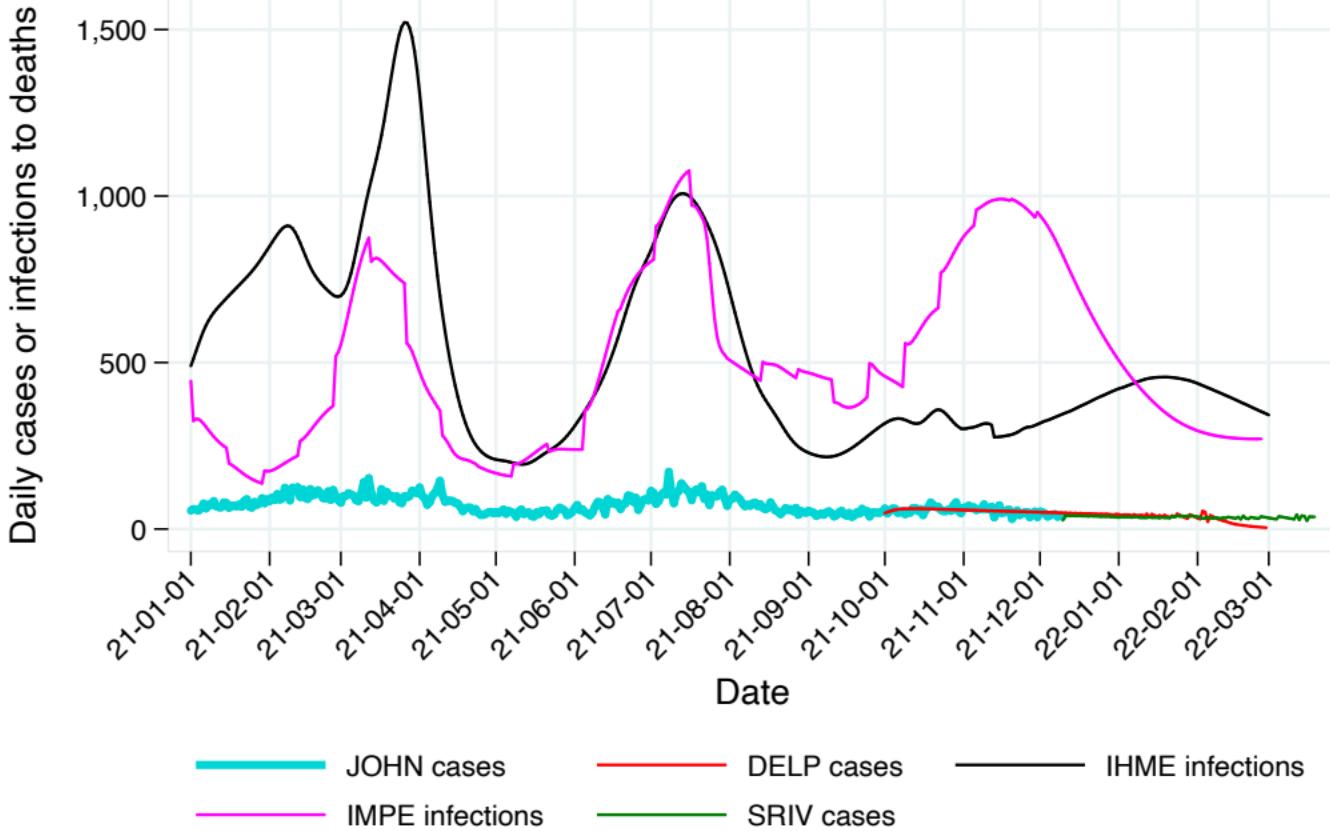
COVID-19 daily cases or infections, to deaths, Iran

reference scenarios



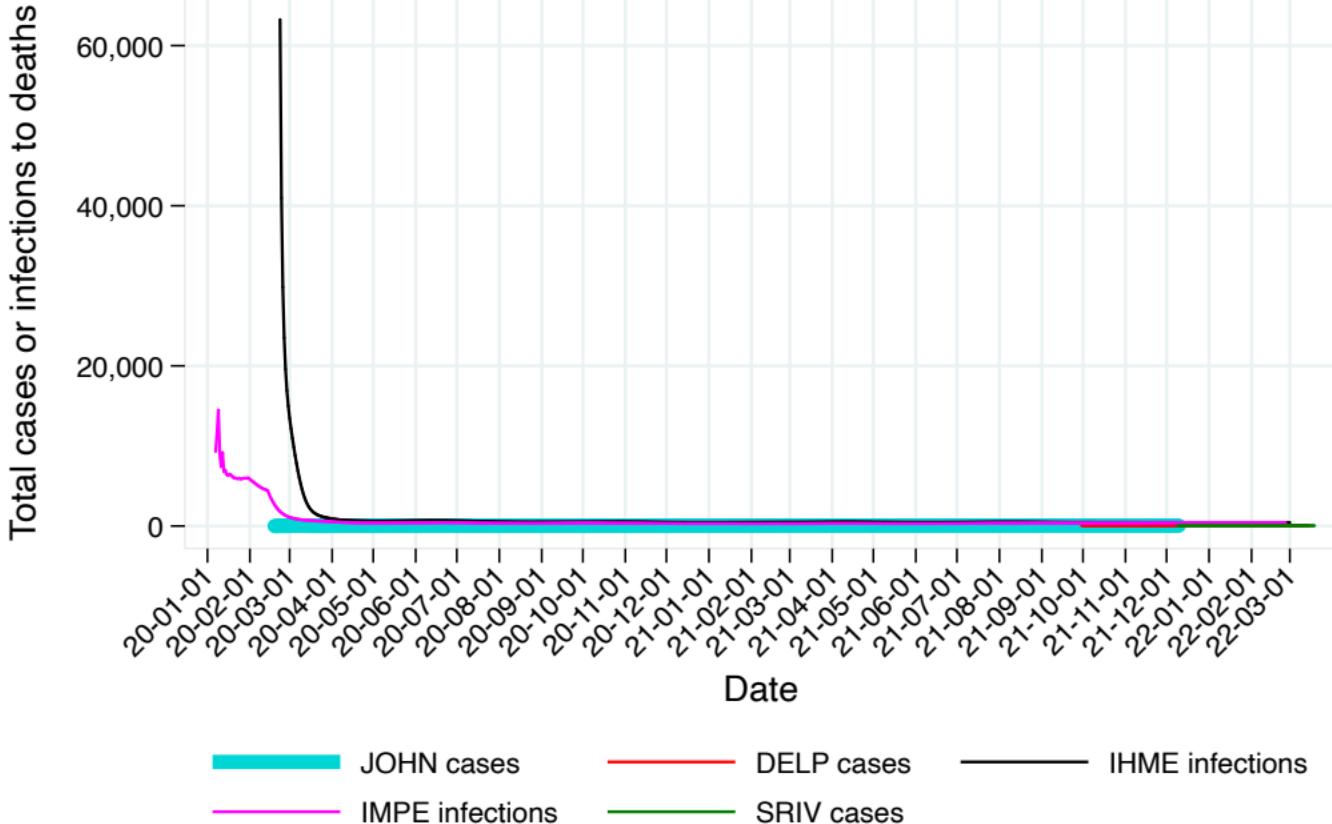
COVID-19 daily cases or infections, to deaths, Iran

2021 on, reference scenarios



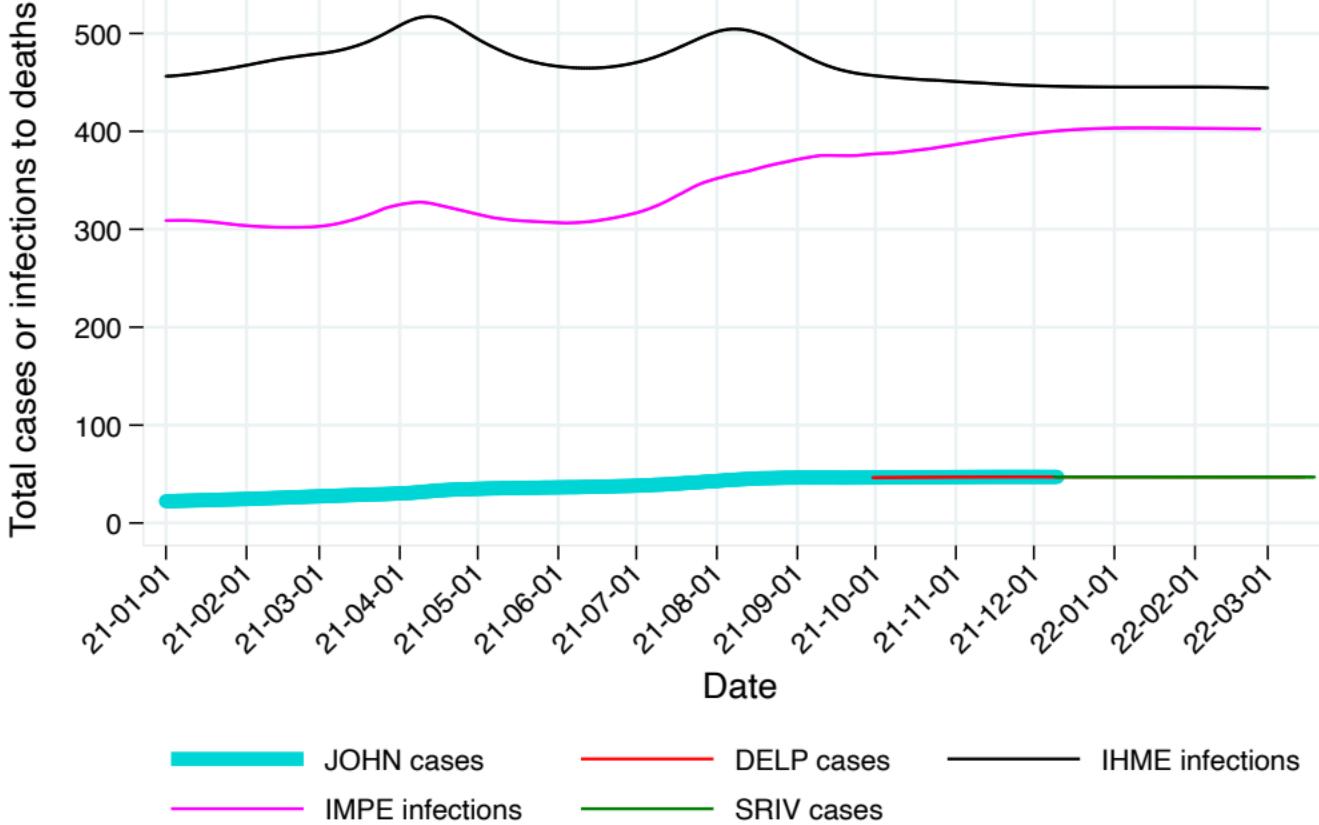
COVID-19 total cases or infections, to deaths, Iran

reference scenarios



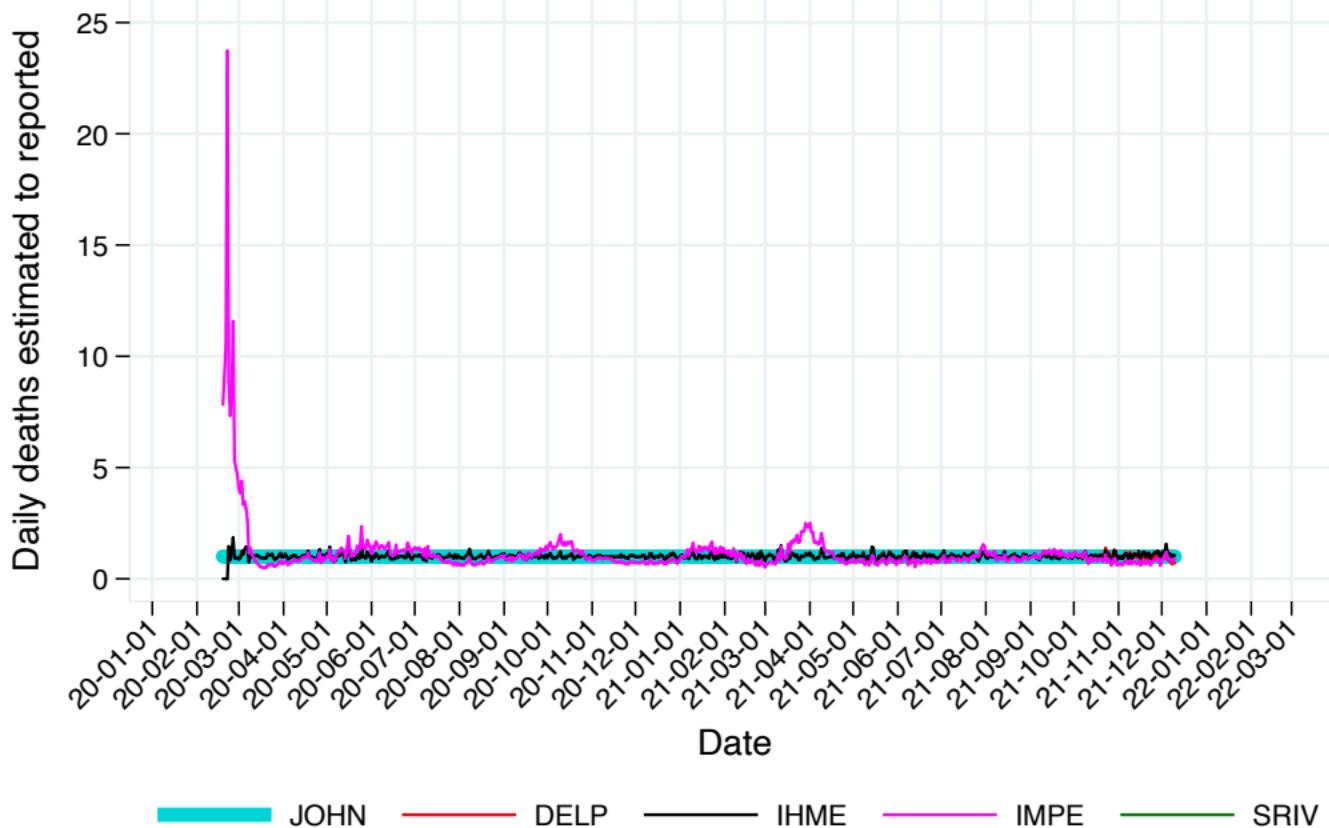
COVID-19 total cases or infections, to deaths, Iran

2021 on, reference scenarios



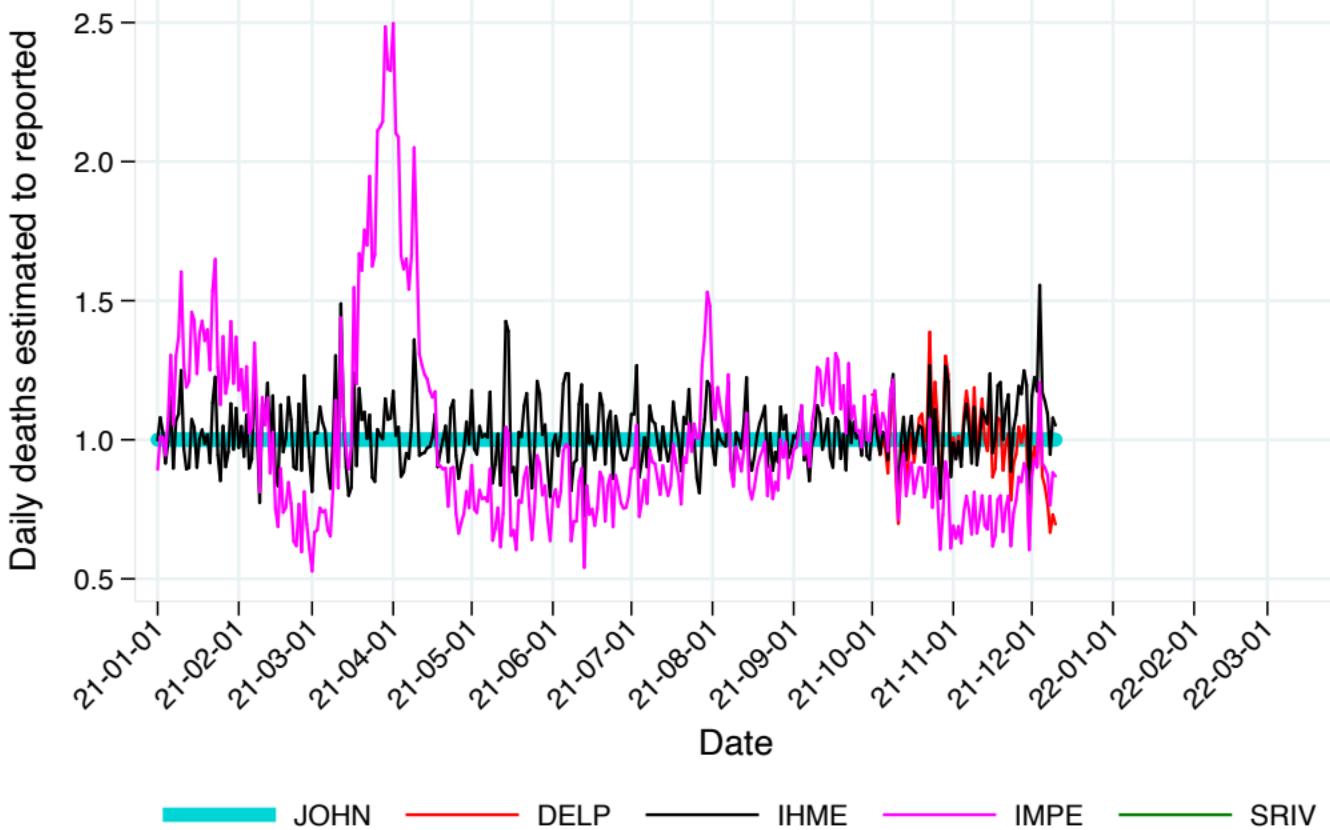
COVID-19 daily deaths, estimated to reported, Iran

reference scenarios



COVID-19 daily deaths, estimated to reported, Iran

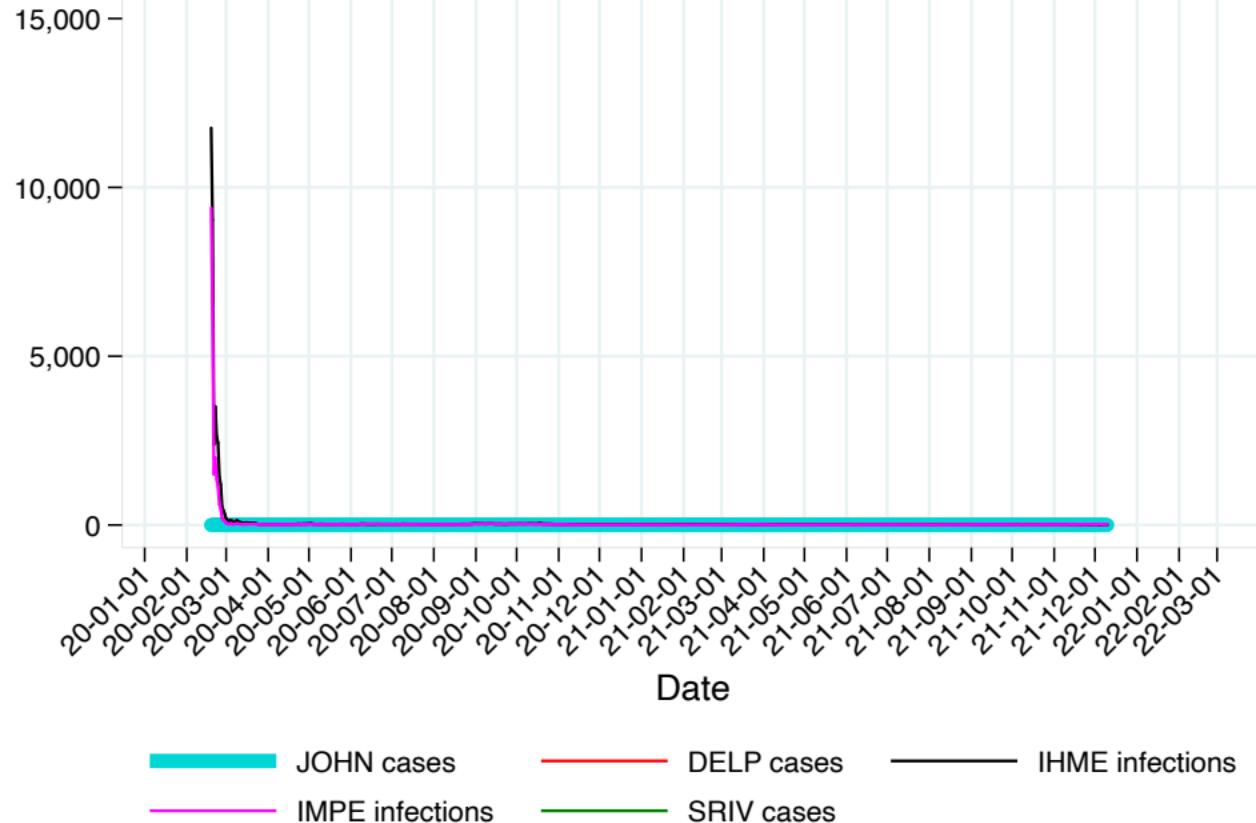
reference scenarios



Daily cases or infections estimated to reported

COVID-19 daily cases estimated to reported, Iran

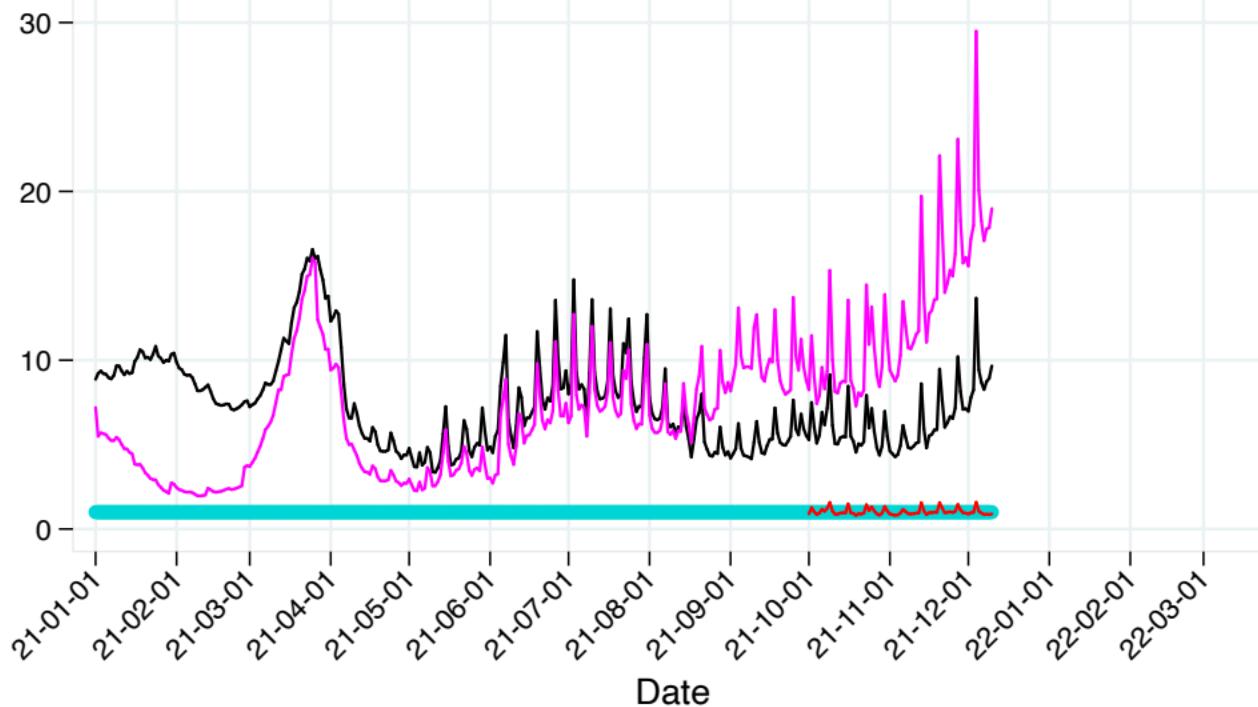
daily cases or infections estimated, to reported cases; reference scenarios



Daily cases or infections estimated to reported

COVID-19 daily cases estimated to reported, Iran

daily cases or infections estimated, to reported cases; reference scenarios



JOHN cases



IMPE infections



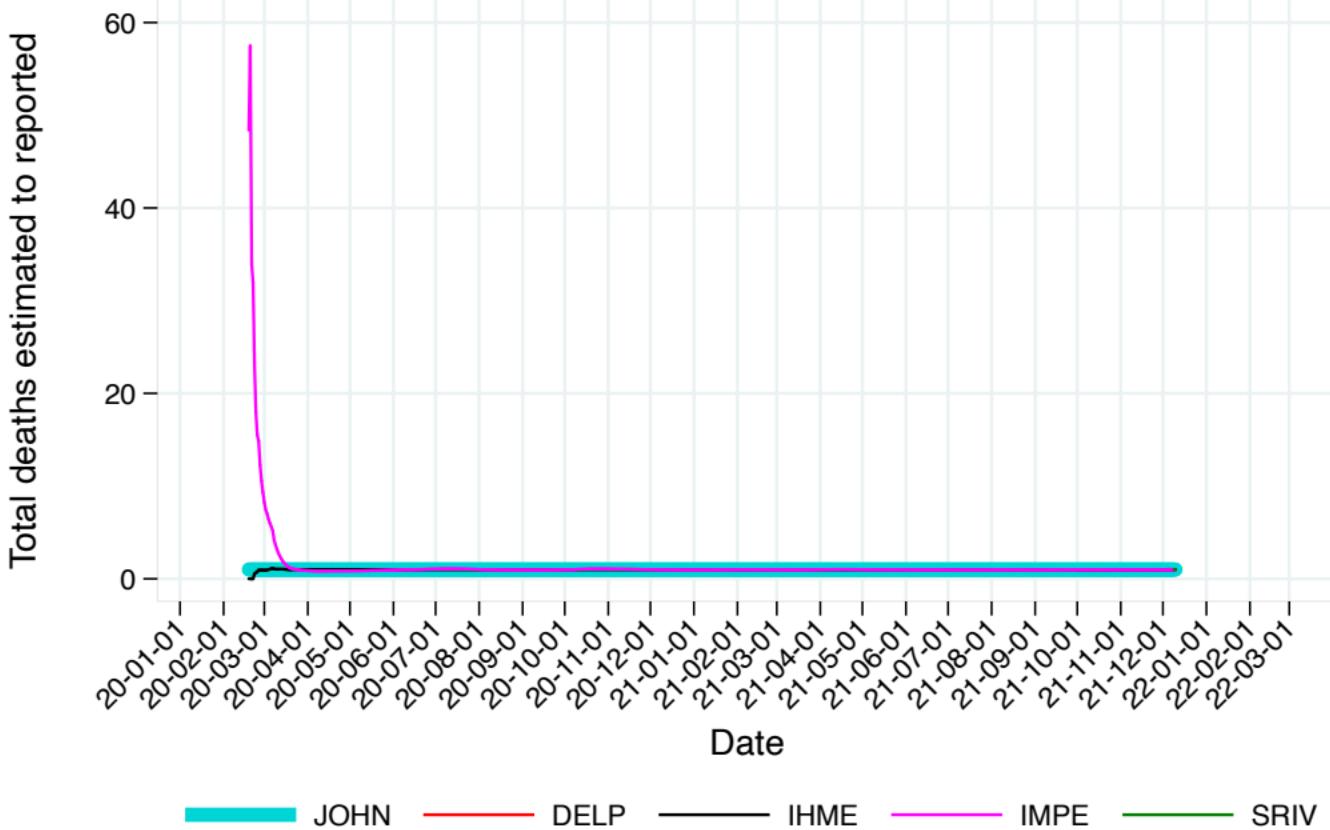
SRIV cases



IHME infections

COVID-19 total deaths, estimated to reported, Iran

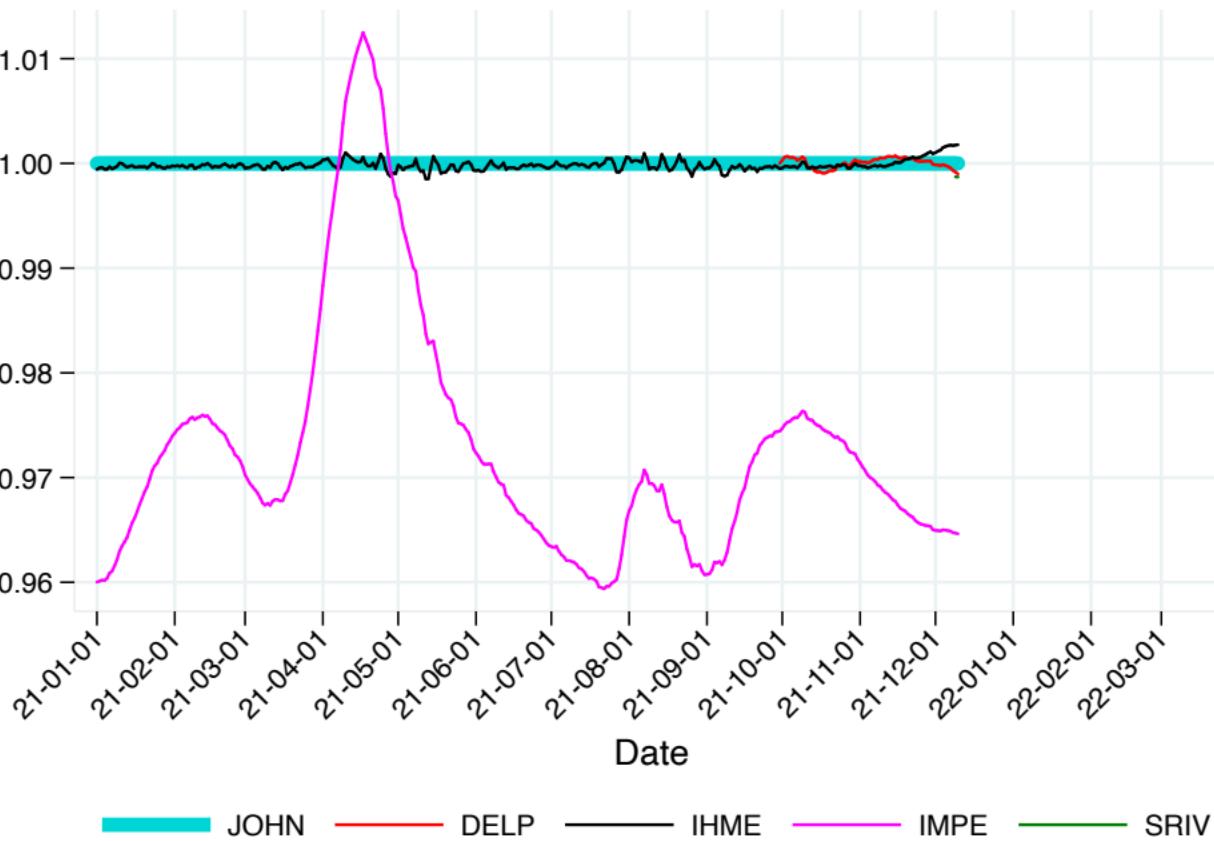
reference scenarios



COVID-19 total deaths, estimated to reported, Iran

reference scenarios

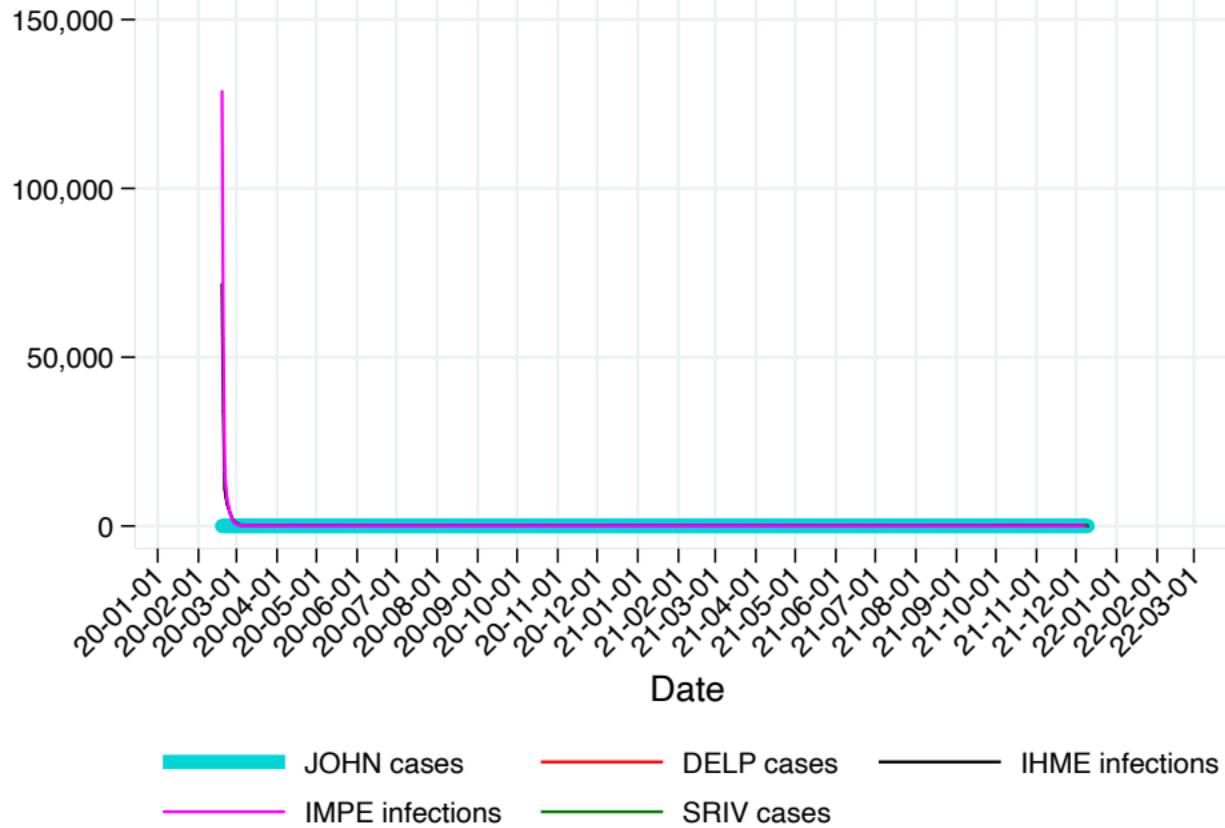
Total deaths estimated to reported



Total cases or infections estimated to reported

COVID-19 total cases estimated to reported, Iran

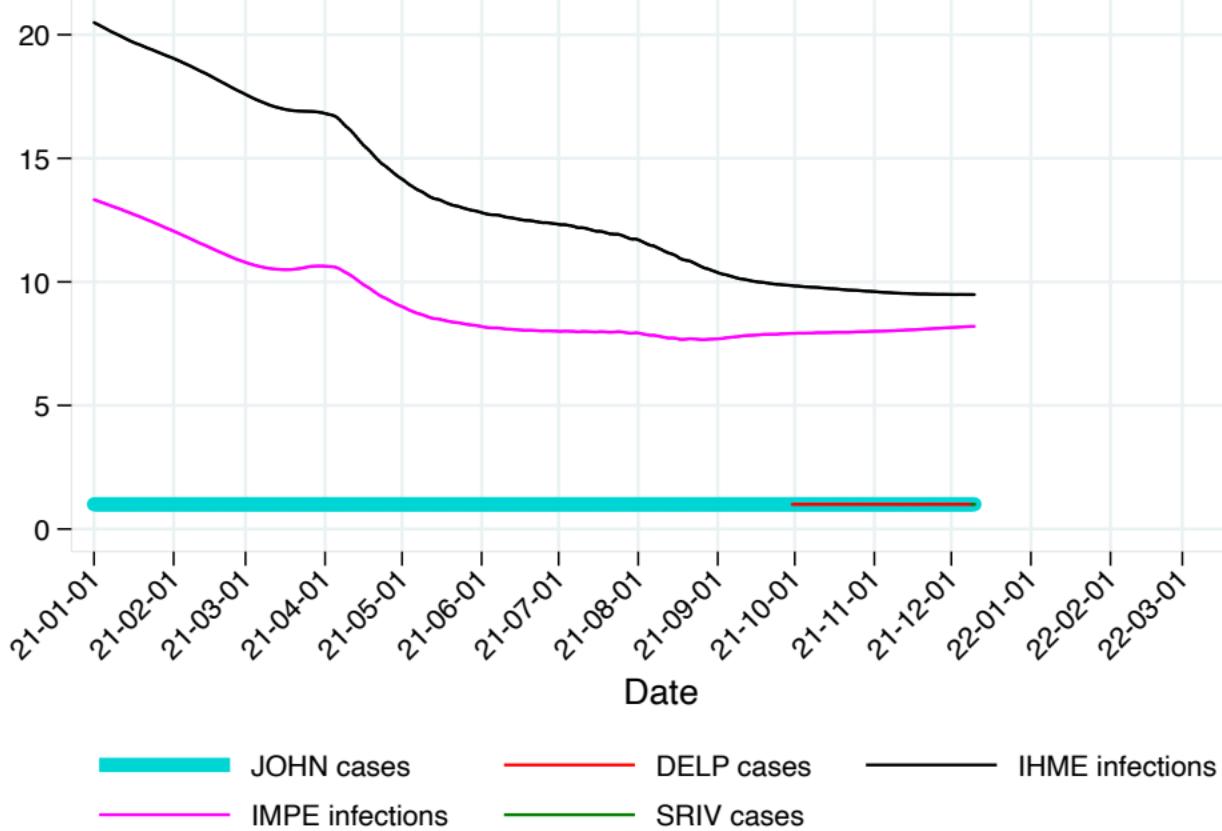
total cases or infections estimated, to reported cases; reference scenarios



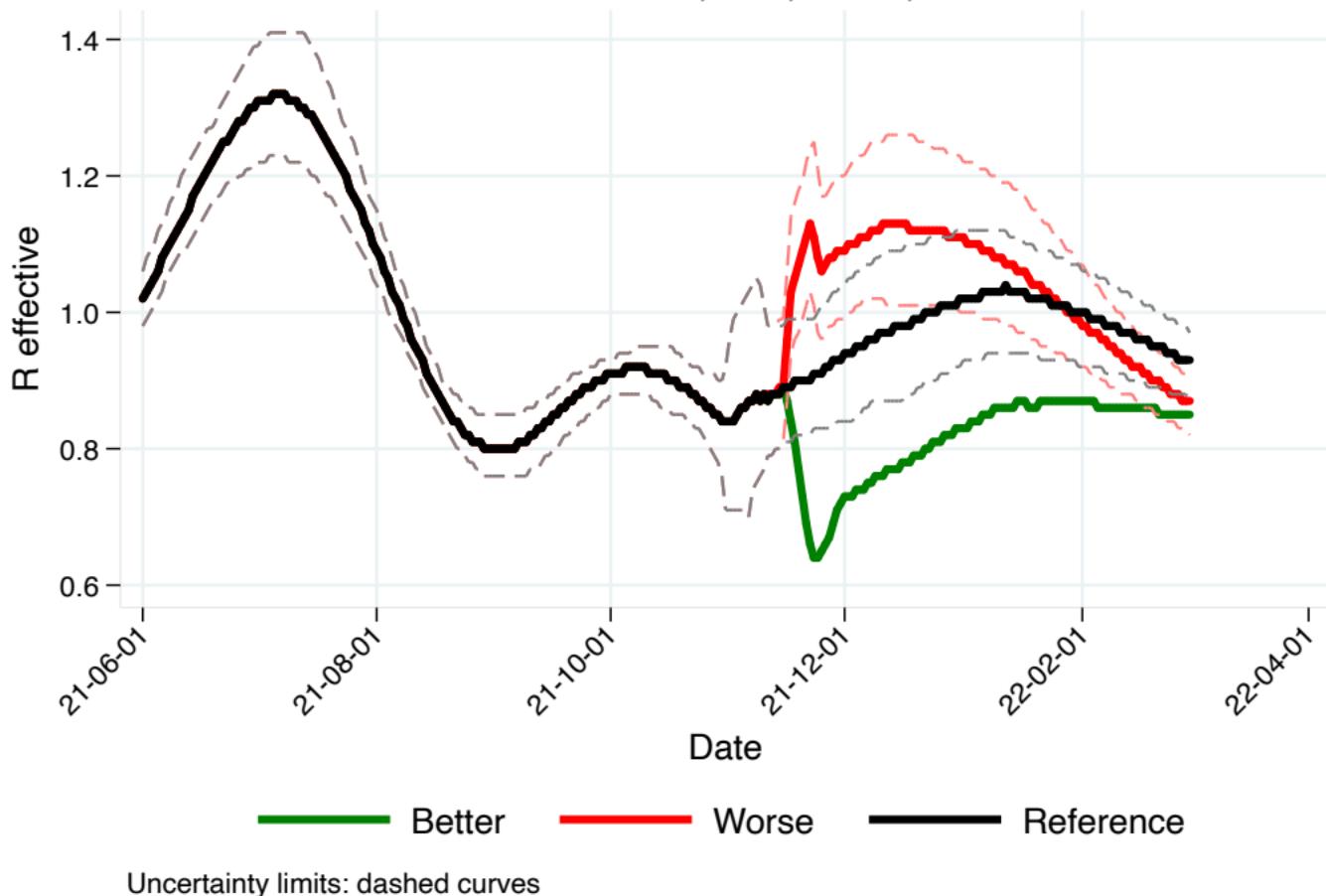
Total cases or infections estimated to reported

COVID-19 total cases estimated to reported, Iran

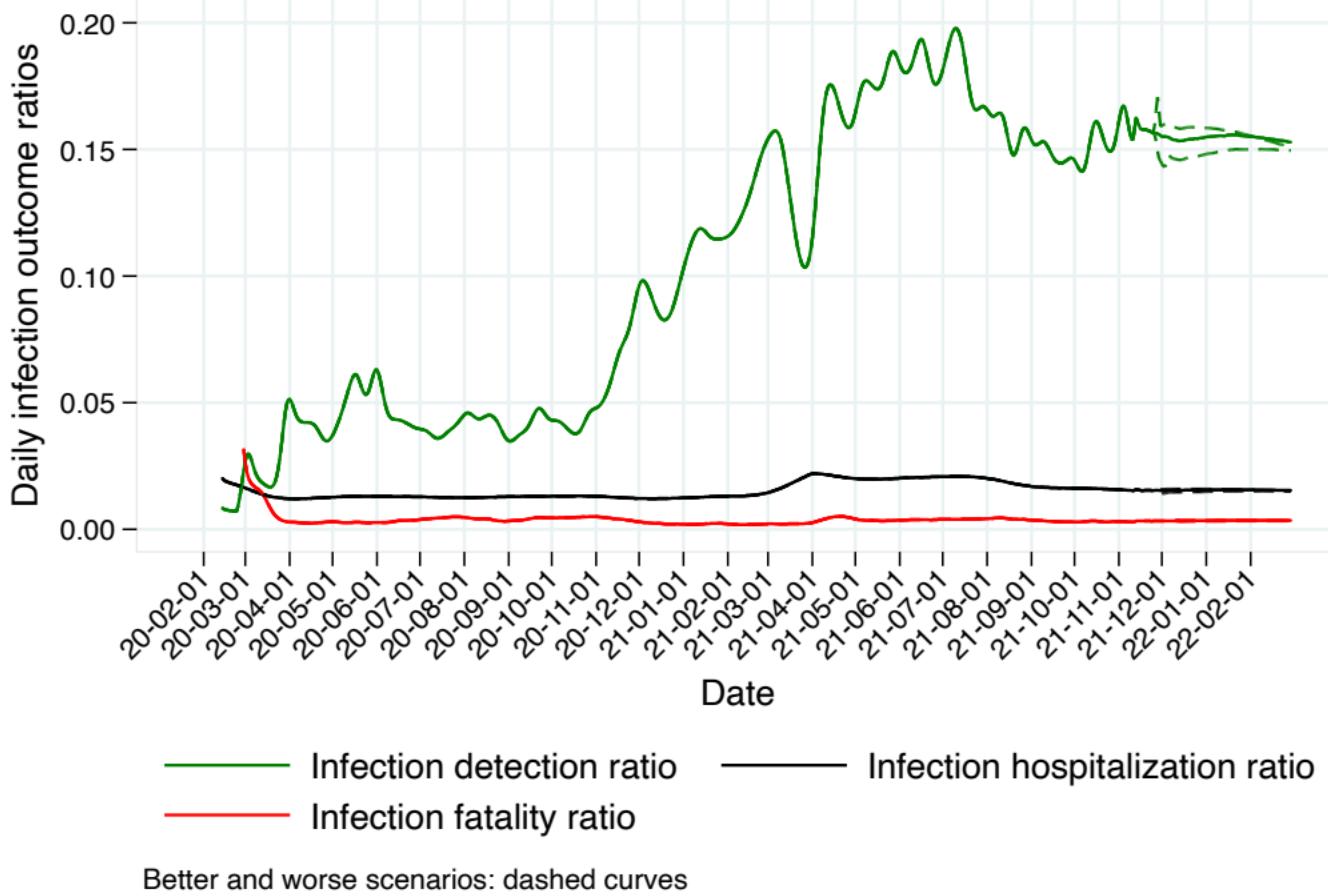
total cases or infections estimated, to reported cases; reference scenarios



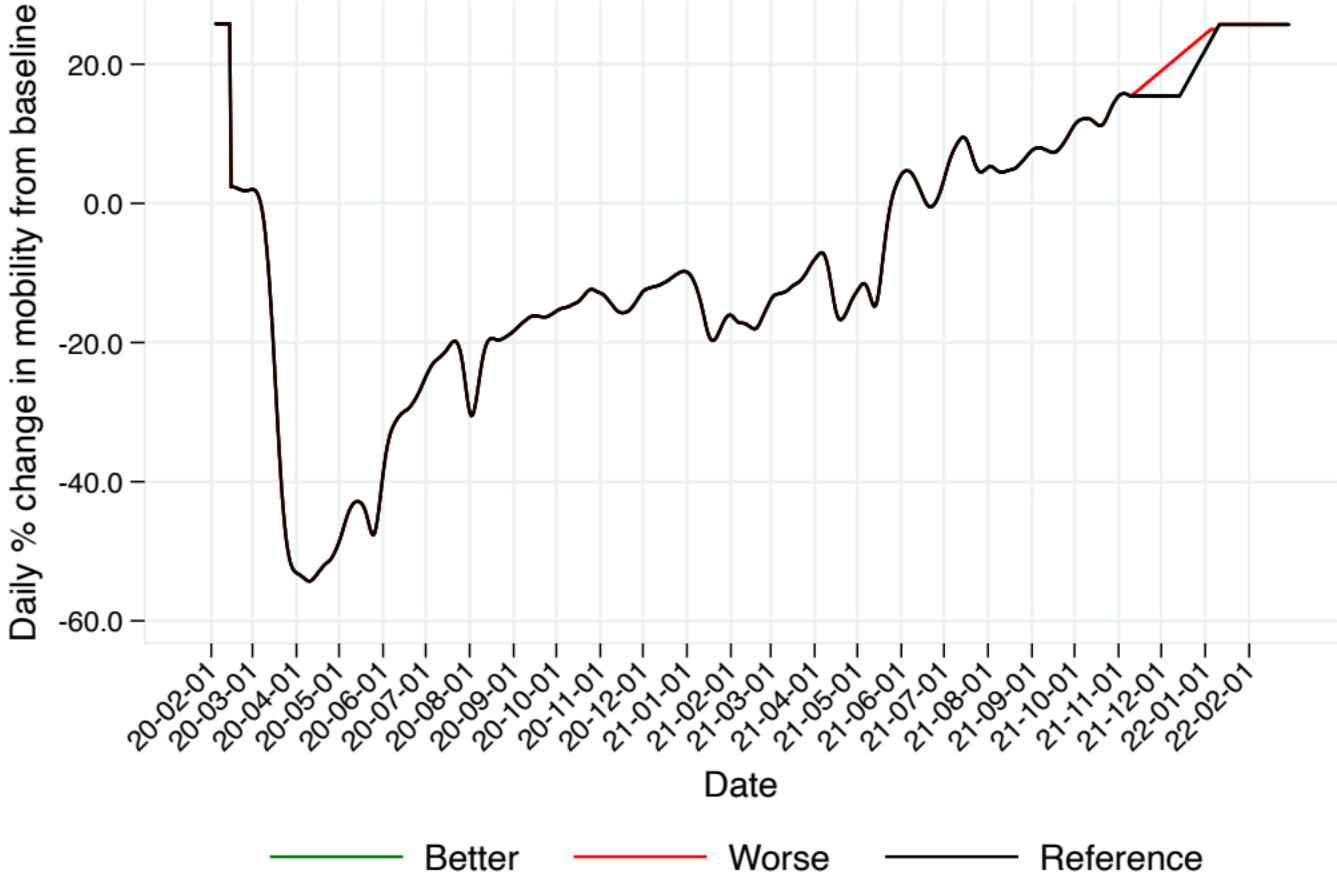
COVID-19 R effective, Iran, IHME, 3 scenarios



COVID-19 daily infection outcome ratios, Iran, IHME, 3 scenarios

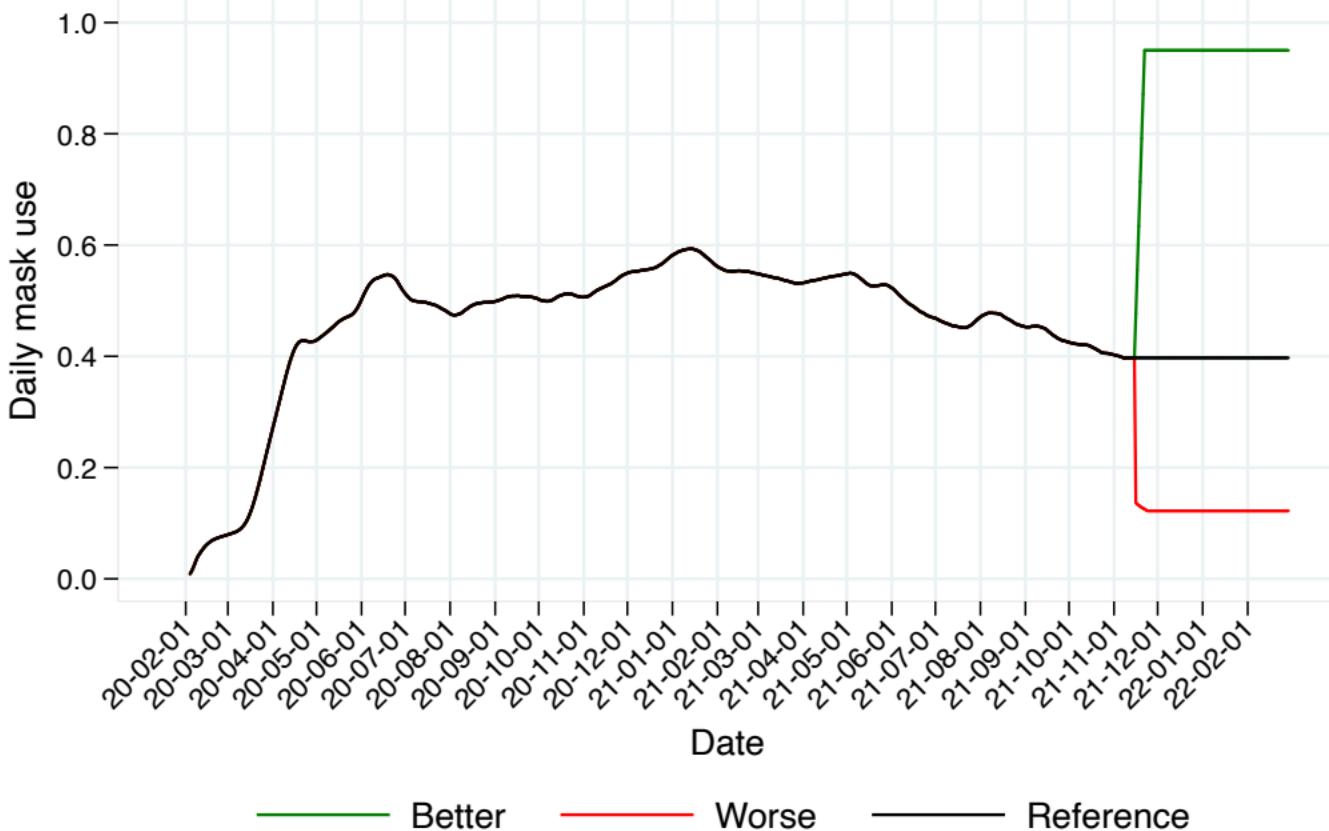


COVID-19 daily % change in mobility, Iran, IHME, 3 scenarios

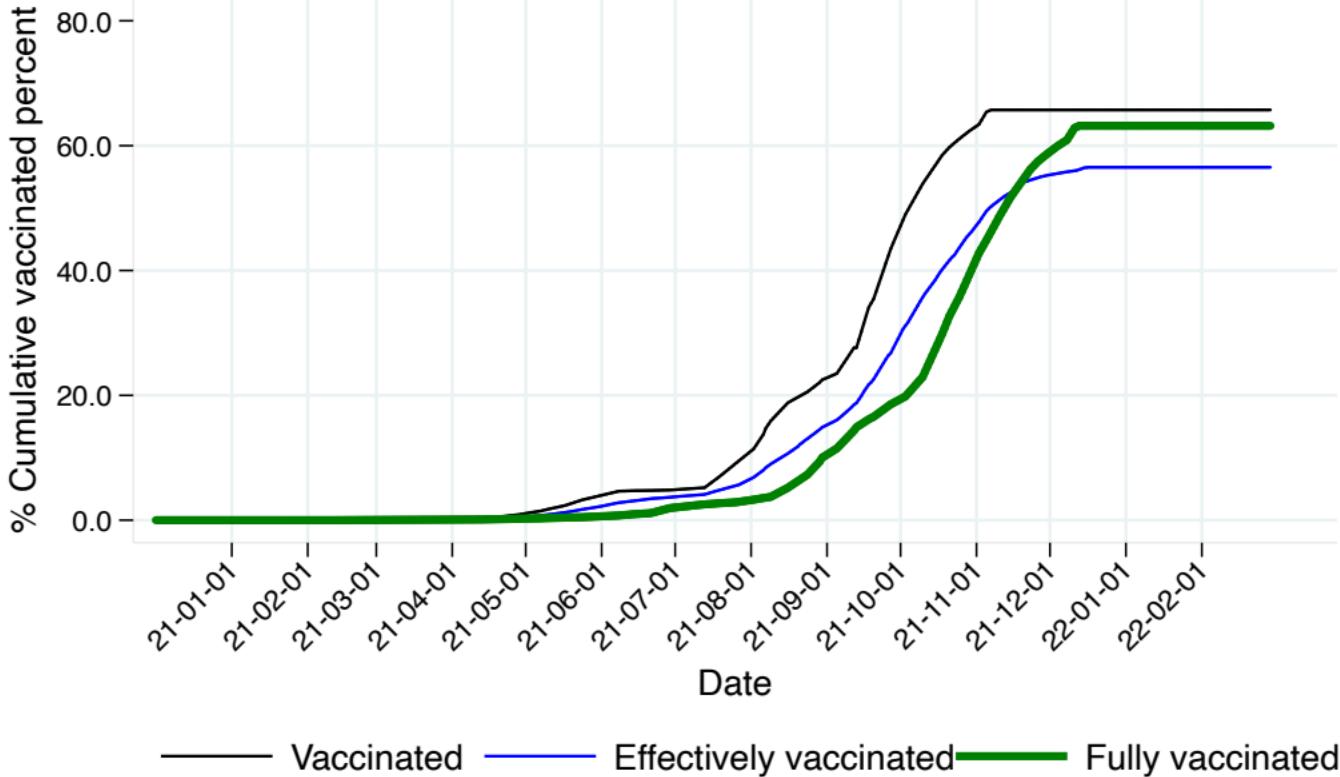


COVID-19 daily mask use, Iran, IHME, 3 scenarios

Percent of population reporting always wearing a mask when leaving home

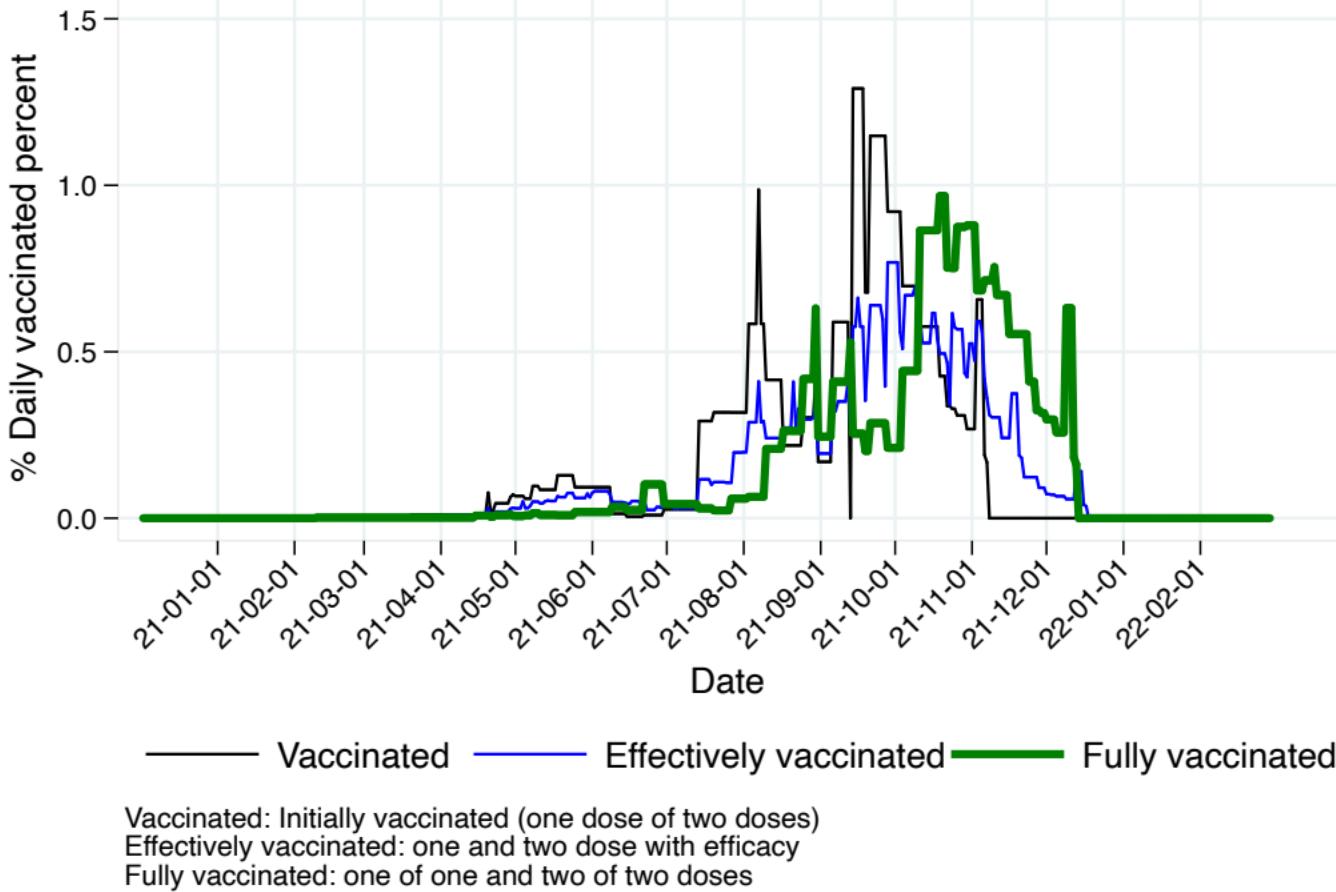


COVID-19 cumulative vaccinated percent, Iran, IHME, 3 scenarios

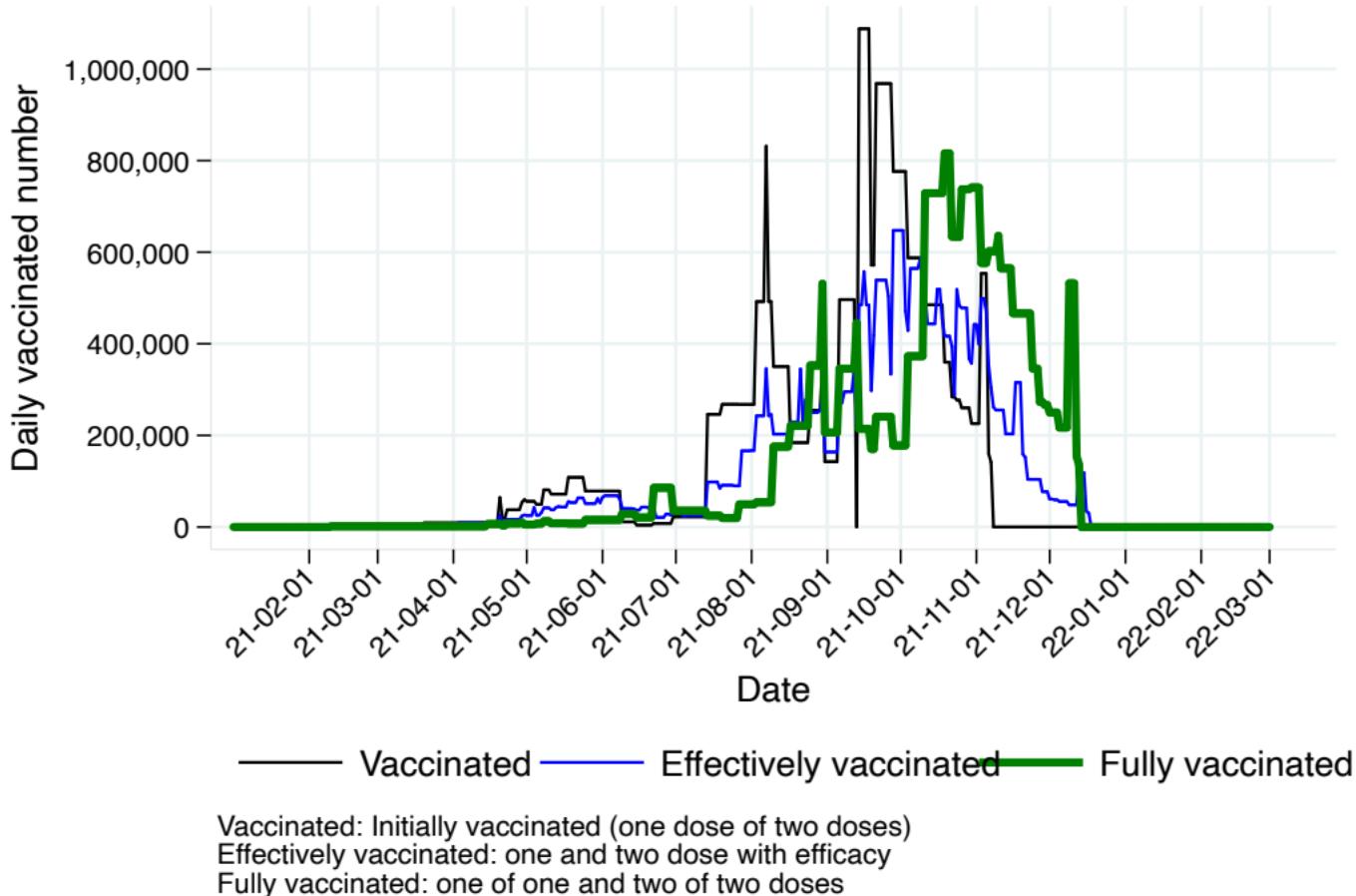


Vaccinated: Initially vaccinated (one dose of two doses)
Effectively vaccinated: one and two dose with efficacy
Fully vaccinated: one or two of two doses

COVID-19 daily vaccinated percent, Iran, IHME, 3 scenarios

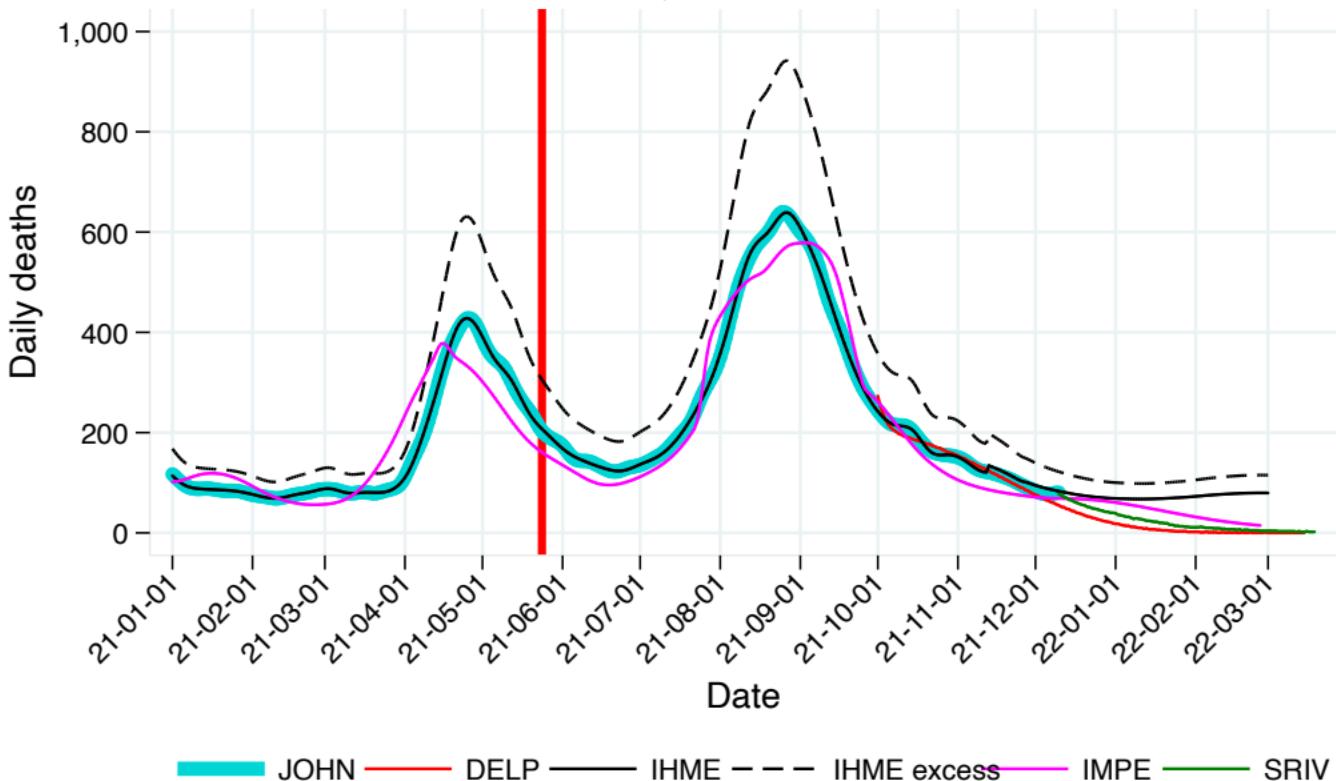


COVID-19 daily vaccinated number, Iran, IHME, 3 scenarios

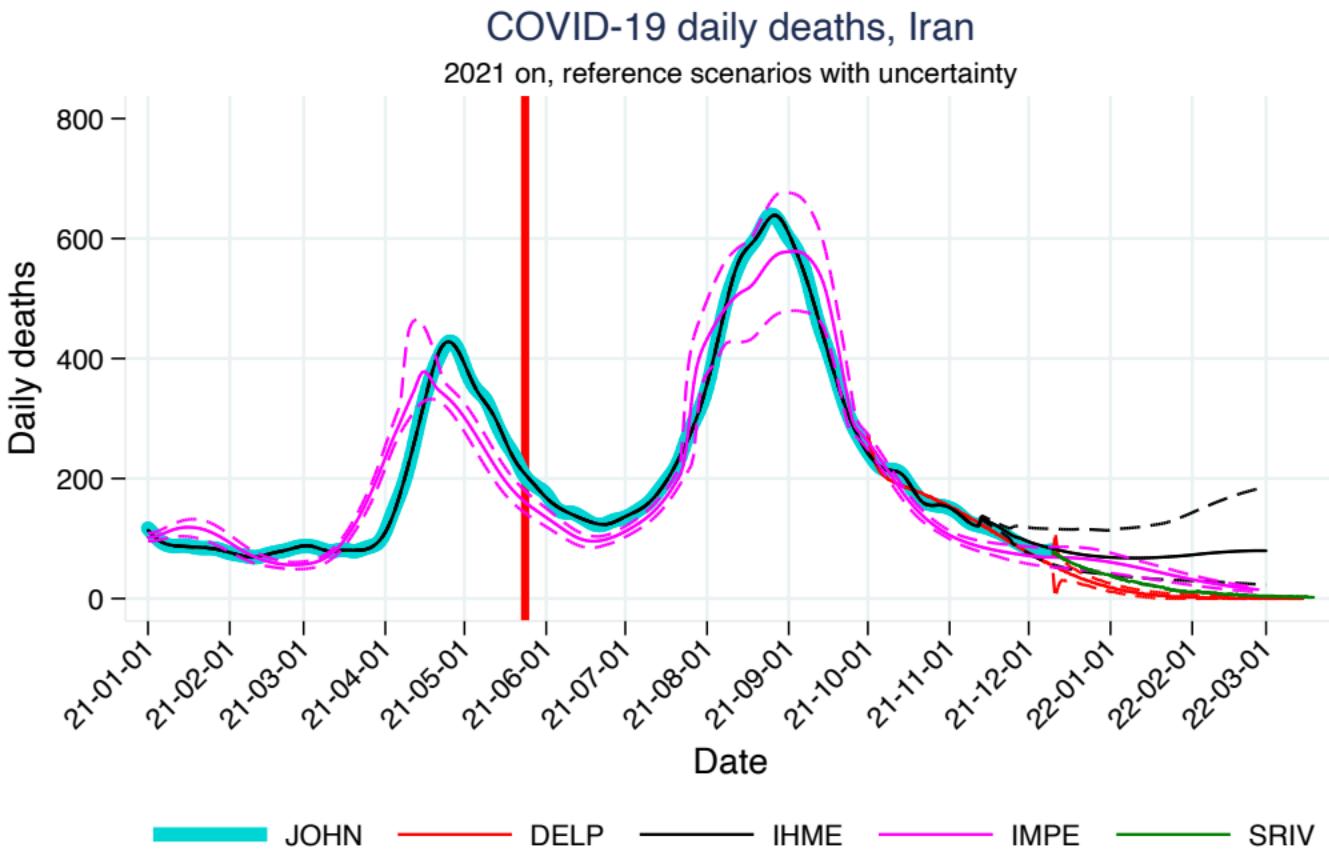


COVID-19 daily deaths, Iran

2021 on, reference scenarios



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

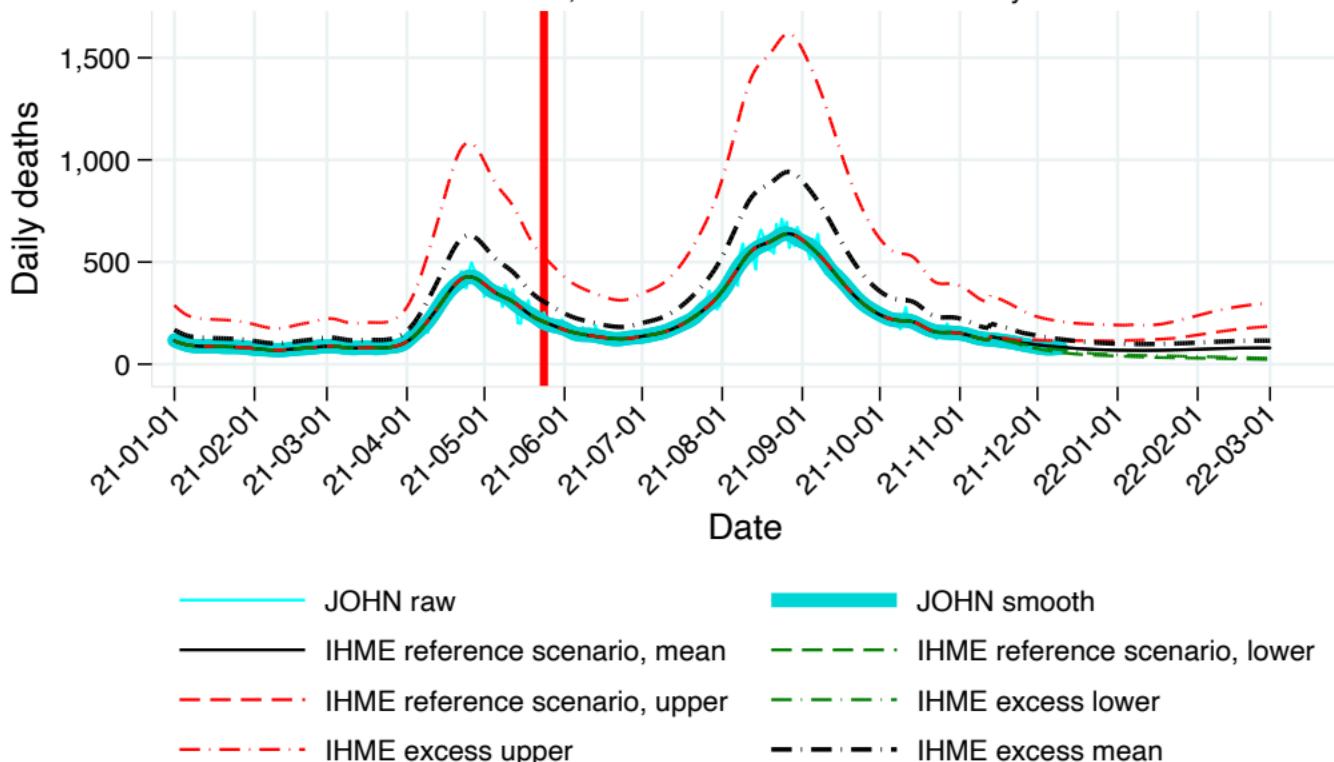


- Uncertainty limits: dashed curves

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

COVID-19 daily deaths, Iran, IHME

2021 on, reference scenario with uncertainty

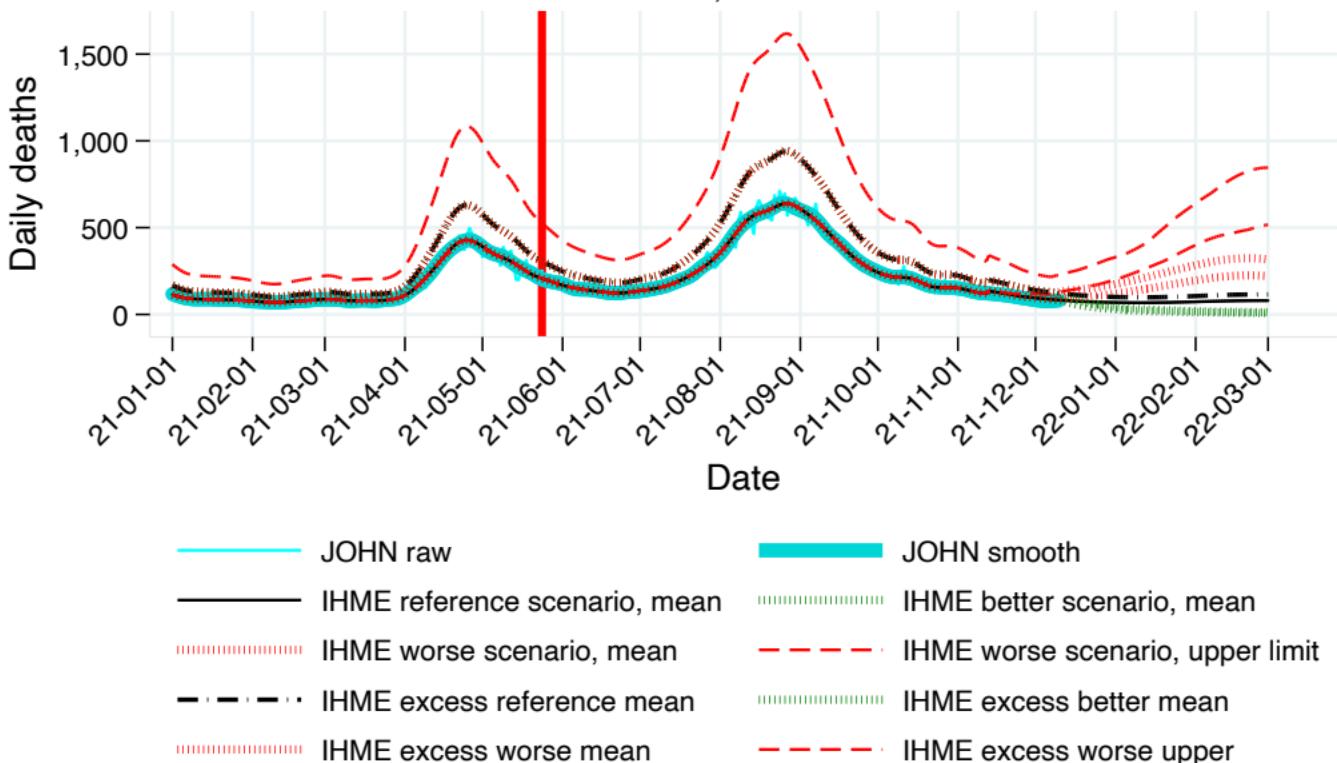


- Uncertainty limits: dashed (---) curves

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

COVID-19 daily deaths, Iran, IHME

2021 on, 3 scenarios

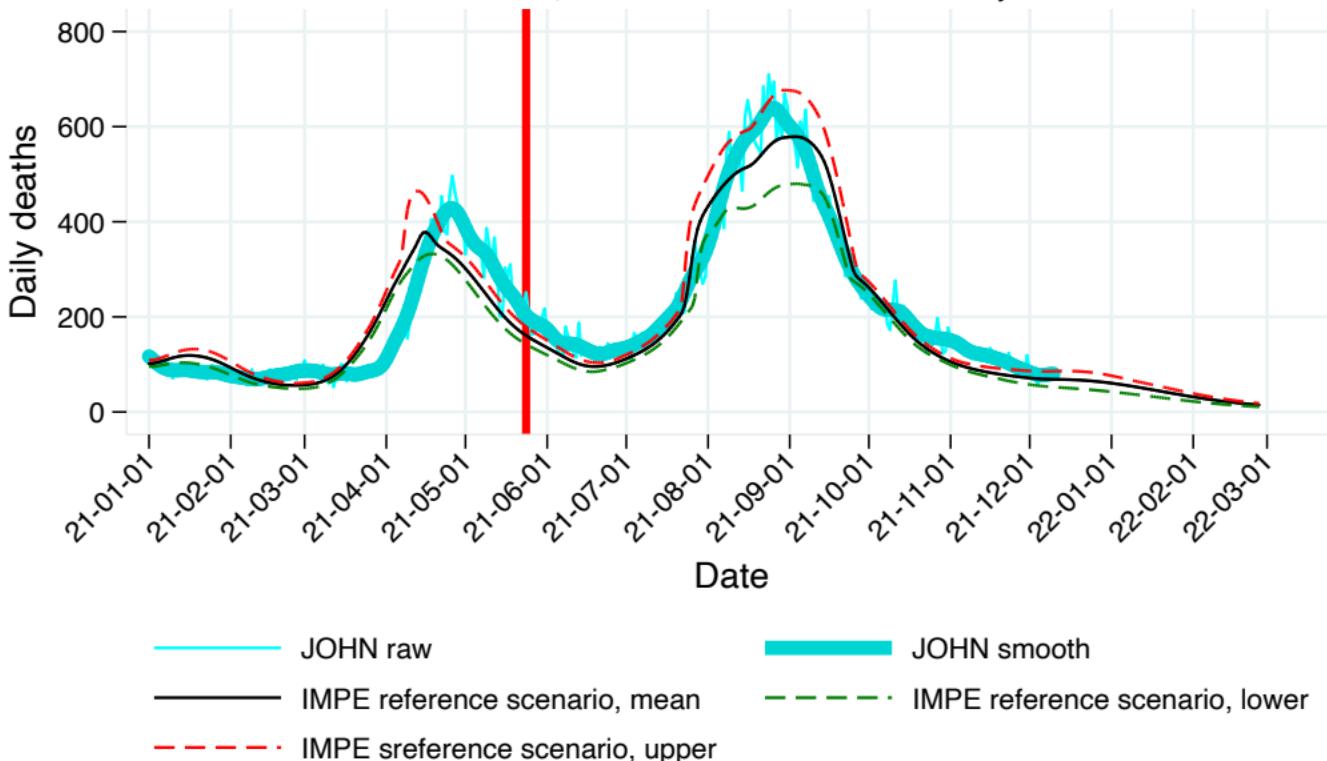


- Better and worse scenarios: tight dot (||||) curves; Uncertainty limits: dashed (---) curves.

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

COVID-19 daily deaths, Iran, IMPE

2021 on, reference scenario with uncertainty

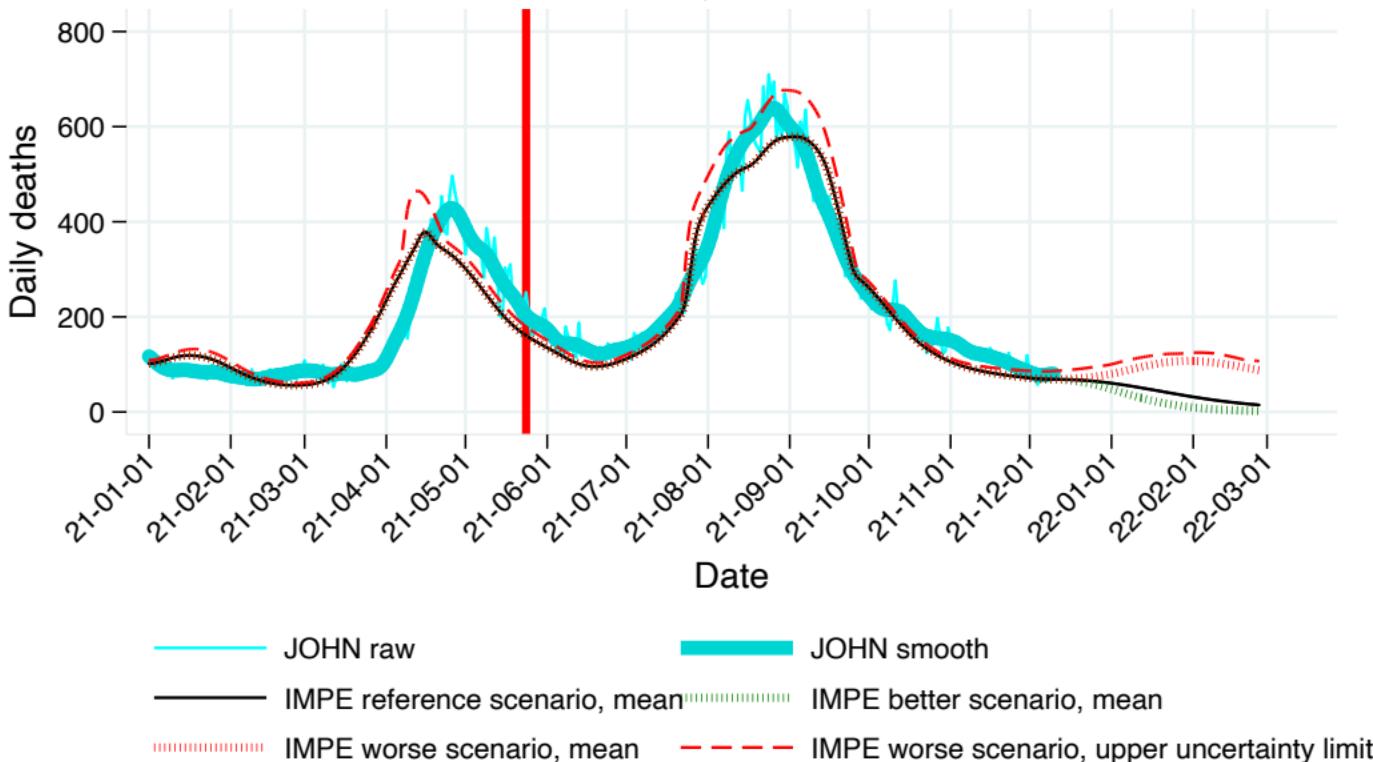


- Uncertainty limits: dashed (— —) curves.

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

COVID-19 daily deaths, Iran, IMPE

2021 on, 3 scenarios

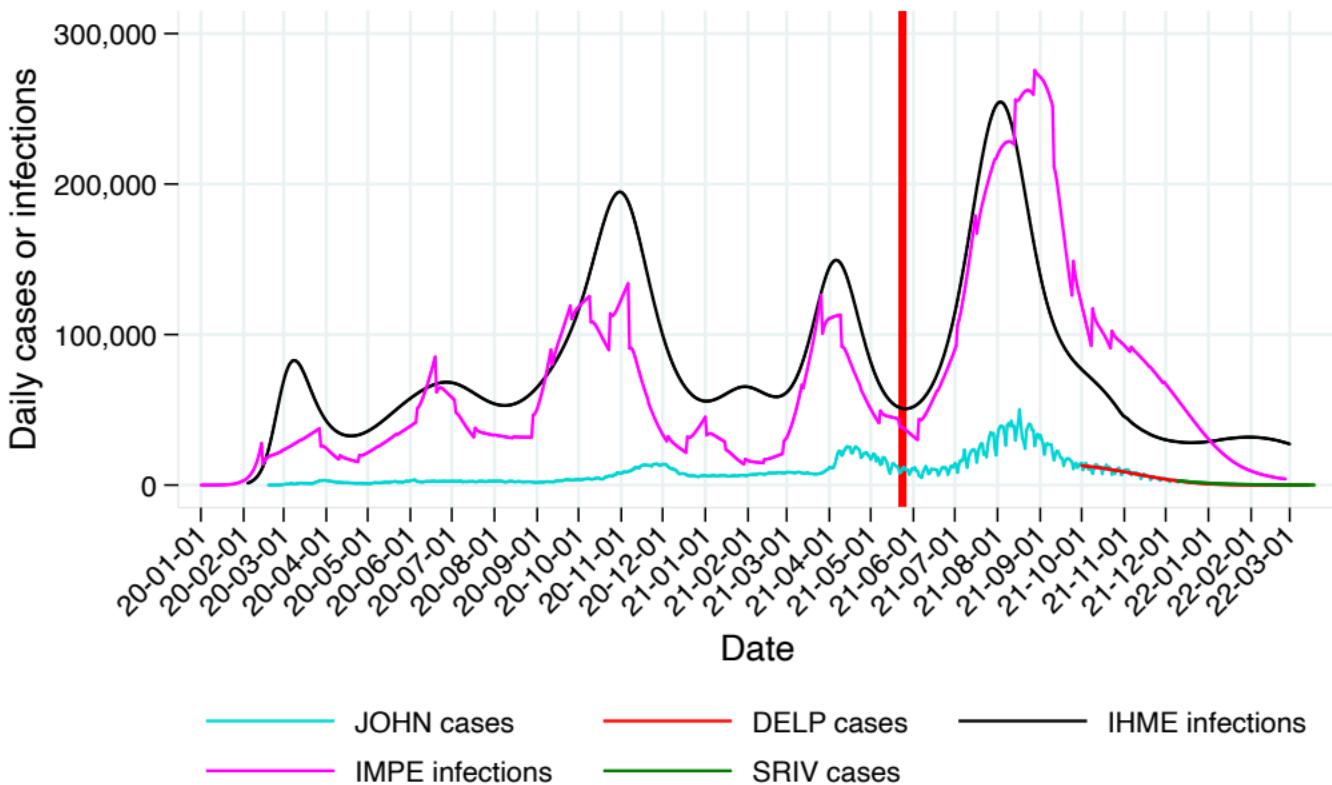


- Better and worse scenarios: tight dot (||||) curves; Uncertainty limits: dashed (---) curves.

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

COVID-19 daily cases or infections, Iran

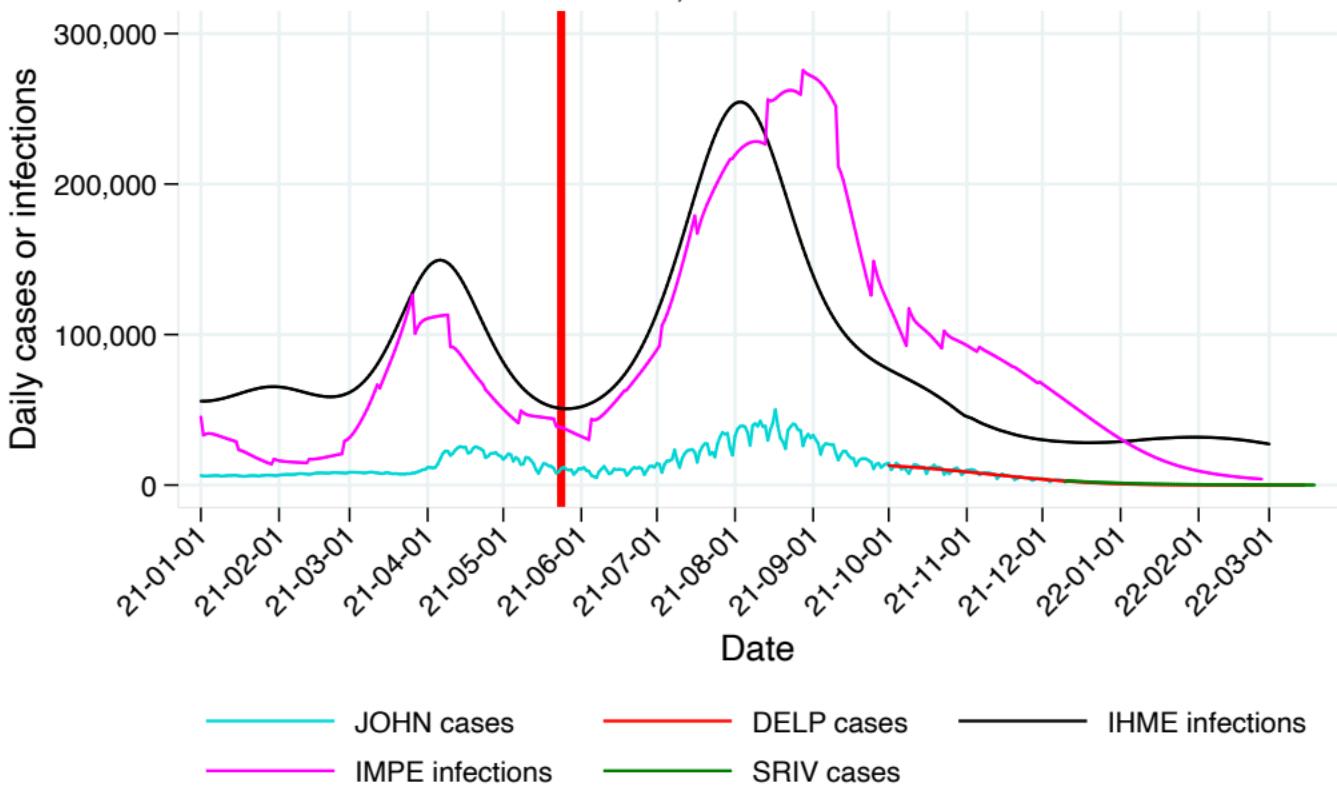
reference scenarios



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

COVID-19 daily cases or infections, Iran

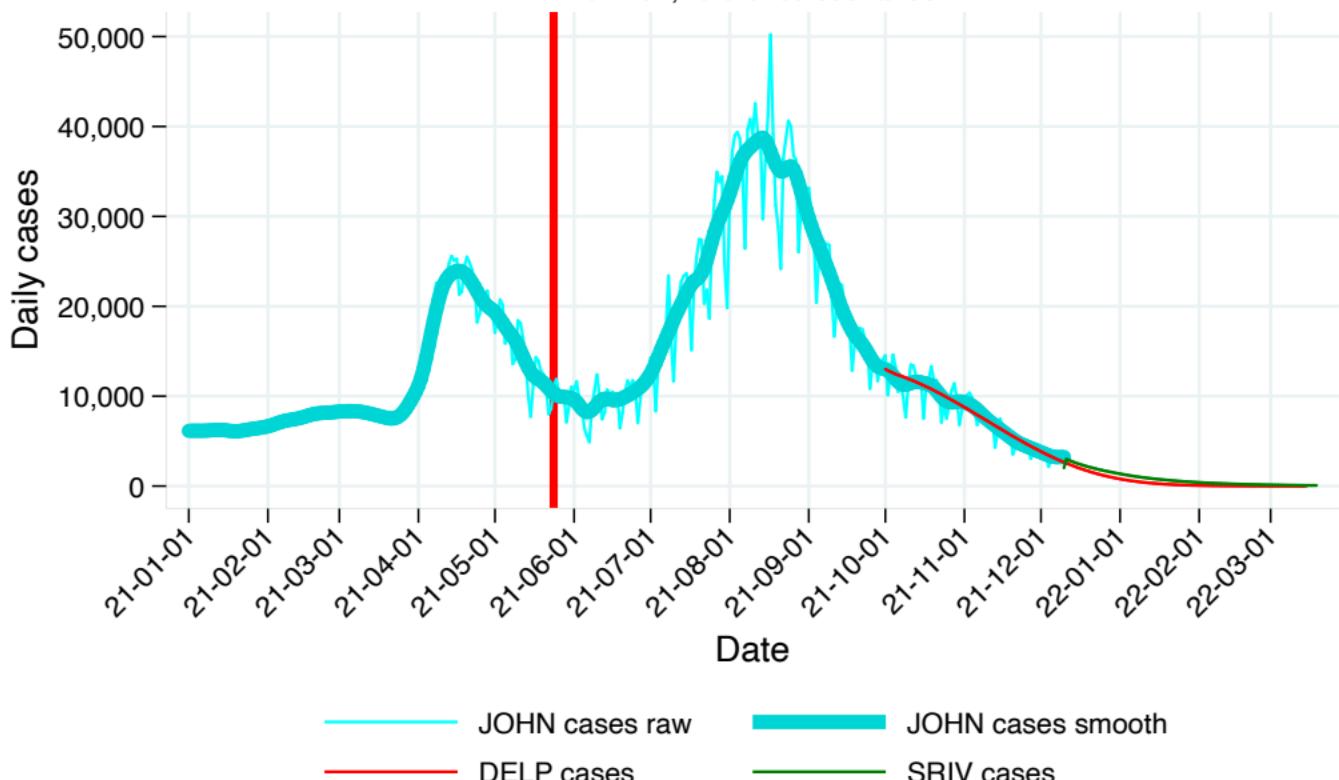
2021 on, reference scenarios



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

COVID-19 daily cases, Iran

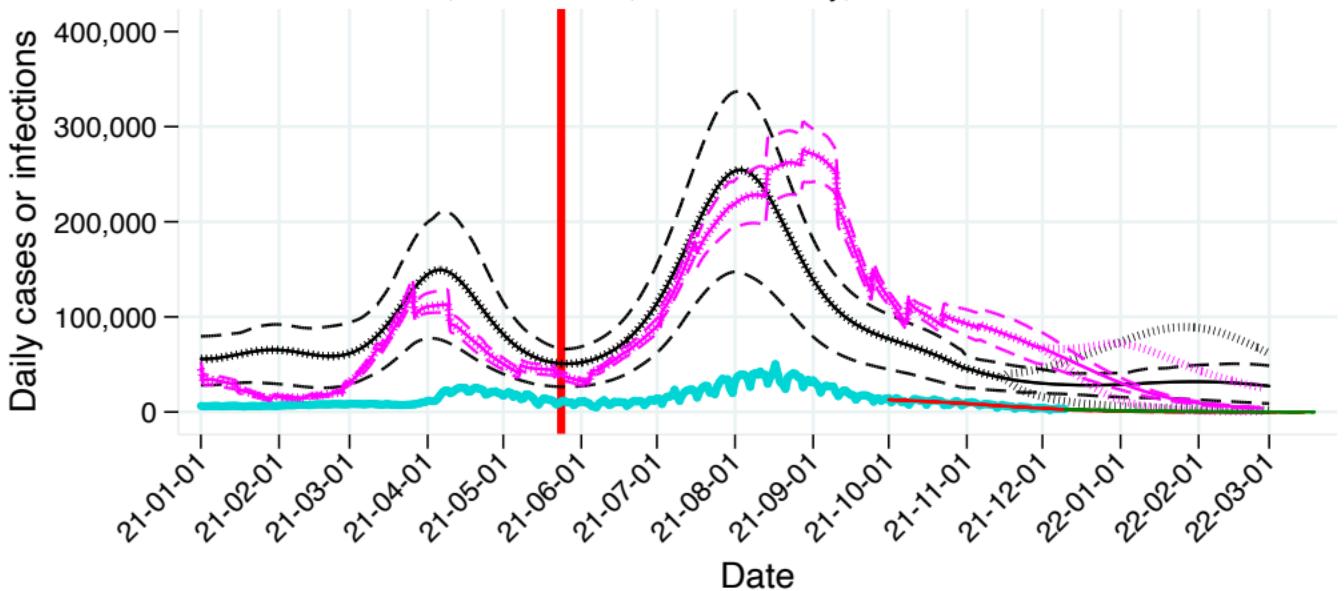
2021 on, reference scenarios



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

COVID-19 daily cases or infections, Iran

2021 on, full scenarios, with uncertainty; IHME & IMPE: infections

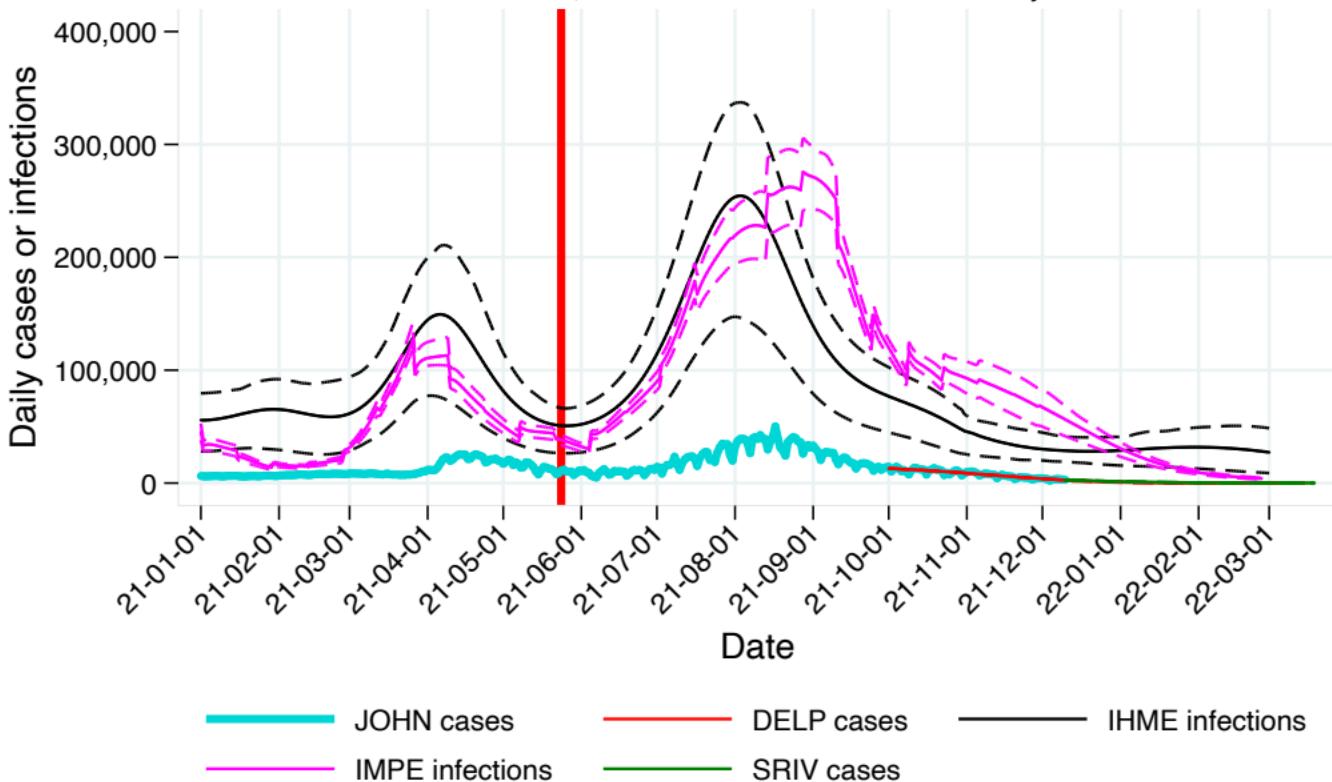


- Uncertainty limits: dashed (---) curves; Better and worse scenarios: tight dot (||||) curves.

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

COVID-19 daily cases or infections, Iran

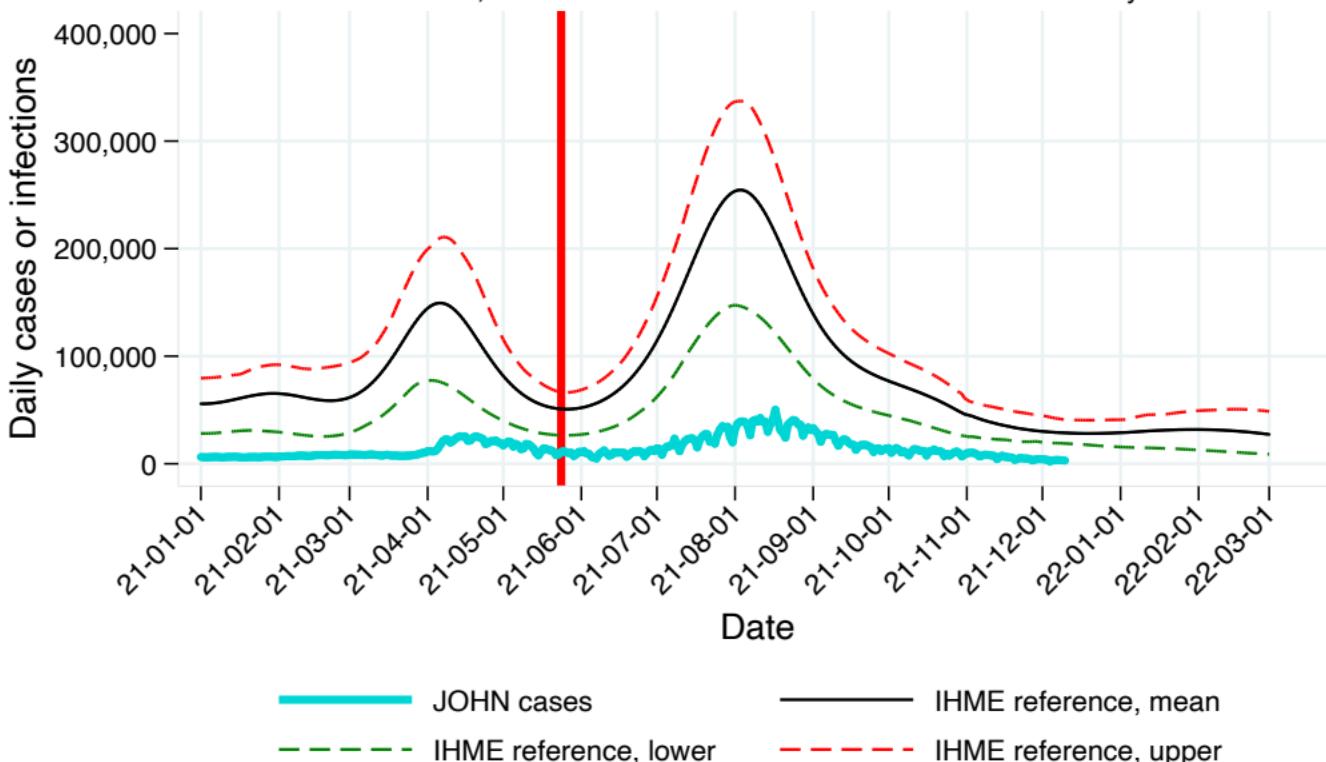
2021 on, reference scenarios with uncertainty



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

COVID-19 daily cases JOHN, and infections IHME, Iran

2021 on, IHME infections reference scenario with uncertainty

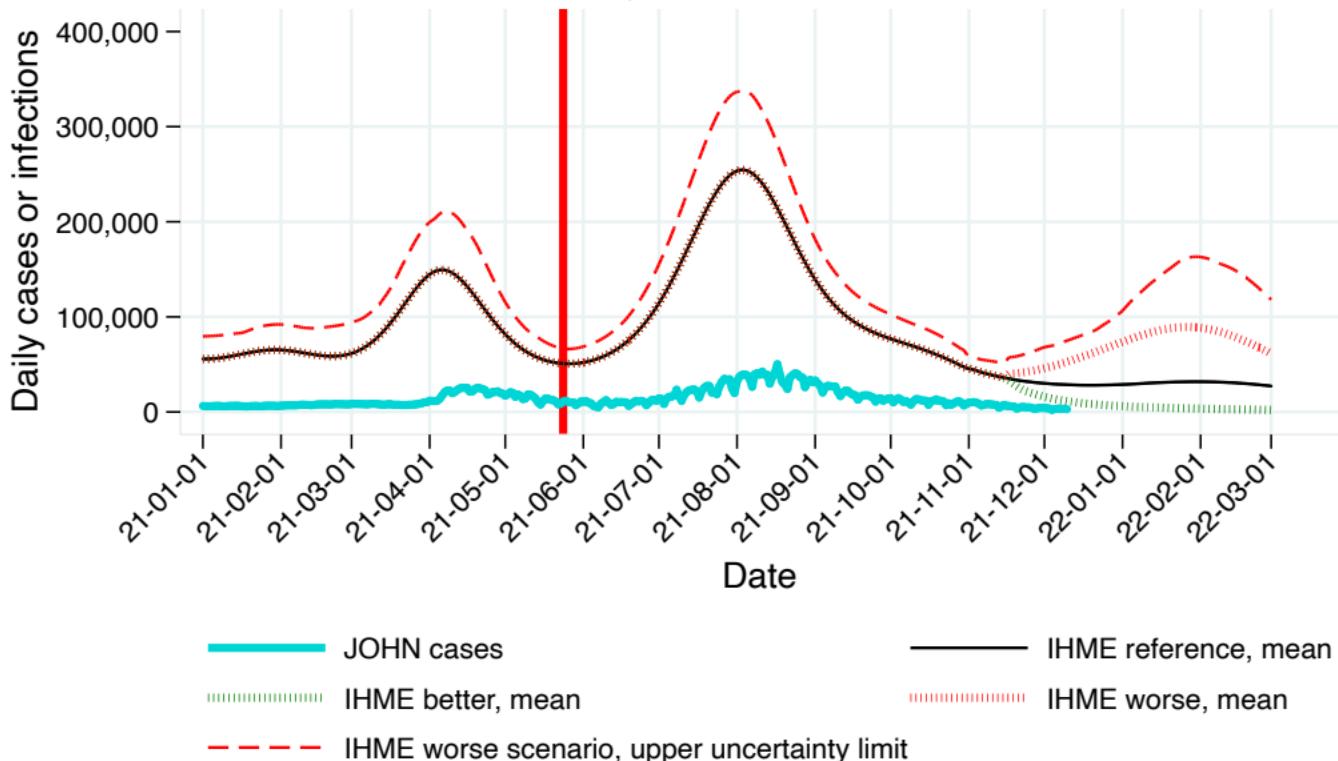


- Uncertainty limits: dashed (---) curves.

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

COVID-19 daily JOHN, and infections IHME, Iran

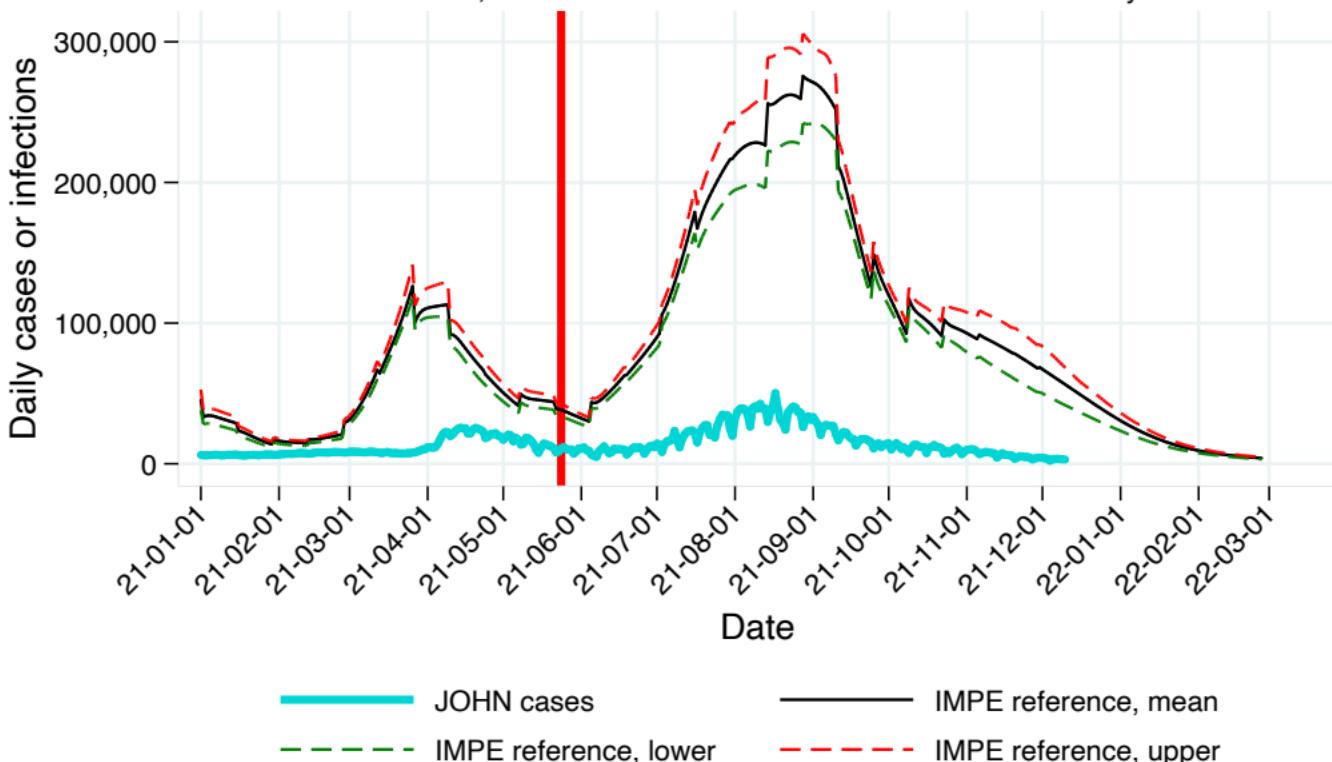
2021 on, IHME infections 3 scenarios



- Better and worse scenarios: tight dot (||||) curves; Uncertainty limits: dashed (---) curves.
- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.

COVID-19 daily cases JOHN, and infections IMPE, Iran

2021 on, IMPE infections reference scenario with uncertainty

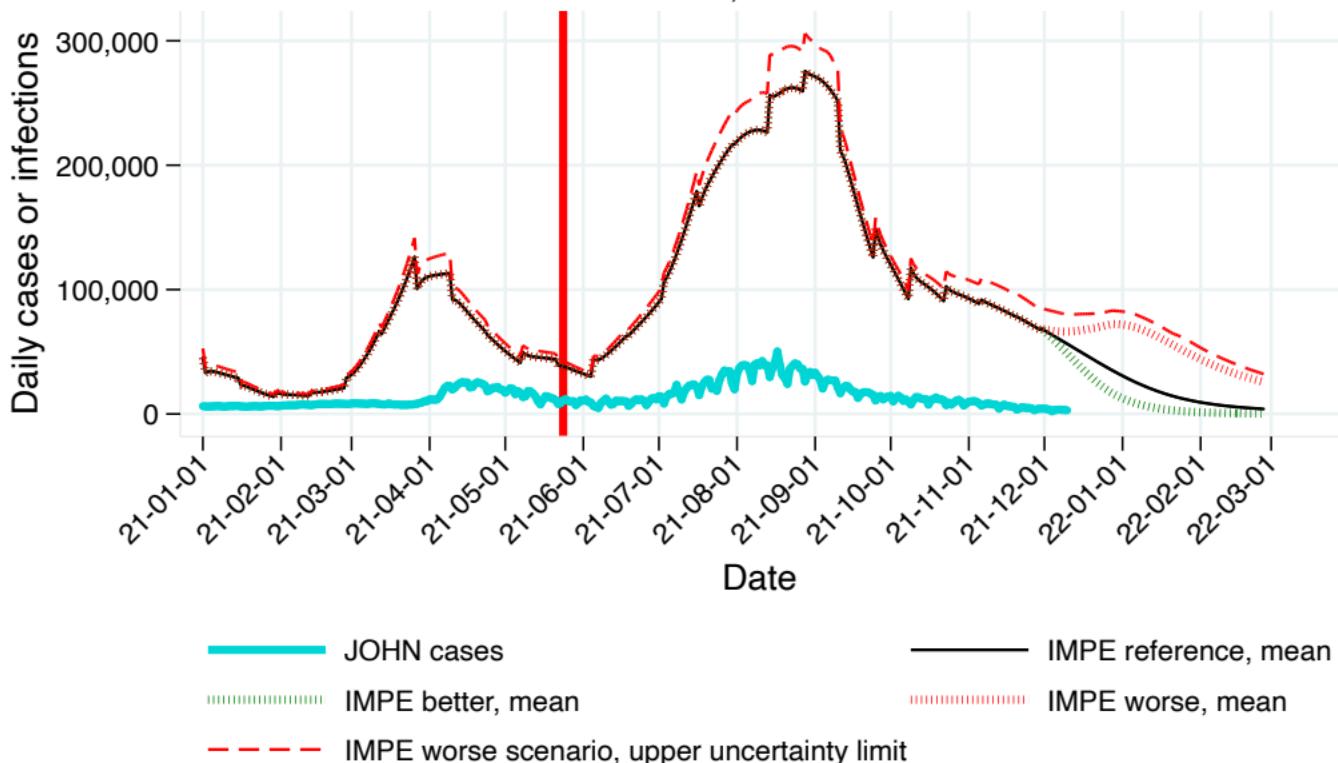


- Uncertainty limits: dashed (---) curves.

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

COVID-19 daily JOHN, and infections IMPE, Iran

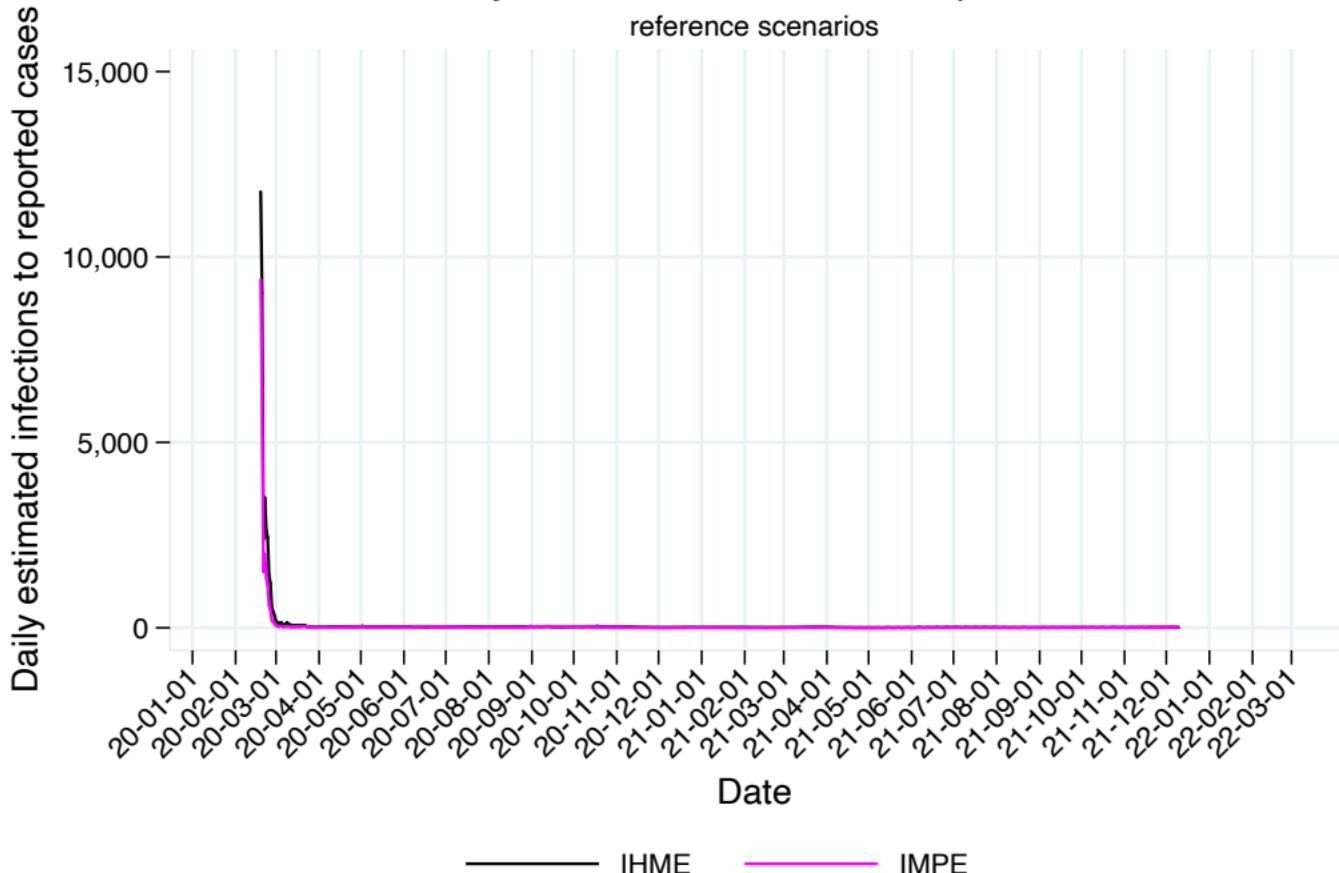
2021 on, 3 scenarios



- Better and worse scenarios: tight dot (||||) curves; Uncertainty limits: dashed (---) curves.
- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.

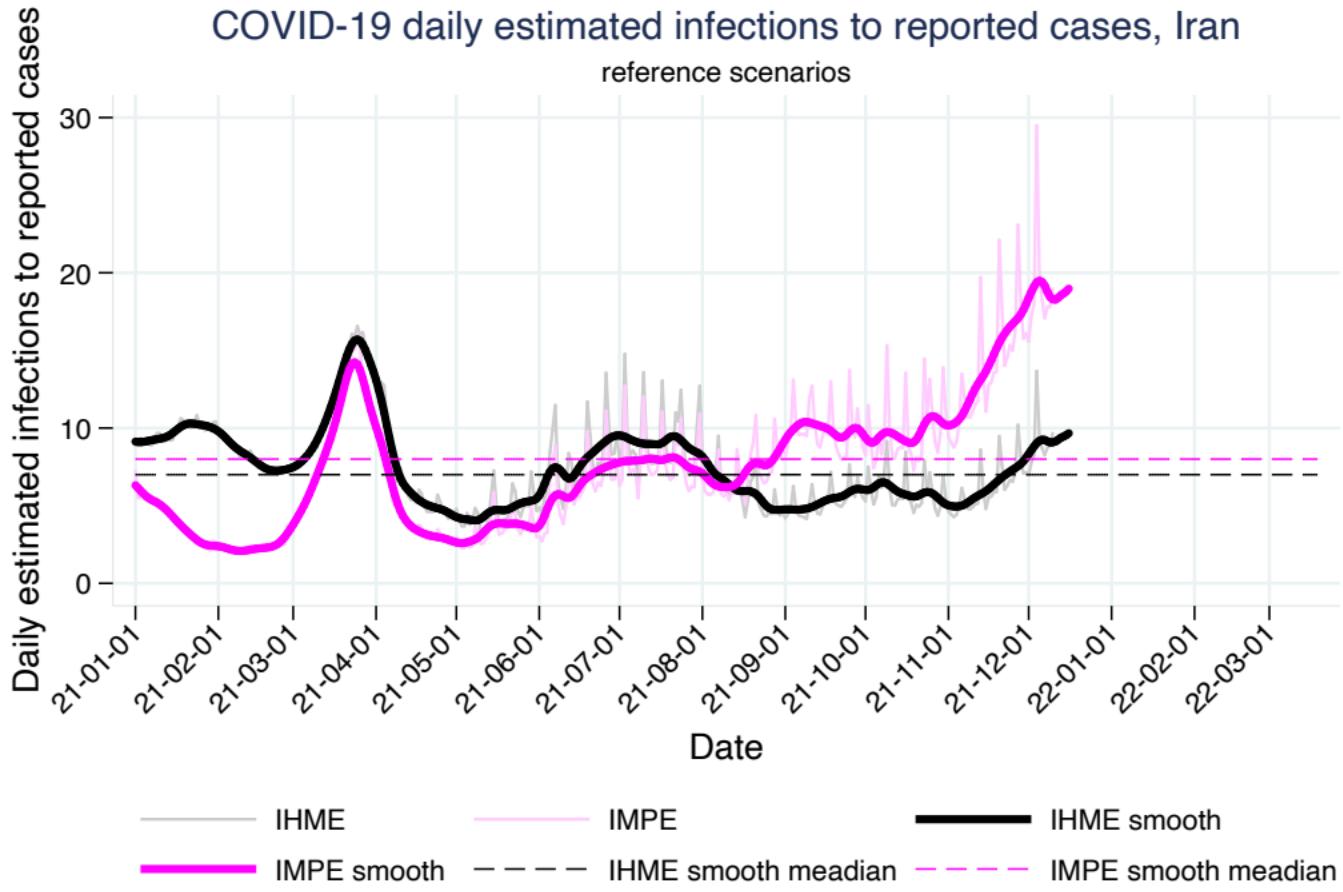
COVID-19 daily estimated infections to reported cases, Iran

reference scenarios



COVID-19 daily estimated infections to reported cases, Iran

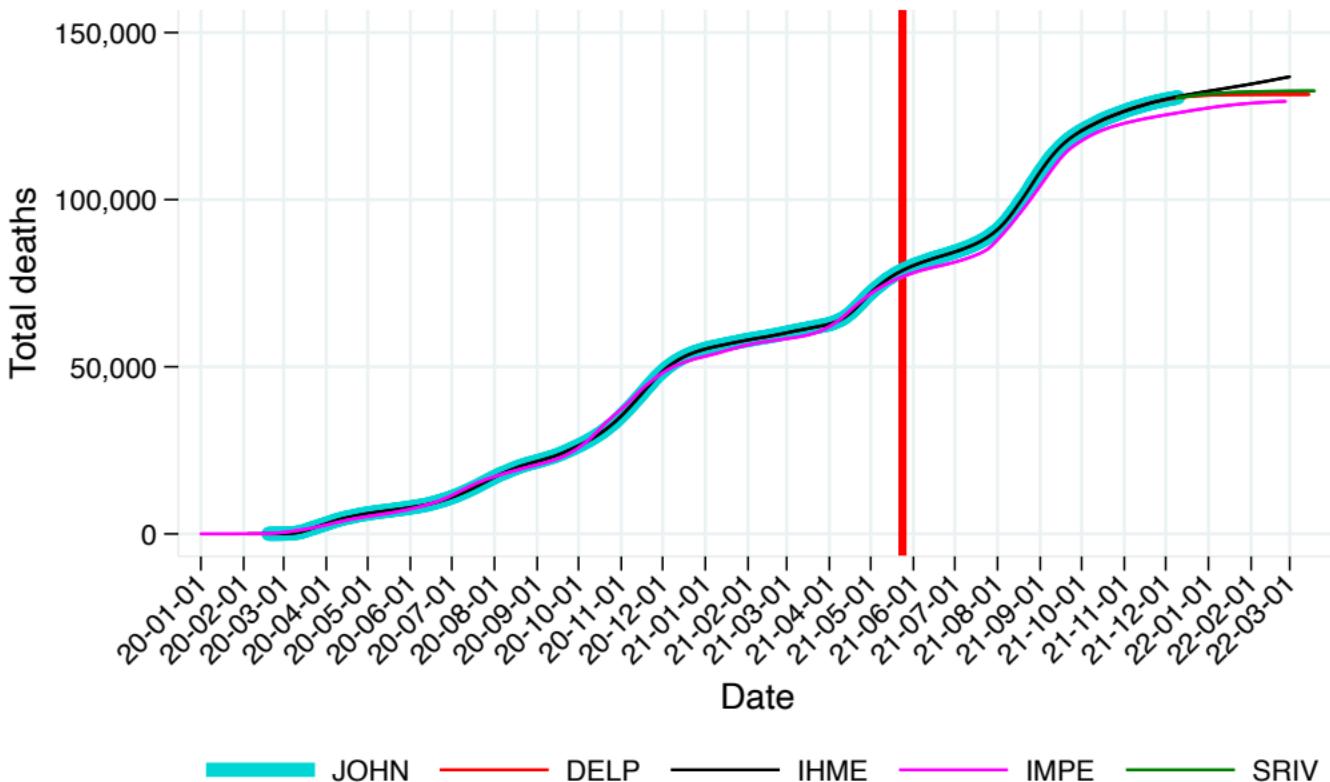
reference scenarios



IHME smooth median in 2021 = 7; IMPE smooth median in 2021 = 8

COVID-19 total deaths, Iran

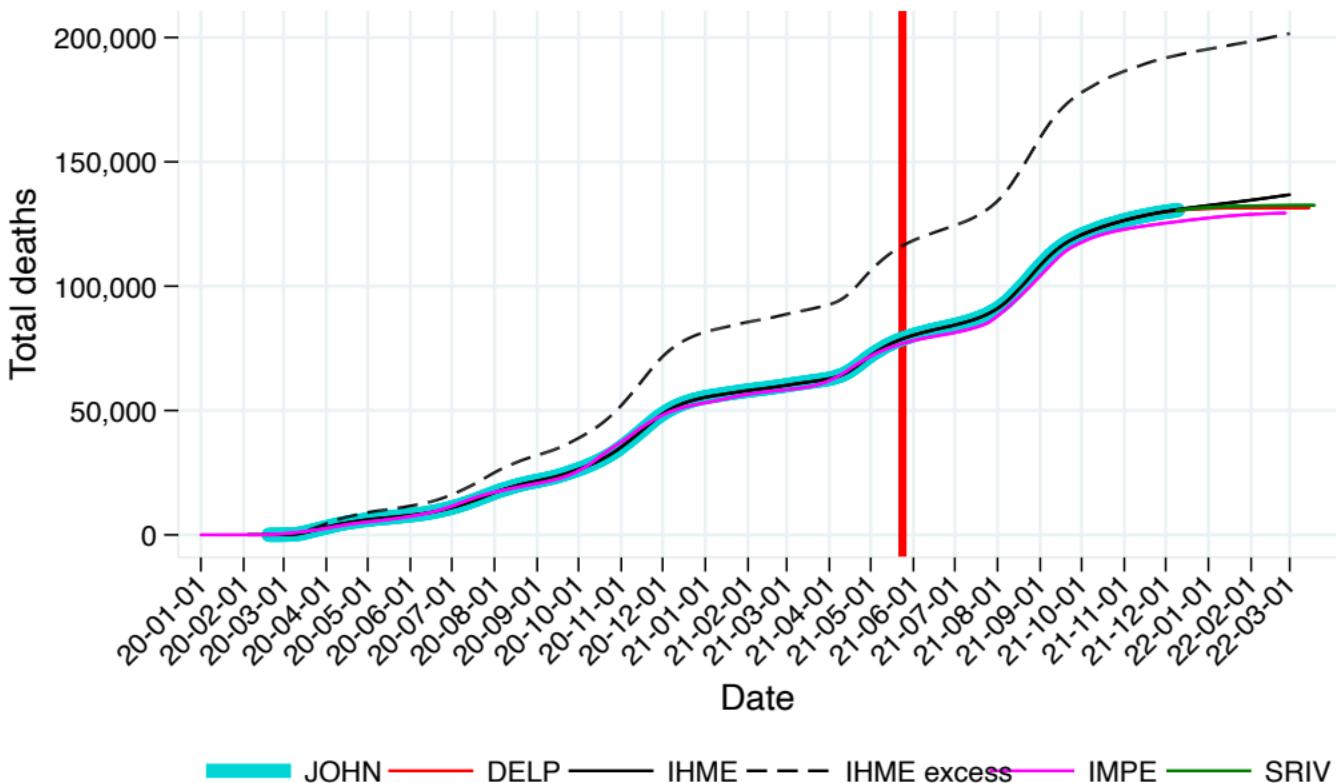
reference scenarios



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

COVID-19 total deaths, Iran

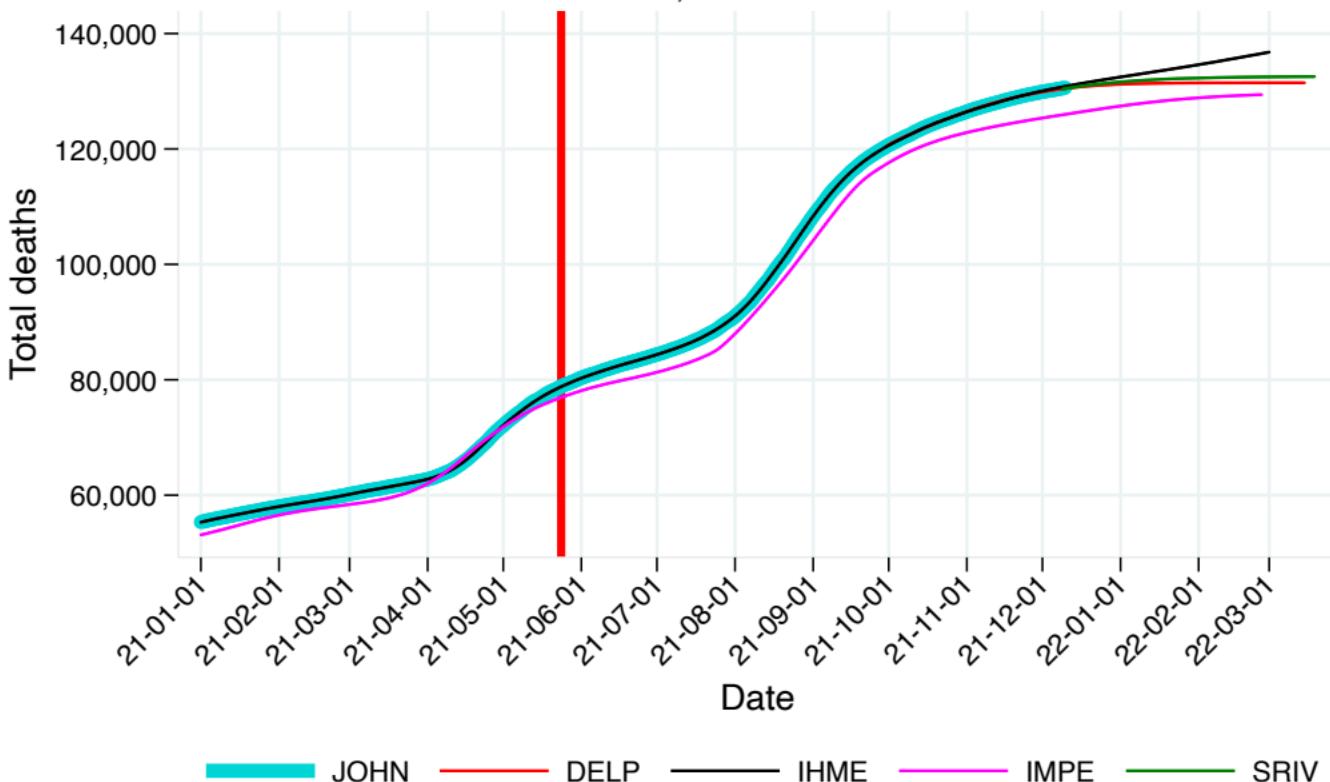
reference scenarios



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

COVID-19 total deaths, Iran

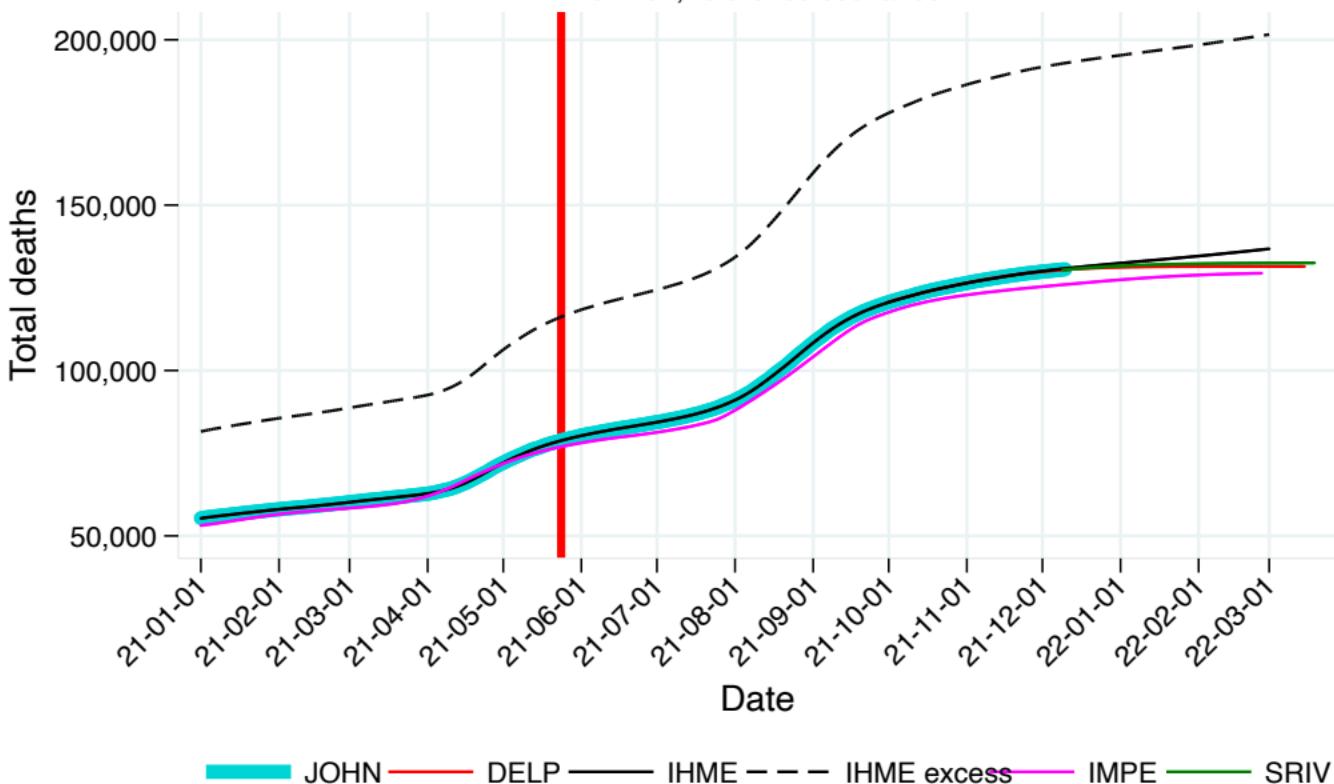
2021 on, reference scenarios



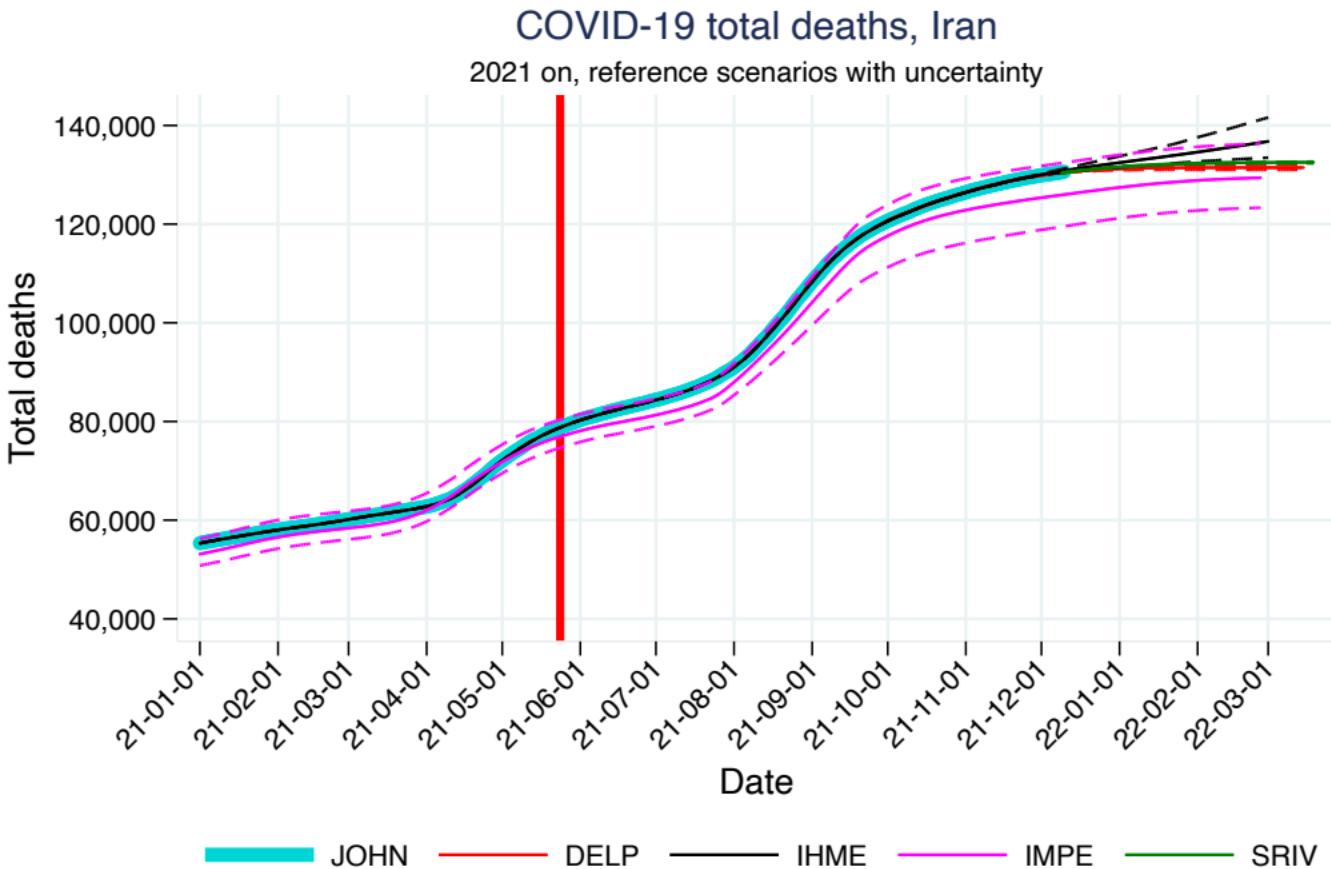
- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.

COVID-19 total deaths, Iran

2021 on, reference scenarios



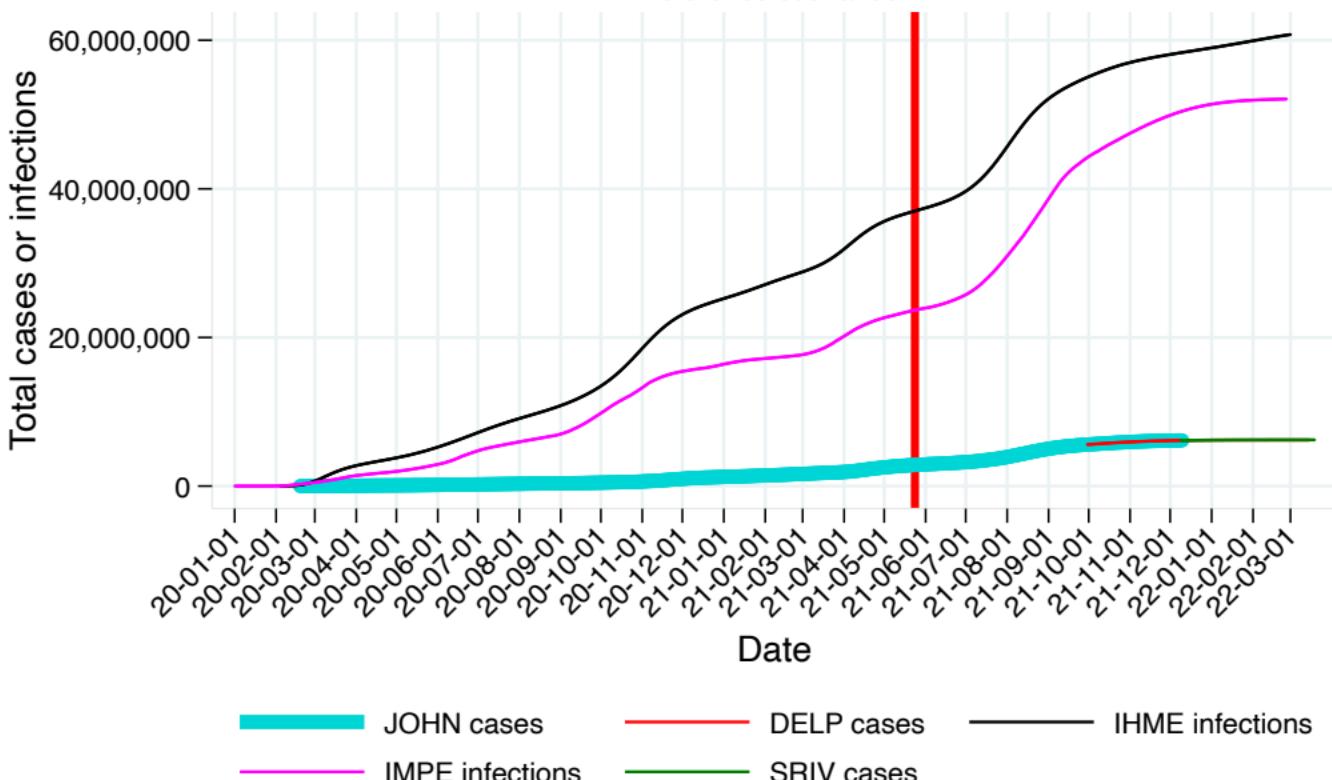
- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.



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

COVID-19 total cases or infections, Iran

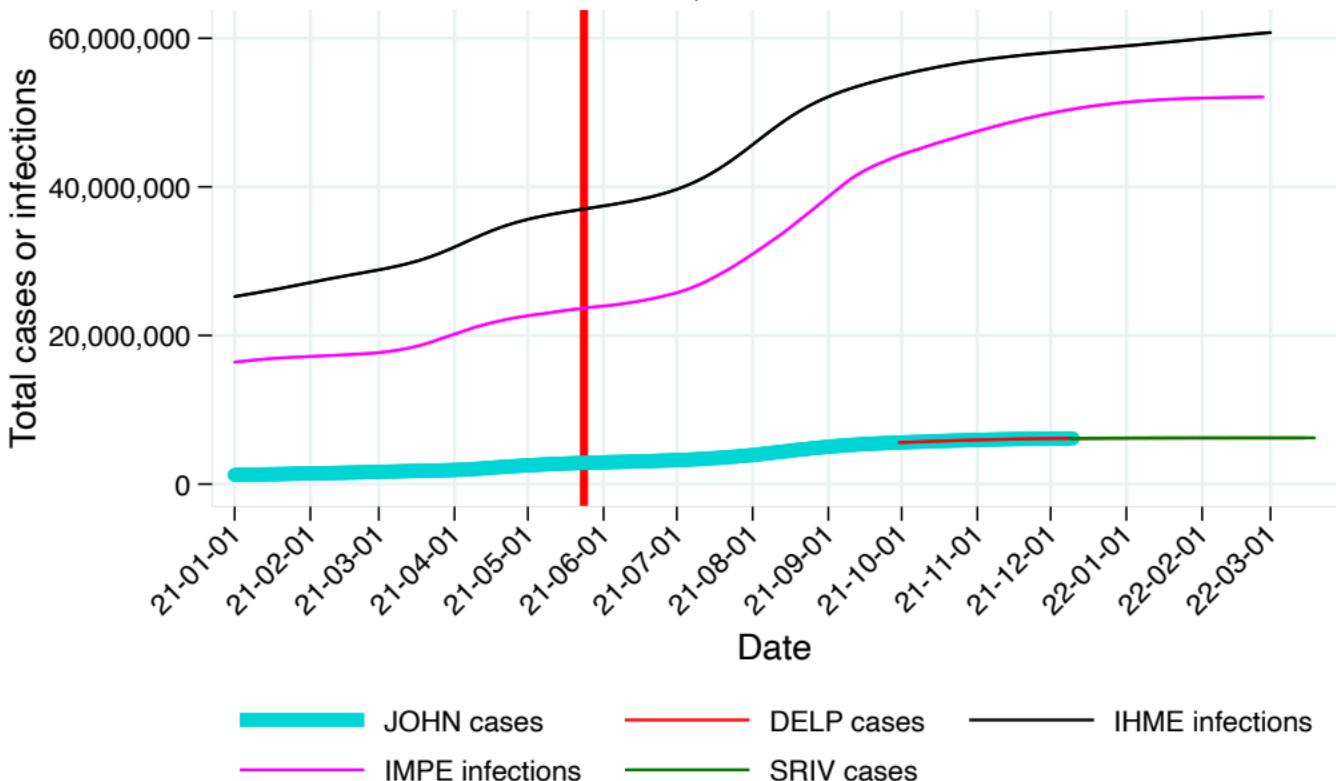
reference scenarios



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

COVID-19 total cases or infections, Iran

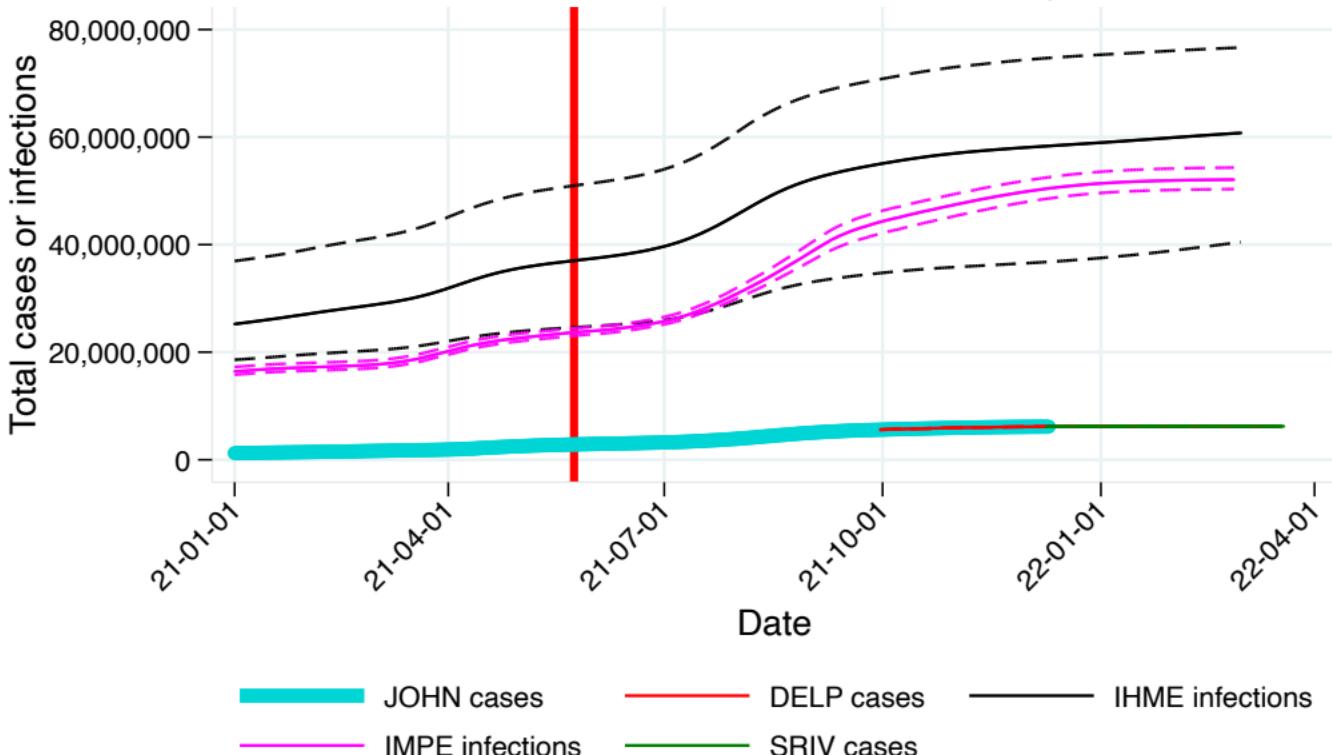
2021 on, reference scenarios



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

COVID-19 total cases or infections, Iran

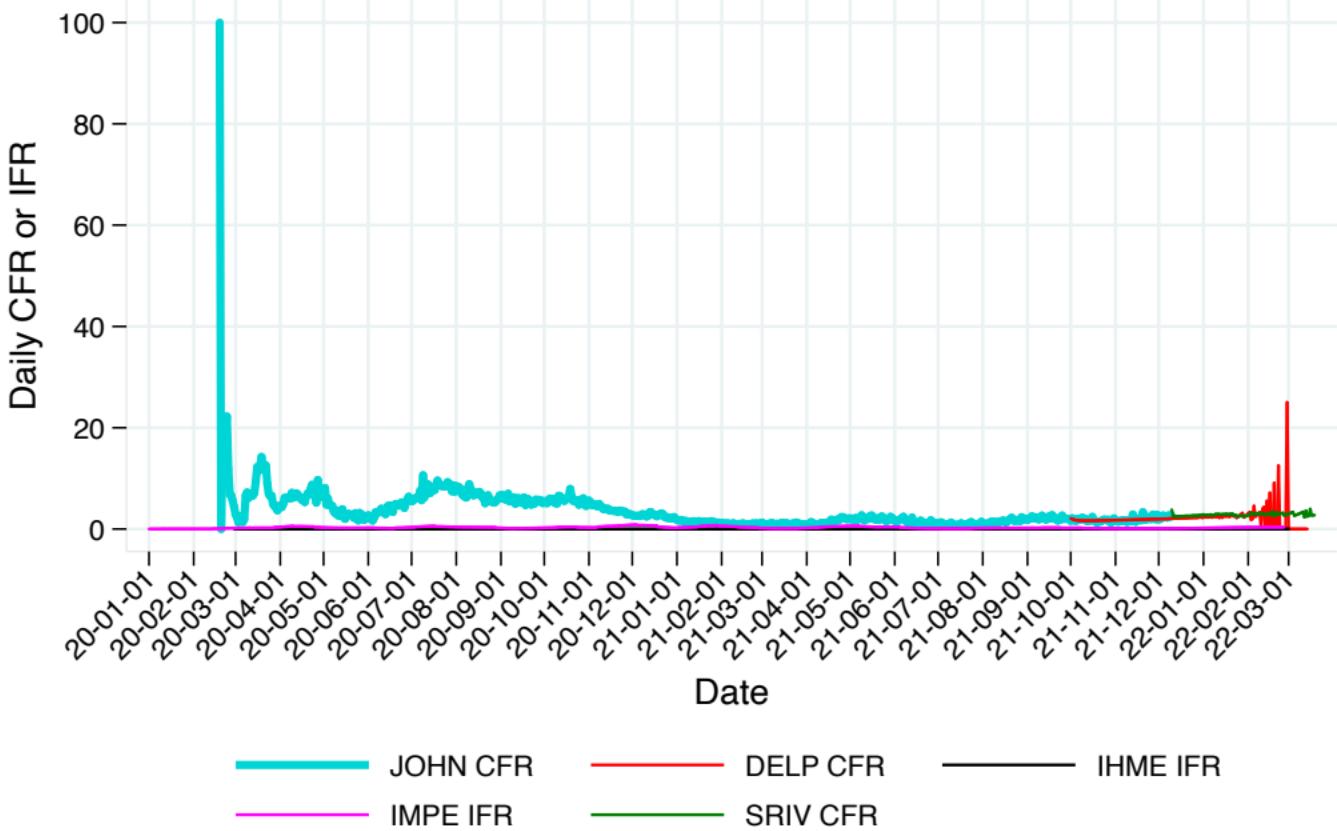
2021 on, reference scenarios with uncertainty



- Uncertainty limits: dashed curves.

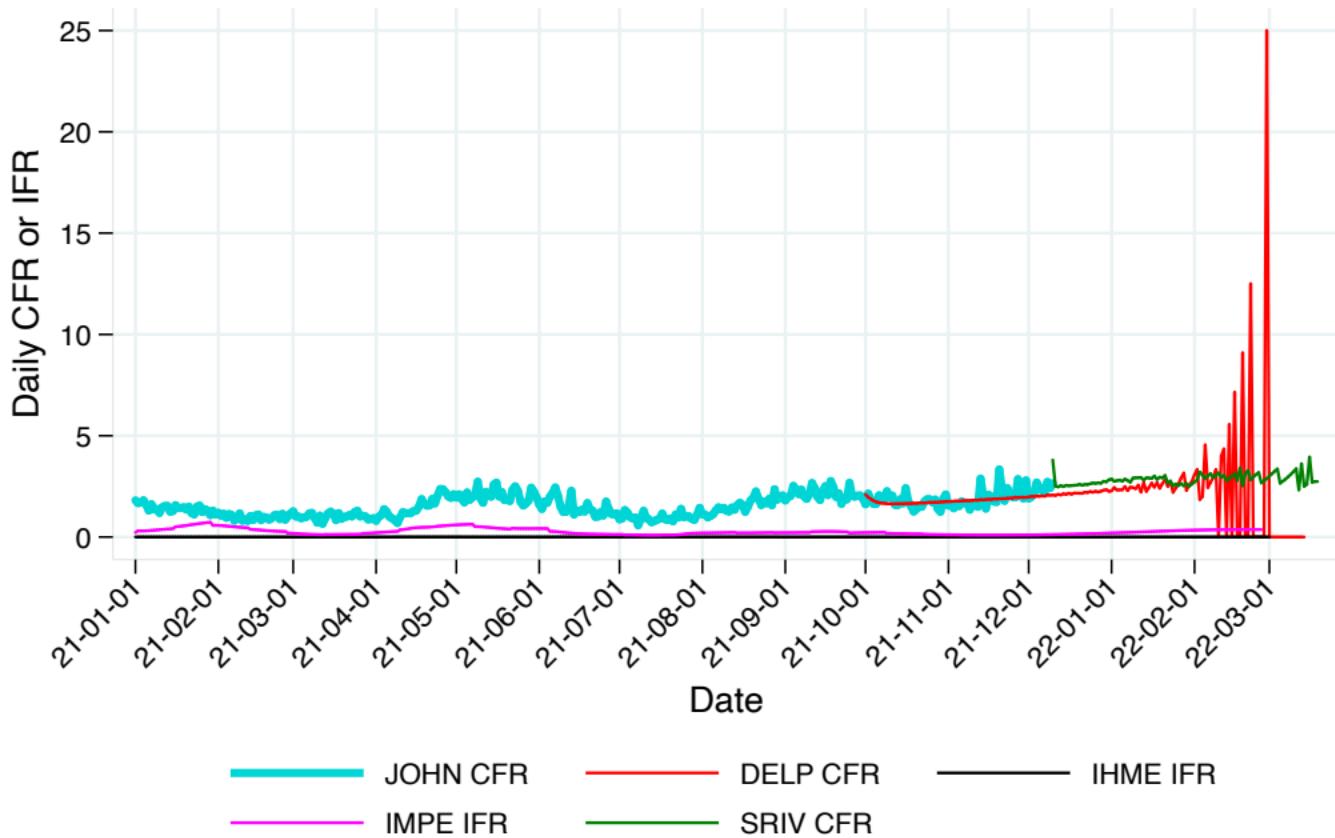
- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.

COVID-19 daily CFR or IFR, Iran

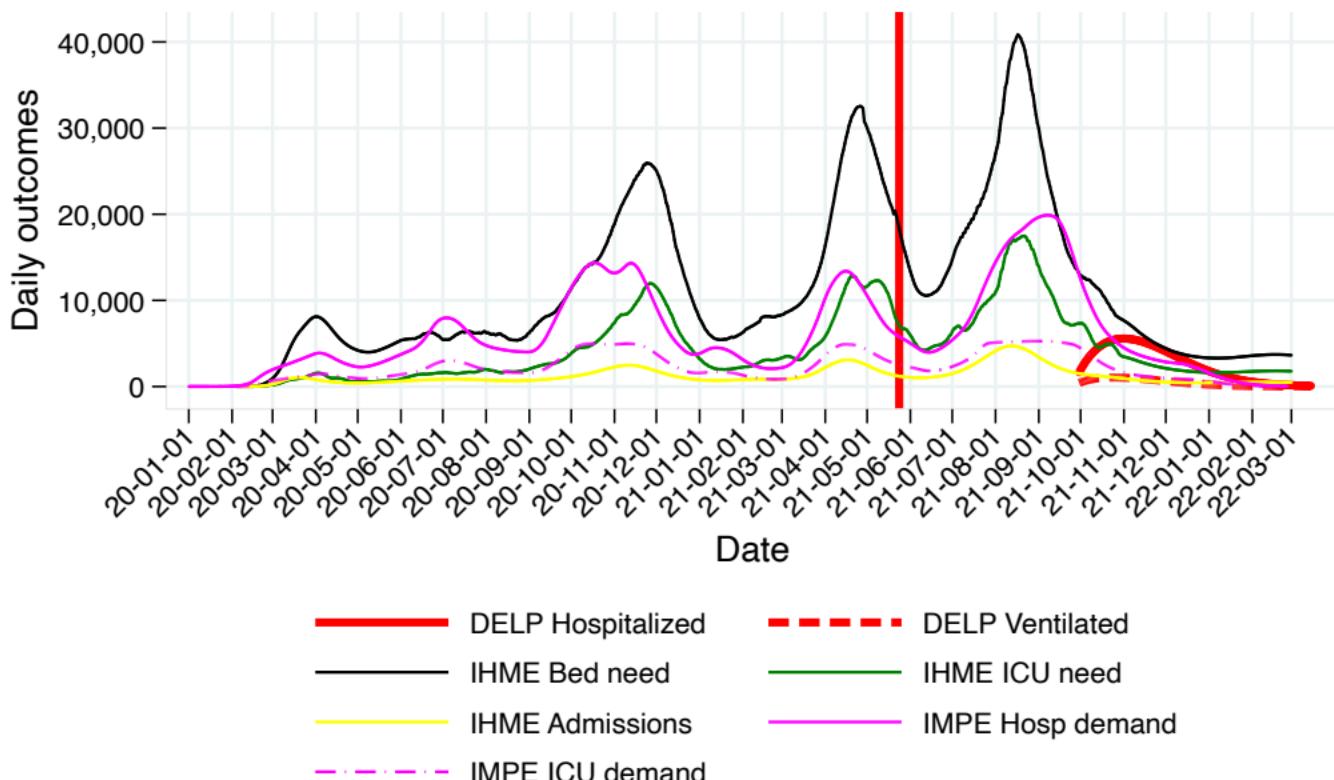


COVID-19 daily CFR or IFR, Iran

2021 on, reference scenarios

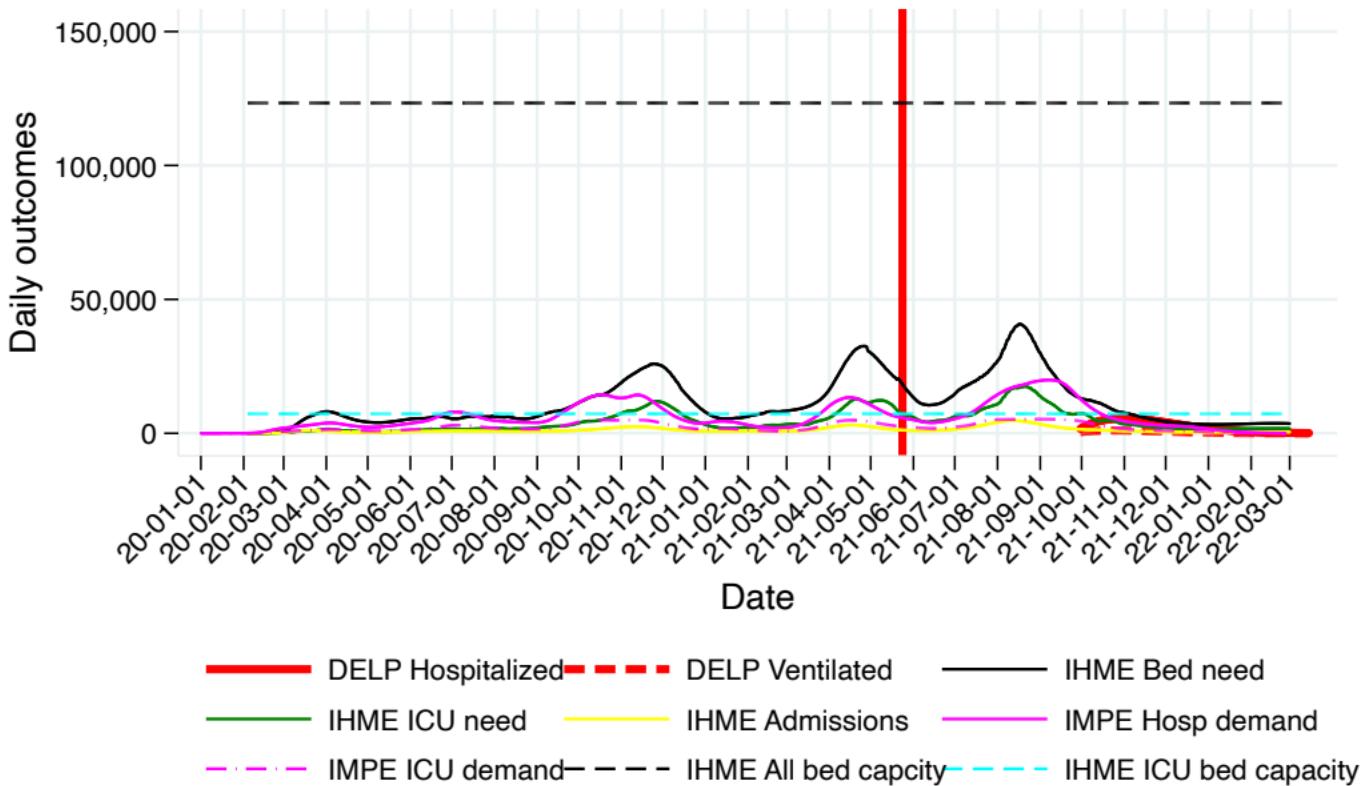


COVID-19 daily hospital-related outcomes Iran



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

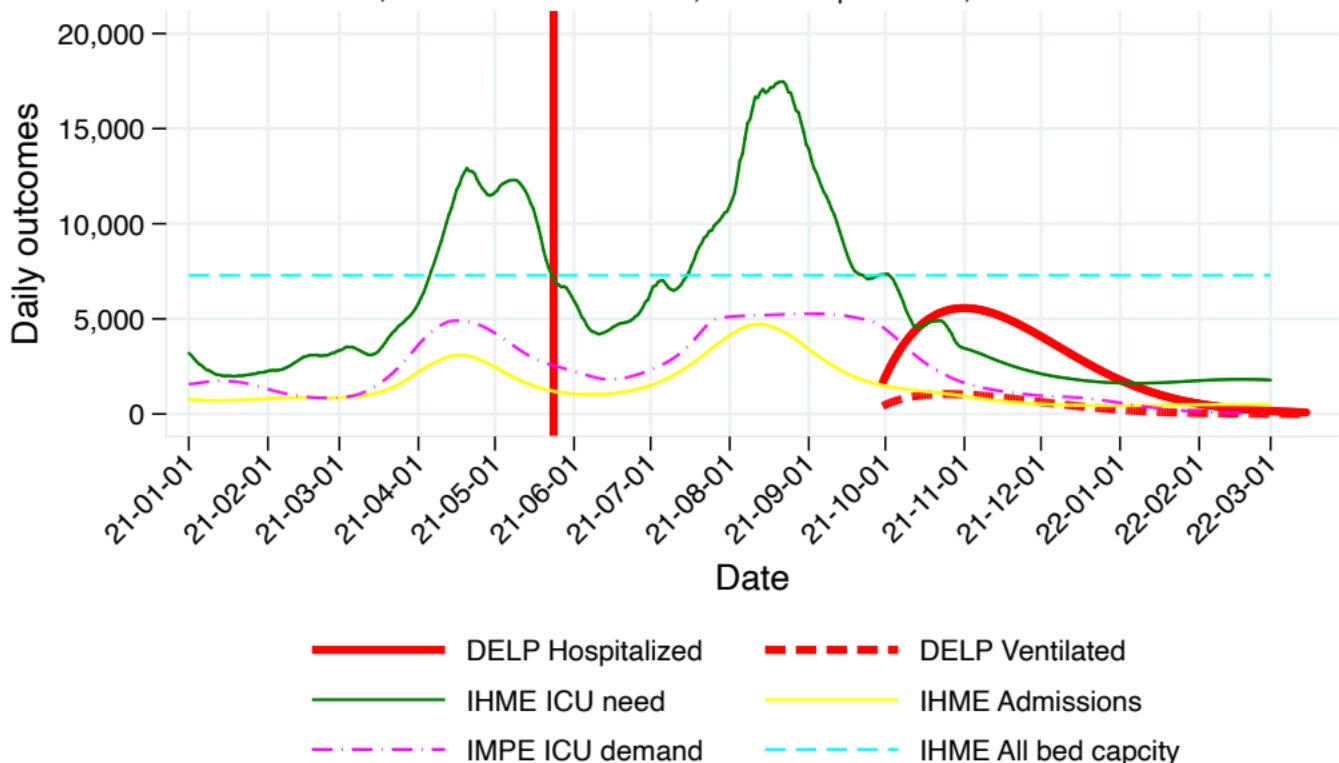
COVID-19 daily hospital-related outcomes Iran



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

COVID-19 daily hospital-related outcomes Iran

2021 on, without IHME Bed need, IMPE Hosp demand, reference scenarios

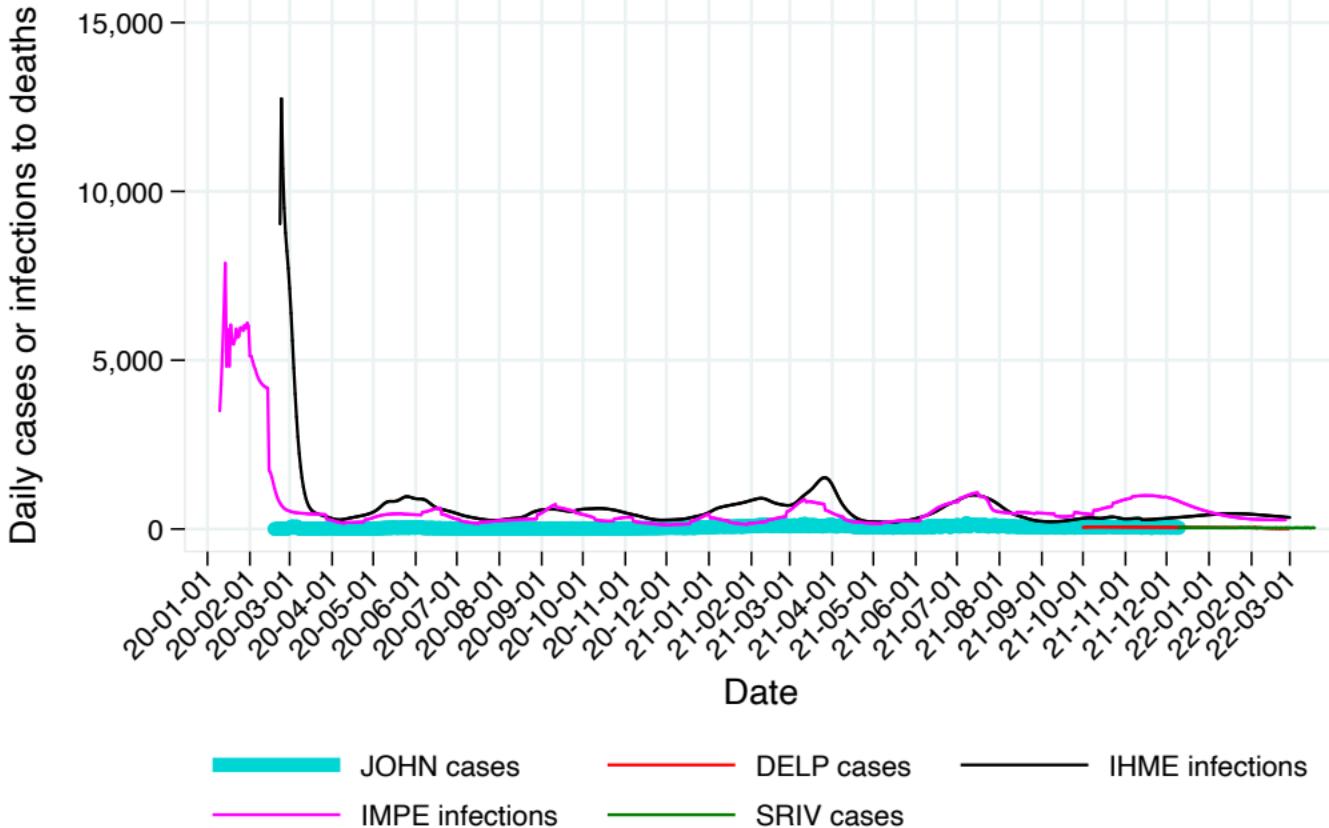


- Uncertainty limits: dashed curves.

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

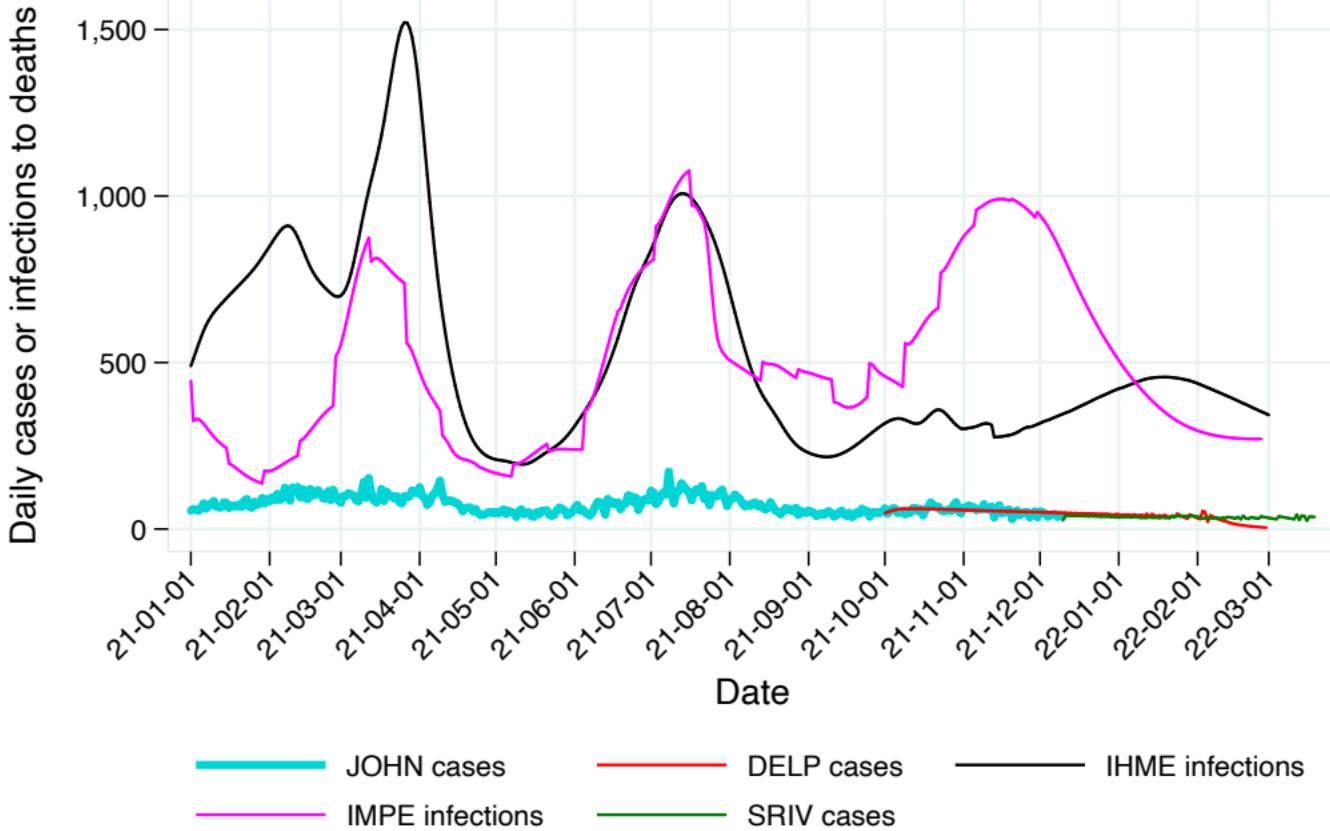
COVID-19 daily cases or infections, to deaths, Iran

reference scenarios



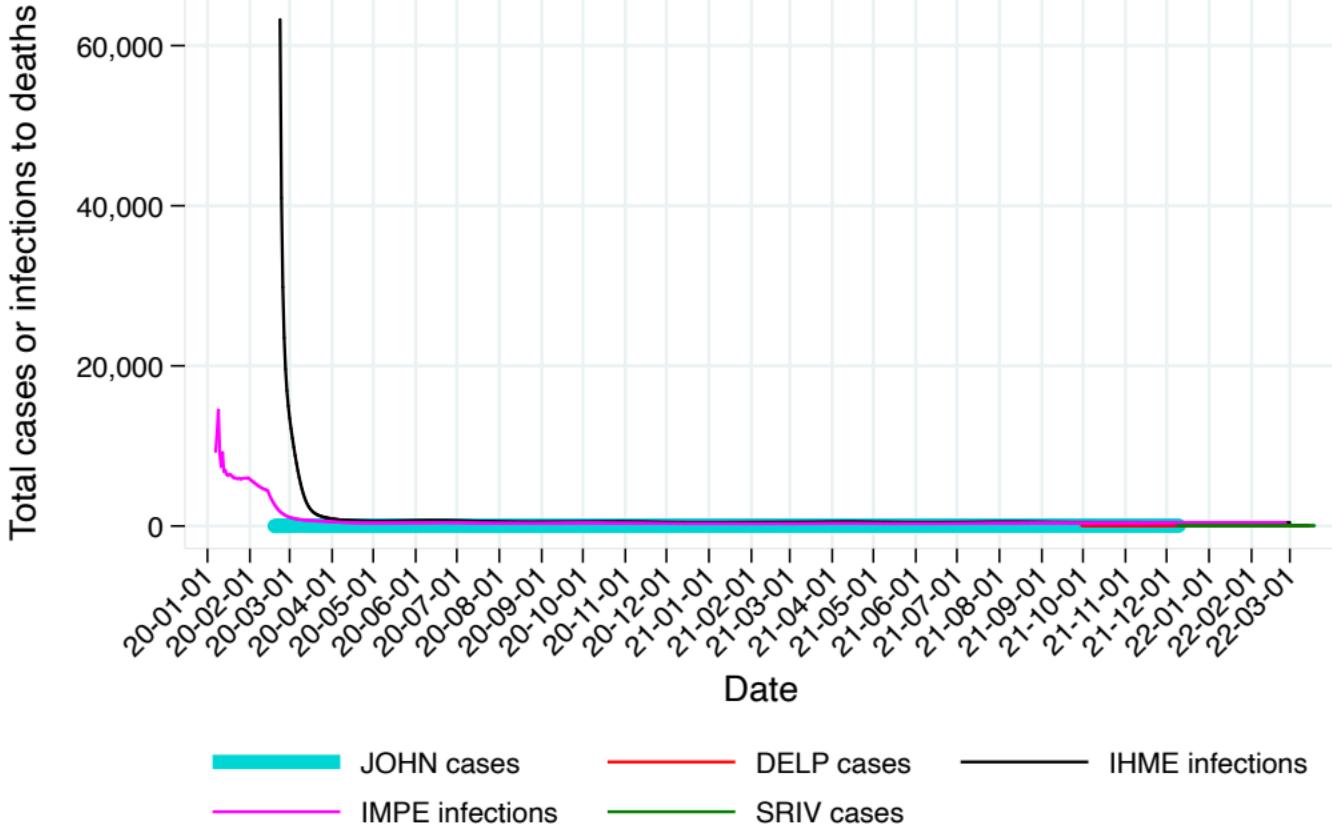
COVID-19 daily cases or infections, to deaths, Iran

2021 on, reference scenarios



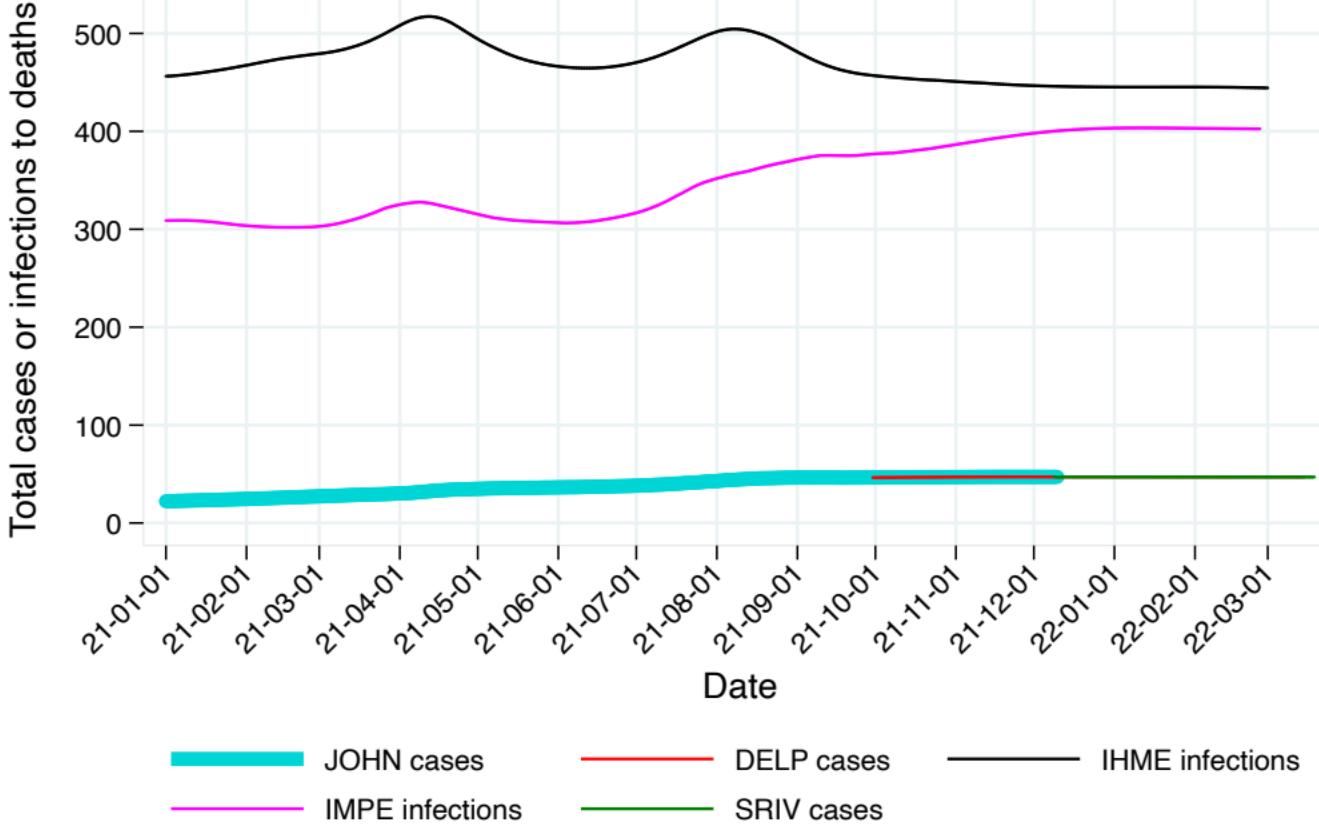
COVID-19 total cases or infections, to deaths, Iran

reference scenarios



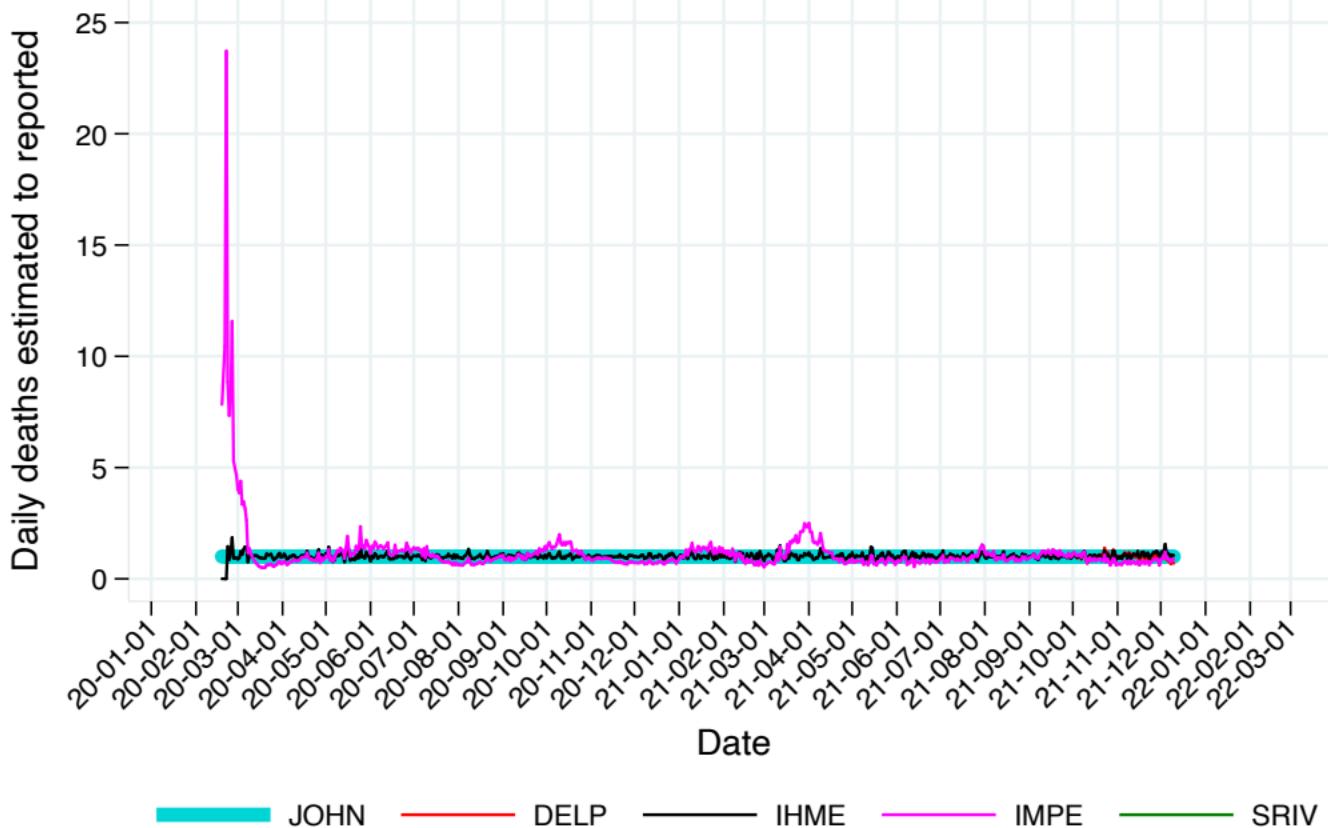
COVID-19 total cases or infections, to deaths, Iran

2021 on, reference scenarios



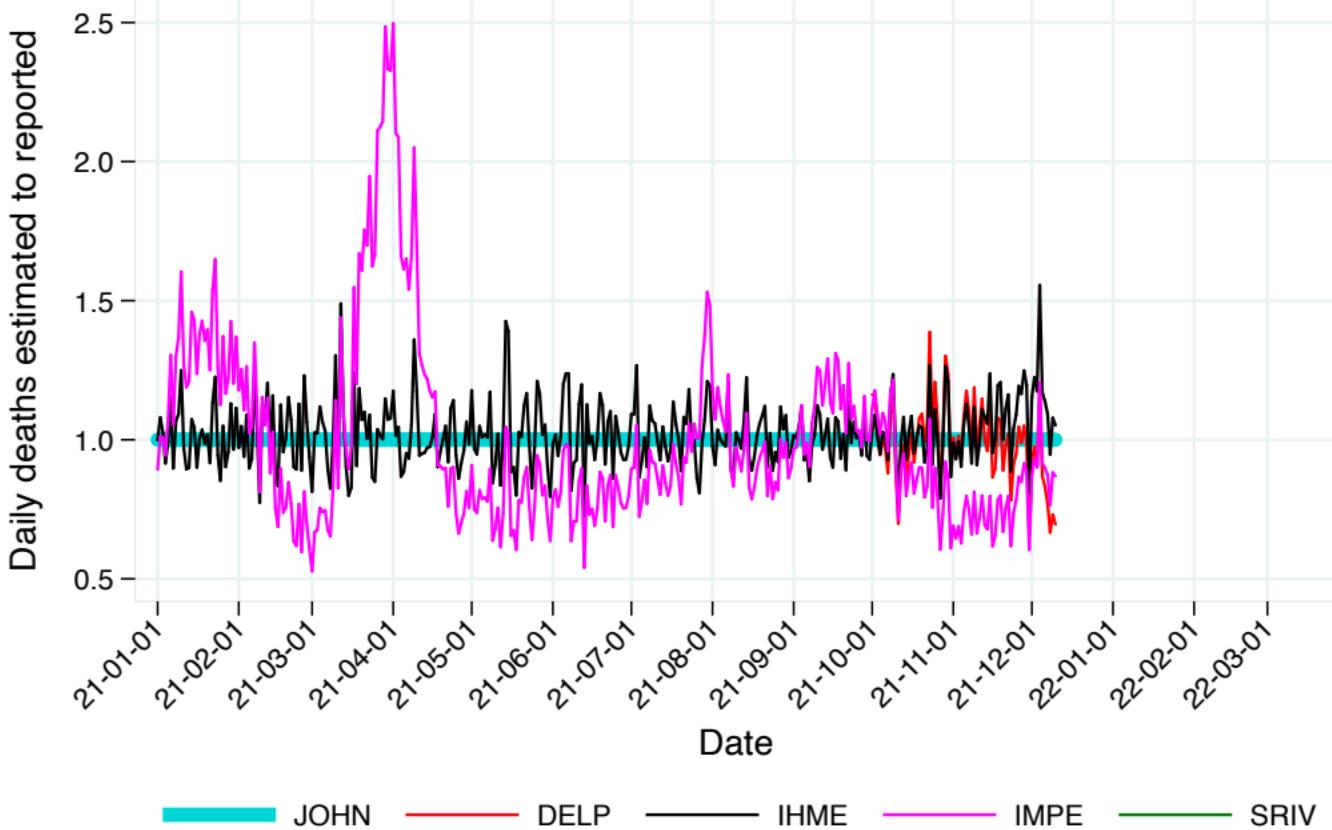
COVID-19 daily deaths, estimated to reported, Iran

reference scenarios



COVID-19 daily deaths, estimated to reported, Iran

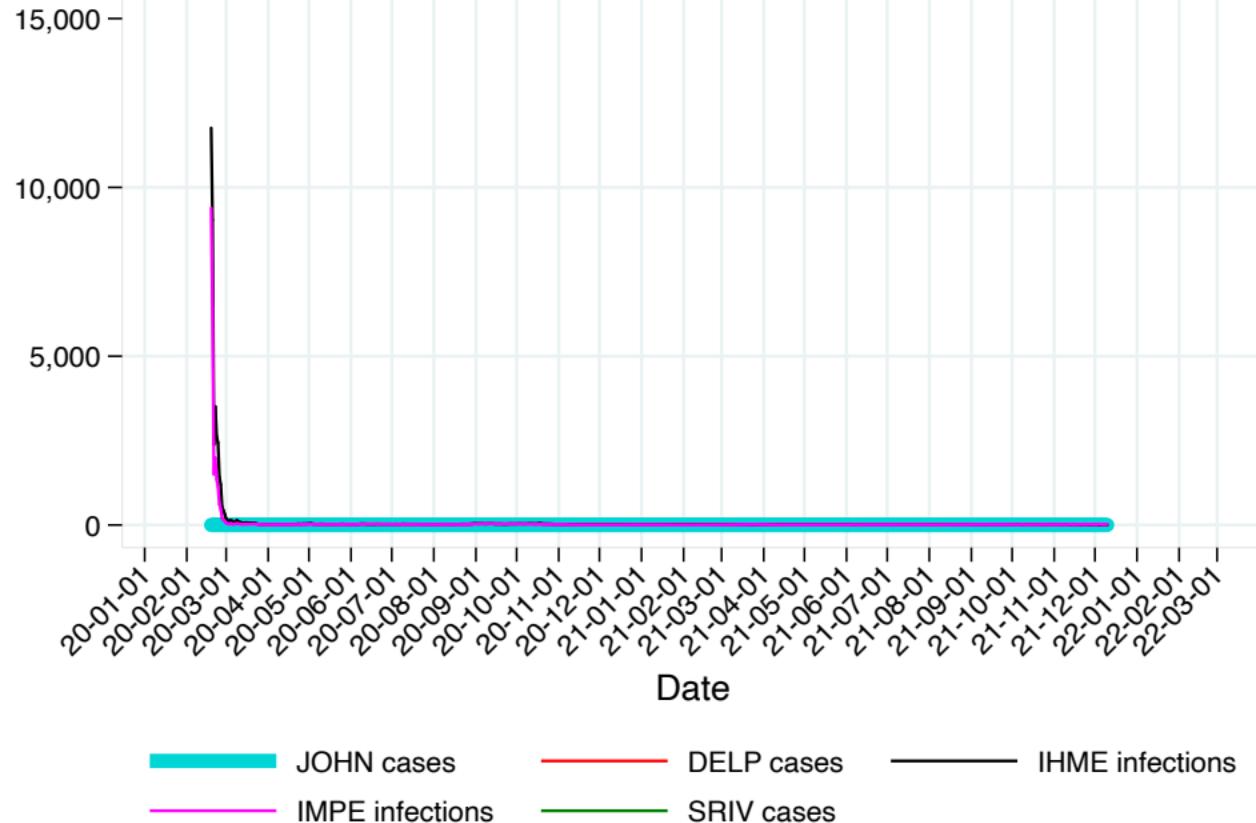
reference scenarios



Daily cases or infections estimated to reported

COVID-19 daily cases estimated to reported, Iran

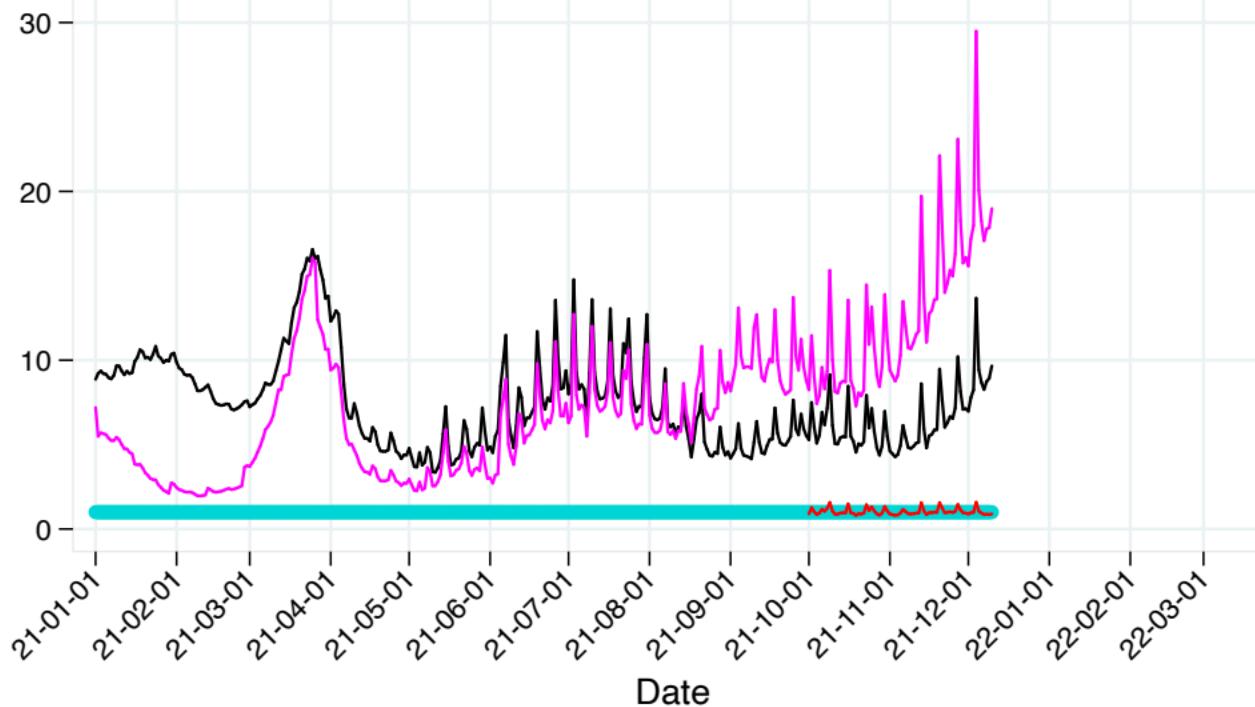
daily cases or infections estimated, to reported cases; reference scenarios



Daily cases or infections estimated to reported

COVID-19 daily cases estimated to reported, Iran

daily cases or infections estimated, to reported cases; reference scenarios

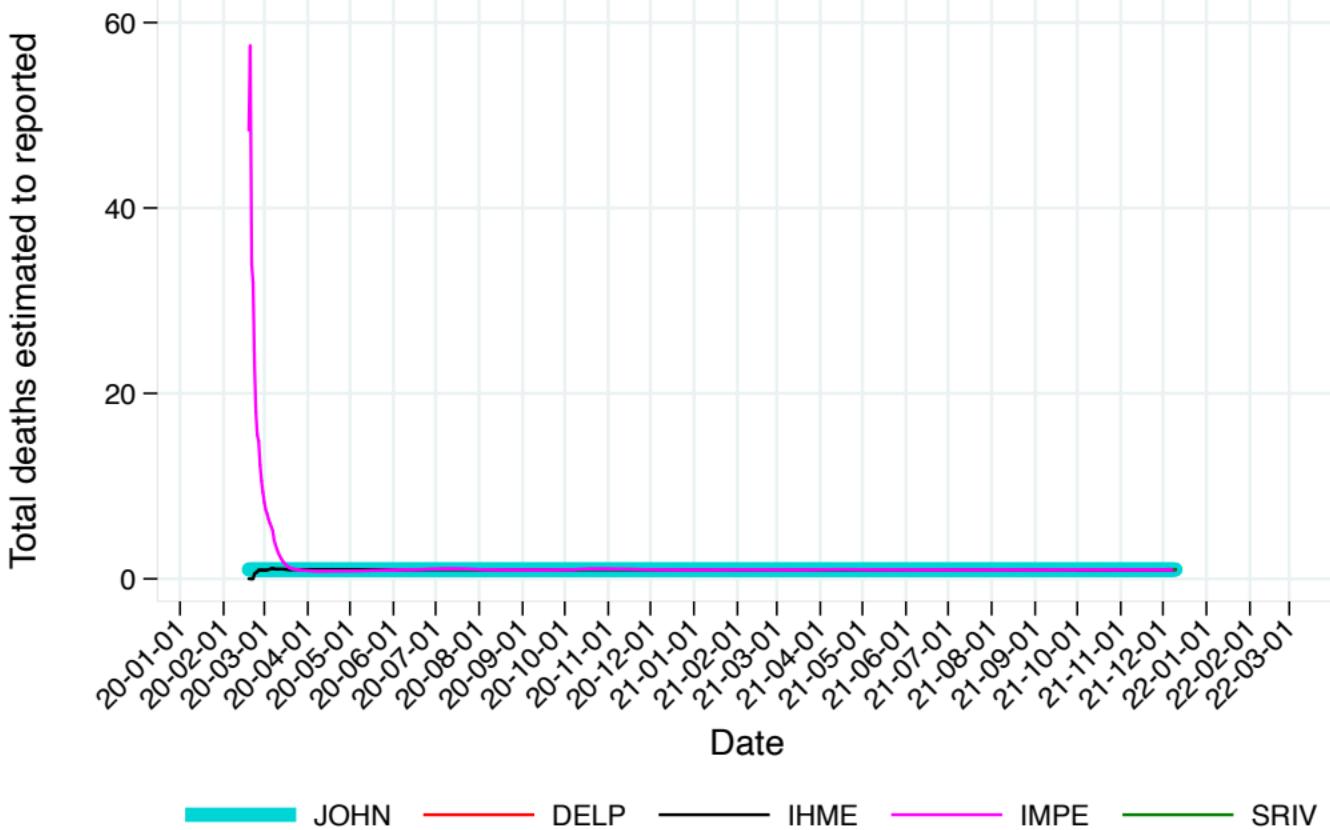


Date

JOHN cases DELP cases IHME infections
IMPE infections SRIIV cases

COVID-19 total deaths, estimated to reported, Iran

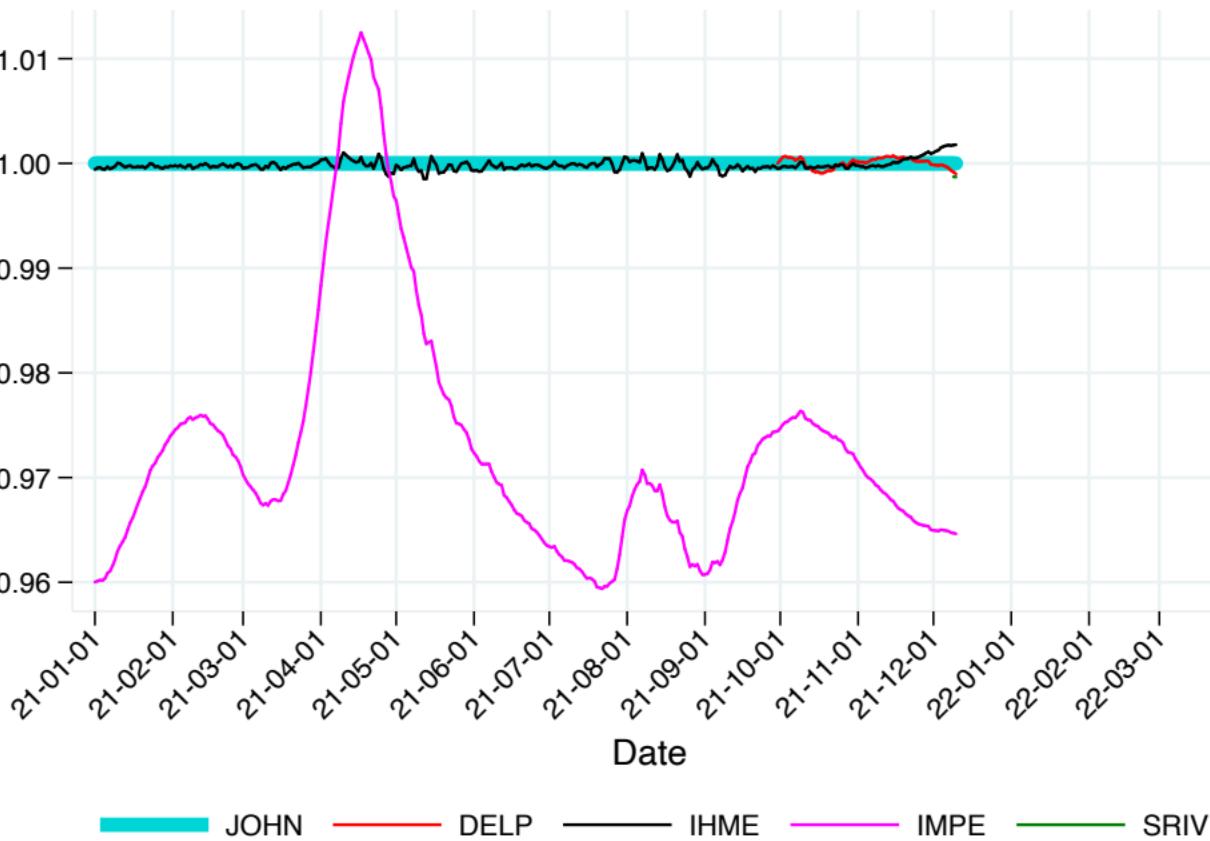
reference scenarios



COVID-19 total deaths, estimated to reported, Iran

reference scenarios

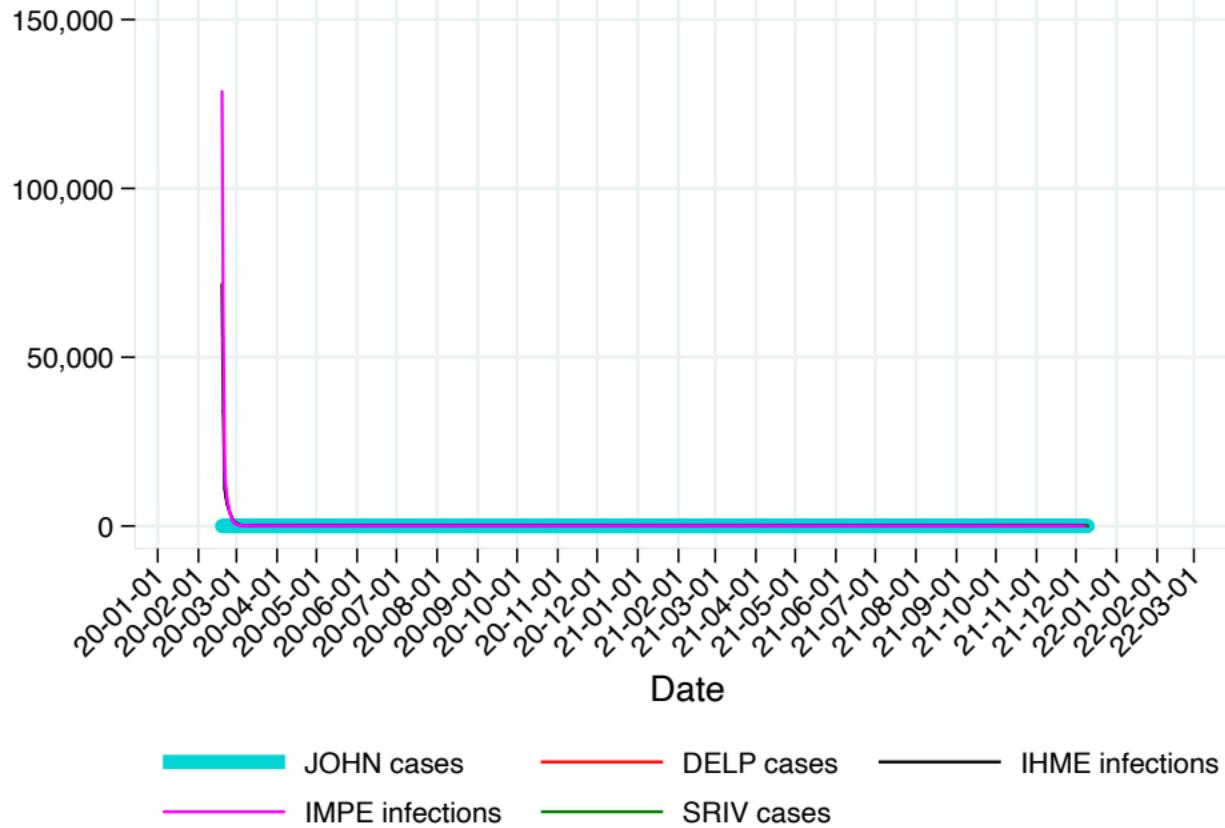
Total deaths estimated to reported



Total cases or infections estimated to reported

COVID-19 total cases estimated to reported, Iran

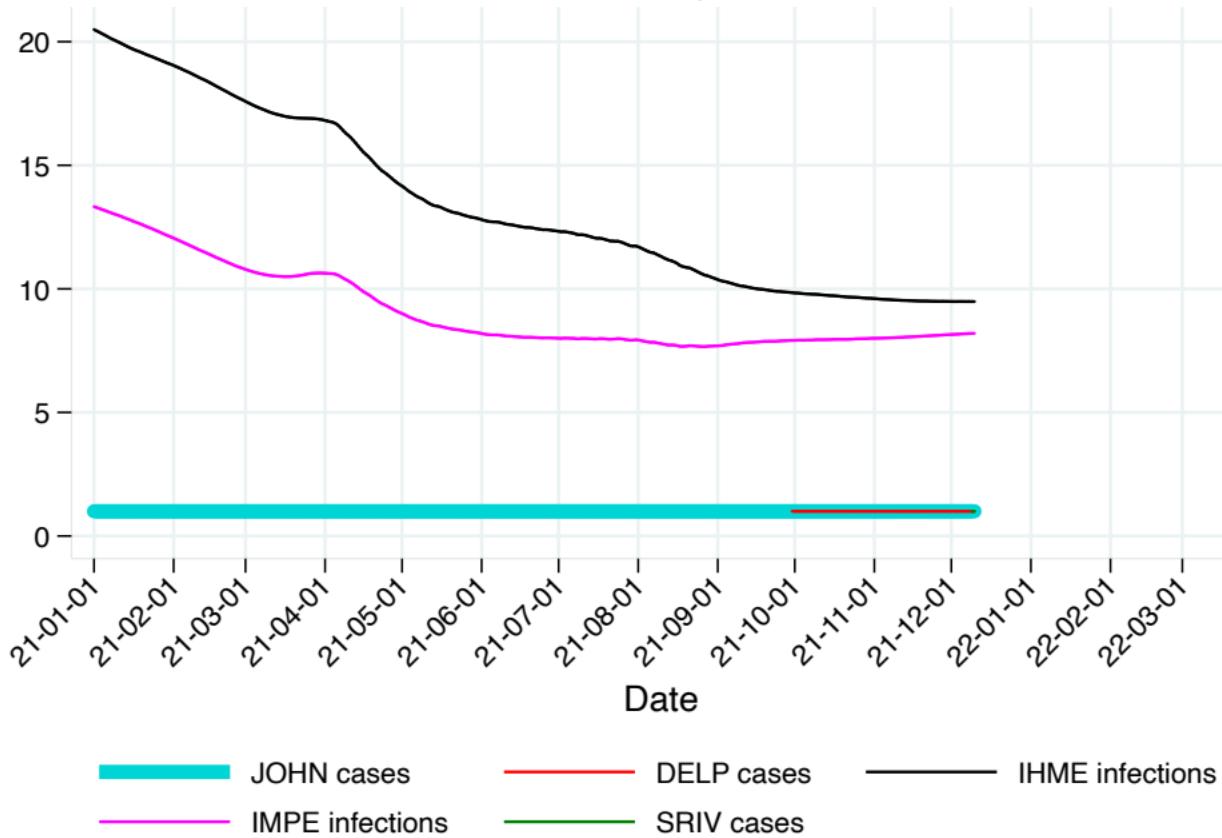
total cases or infections estimated, to reported cases; reference scenarios



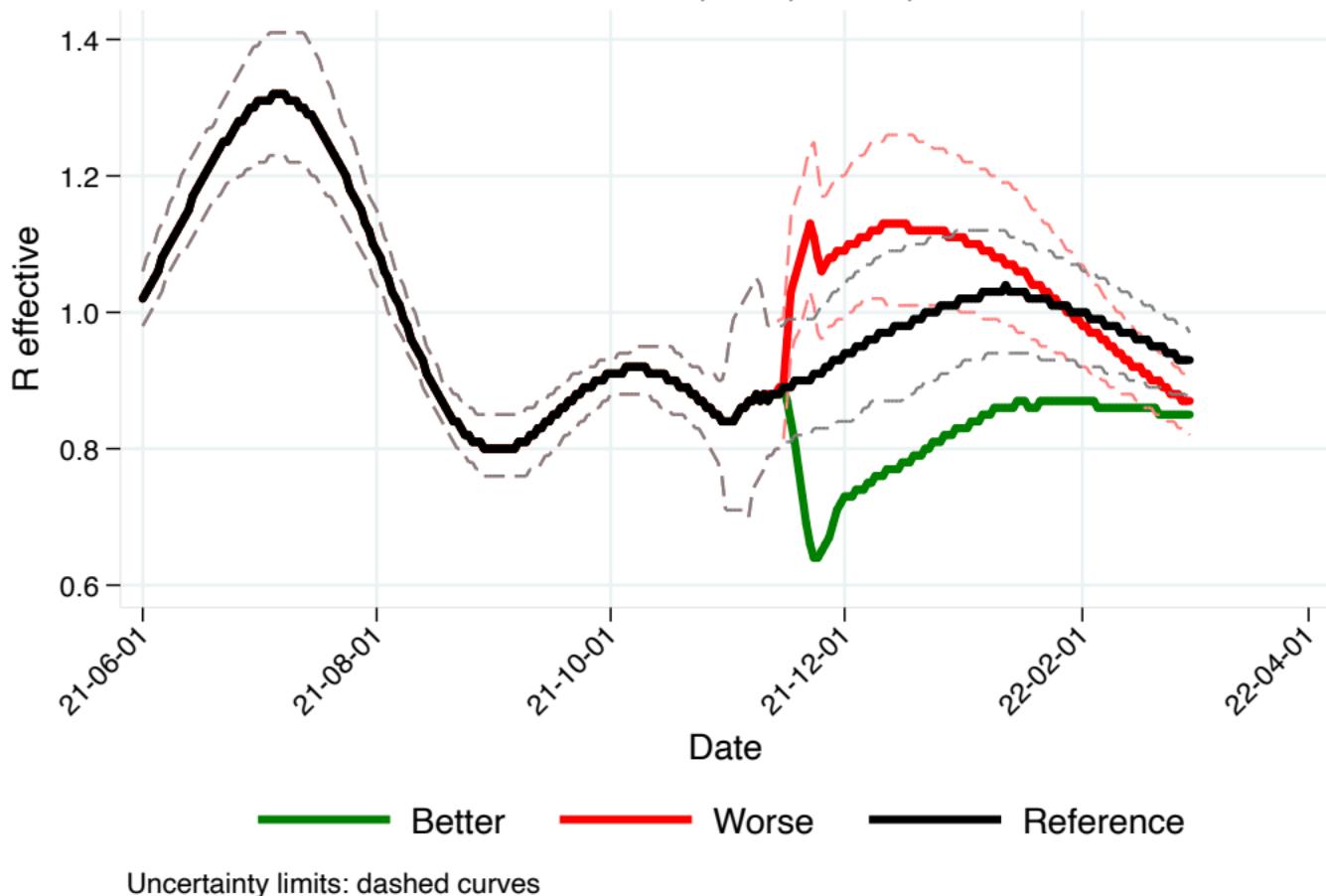
Total cases or infections estimated to reported

COVID-19 total cases estimated to reported, Iran

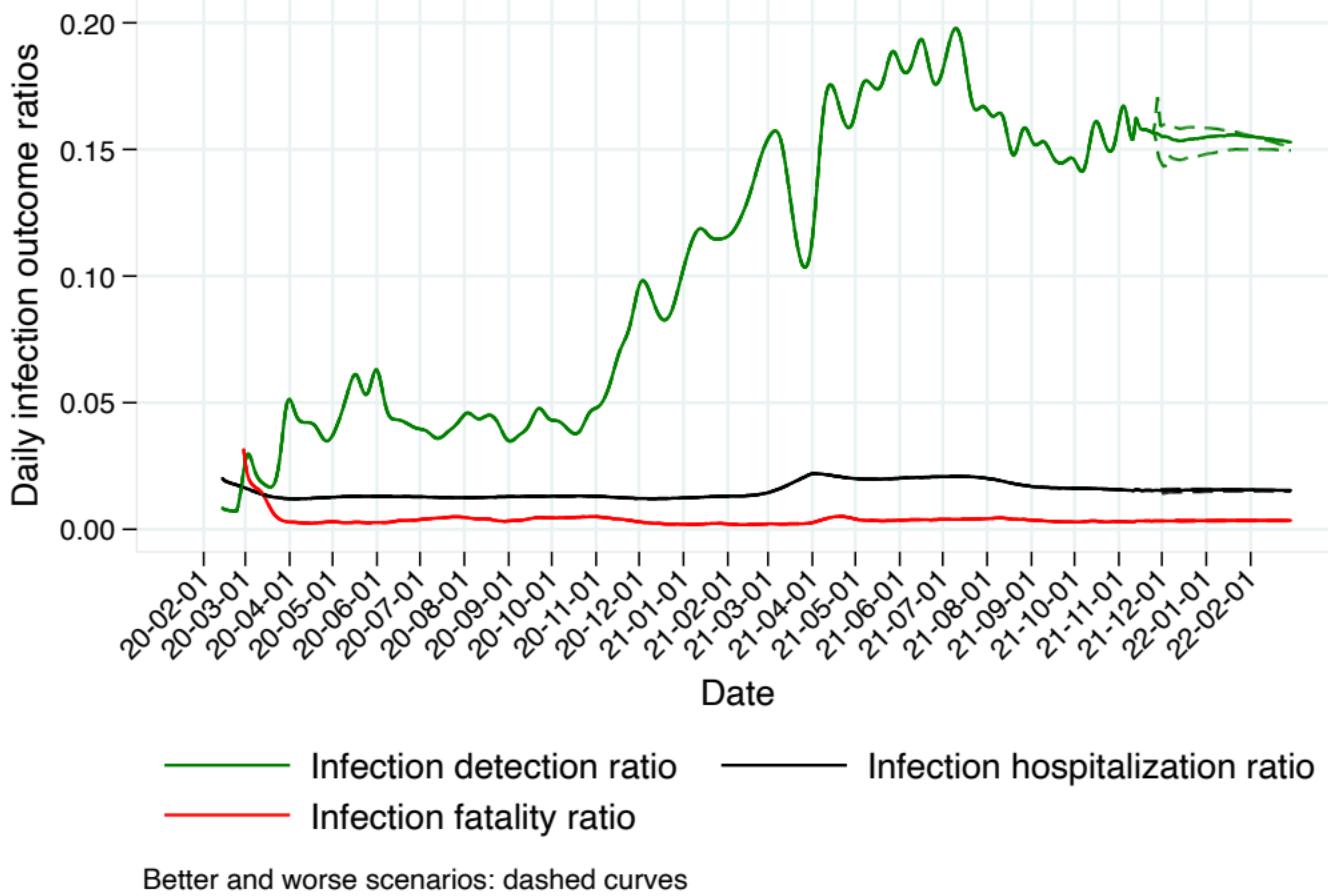
total cases or infections estimated, to reported cases; reference scenarios



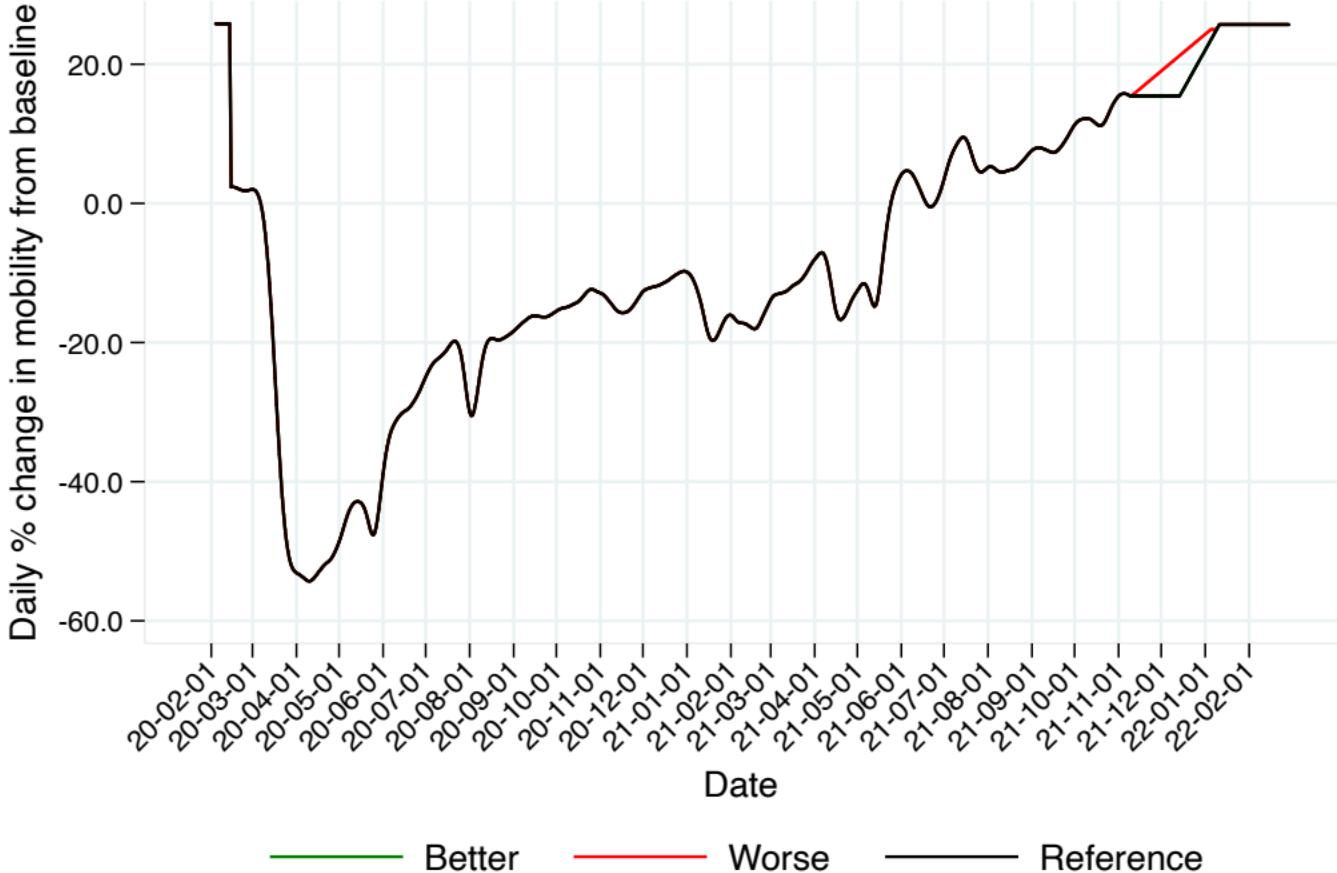
COVID-19 R effective, Iran, IHME, 3 scenarios



COVID-19 daily infection outcome ratios, Iran, IHME, 3 scenarios

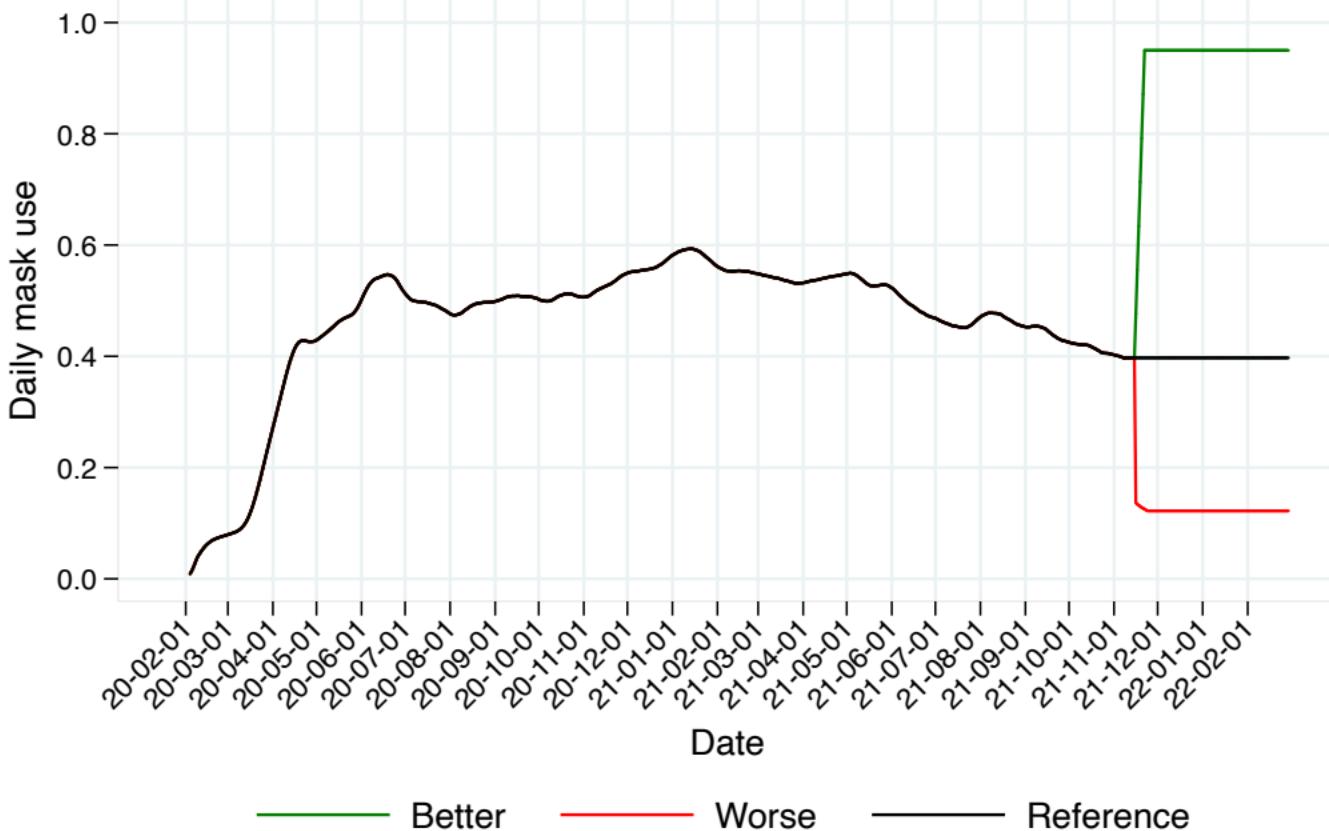


COVID-19 daily % change in mobility, Iran, IHME, 3 scenarios

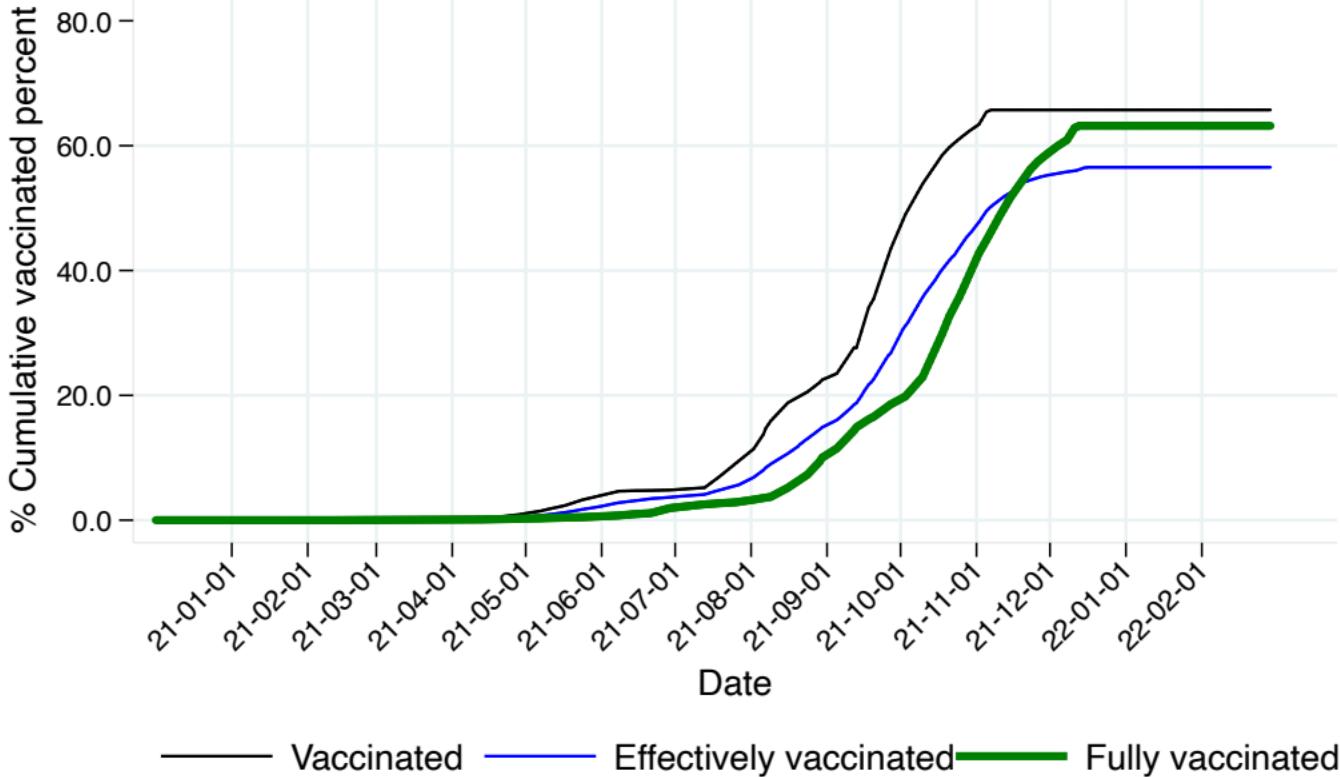


COVID-19 daily mask use, Iran, IHME, 3 scenarios

Percent of population reporting always wearing a mask when leaving home

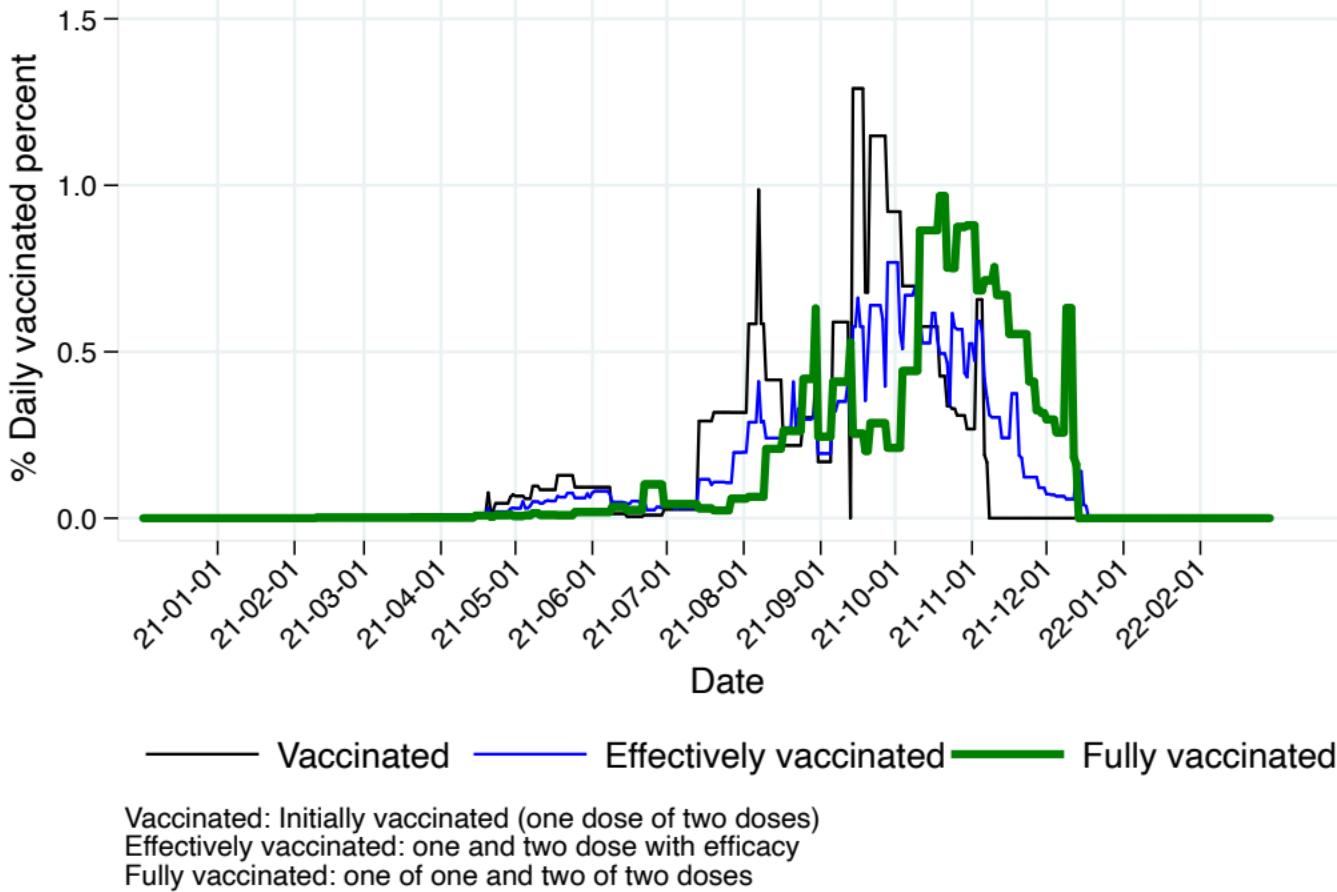


COVID-19 cumulative vaccinated percent, Iran, IHME, 3 scenarios



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

COVID-19 daily vaccinated percent, Iran, IHME, 3 scenarios



COVID-19 daily vaccinated number, Iran, IHME, 3 scenarios

