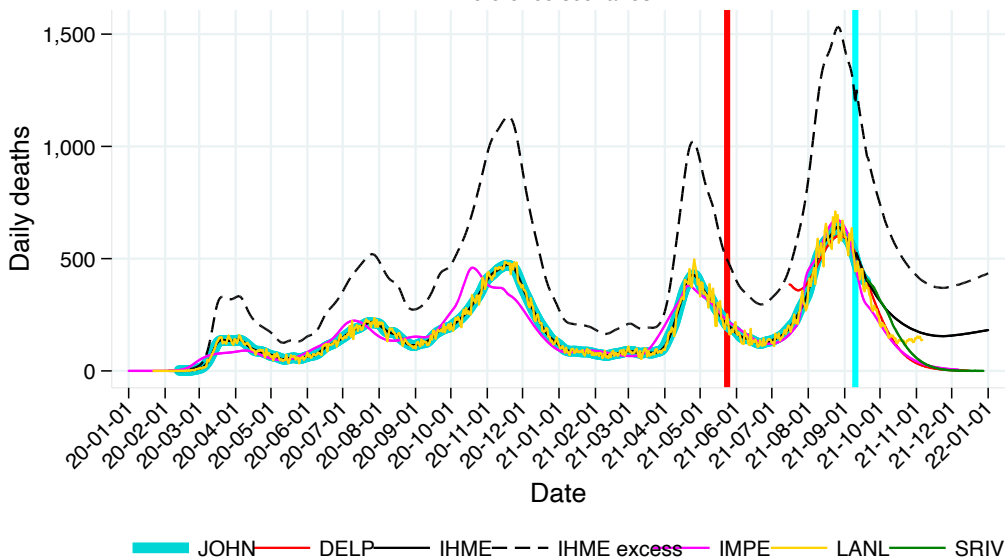


# COVID-19 daily deaths, Iran

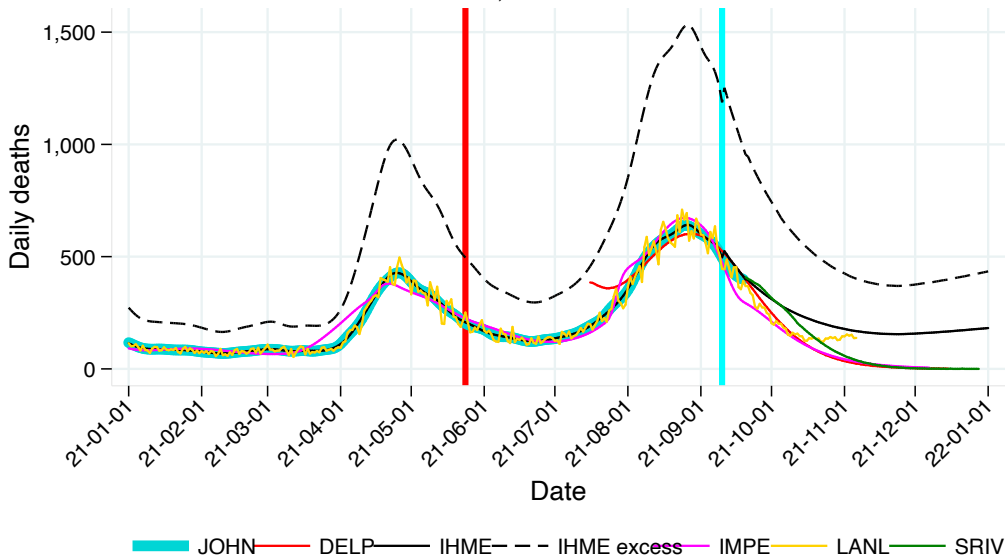
reference scenarios



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

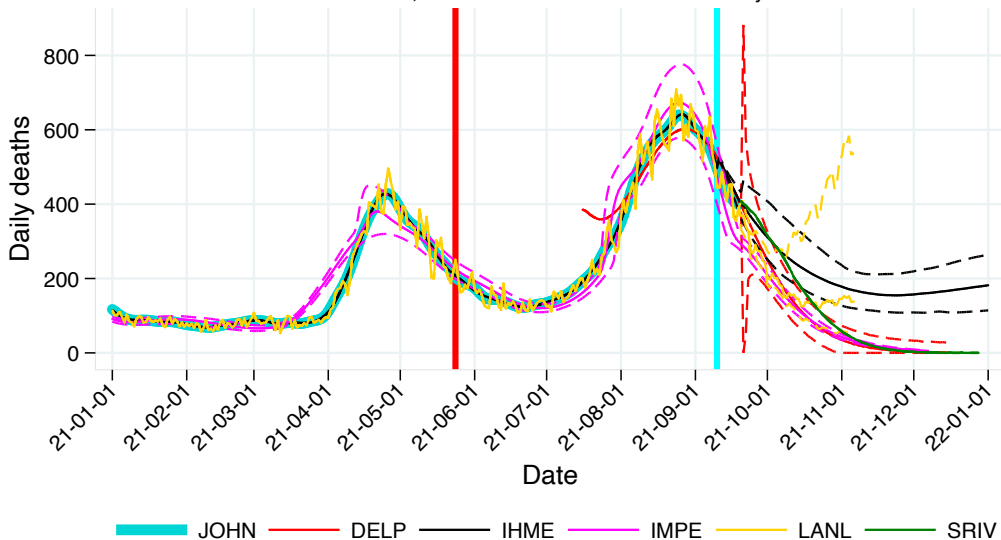
2021 on, reference scenarios



- 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 daily deaths, Iran

2021 on, reference scenarios with uncertainty



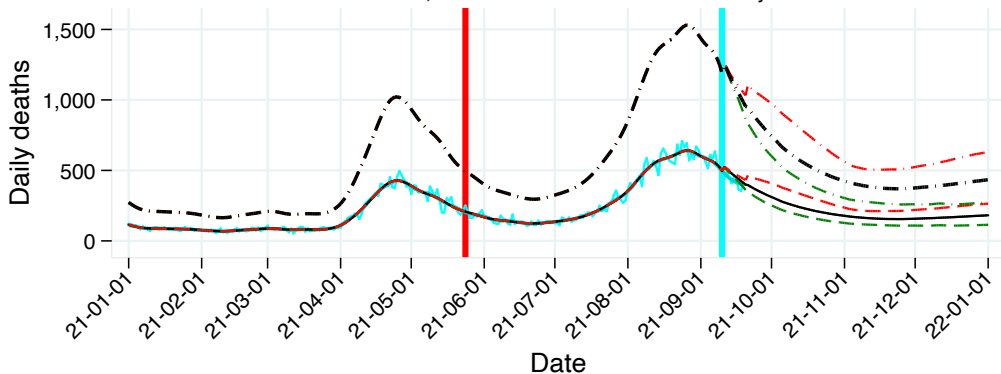
- Uncertainty limits: dashed curves

- 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 deaths, Iran, IHME

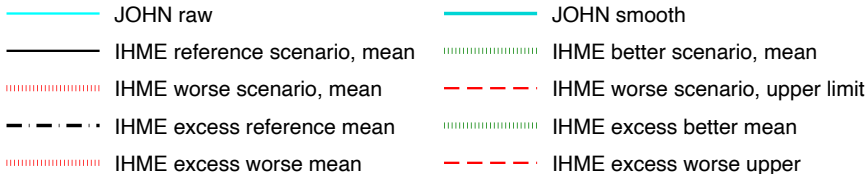
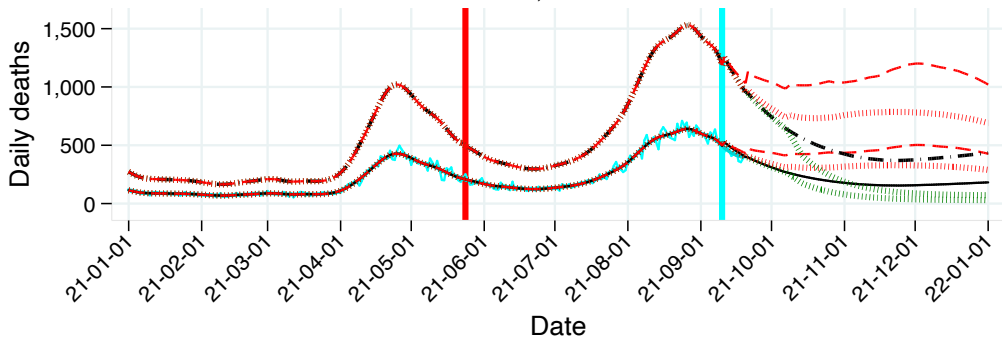
2021 on, reference scenario with uncertainty



- 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.
- 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 deaths, Iran, IHME

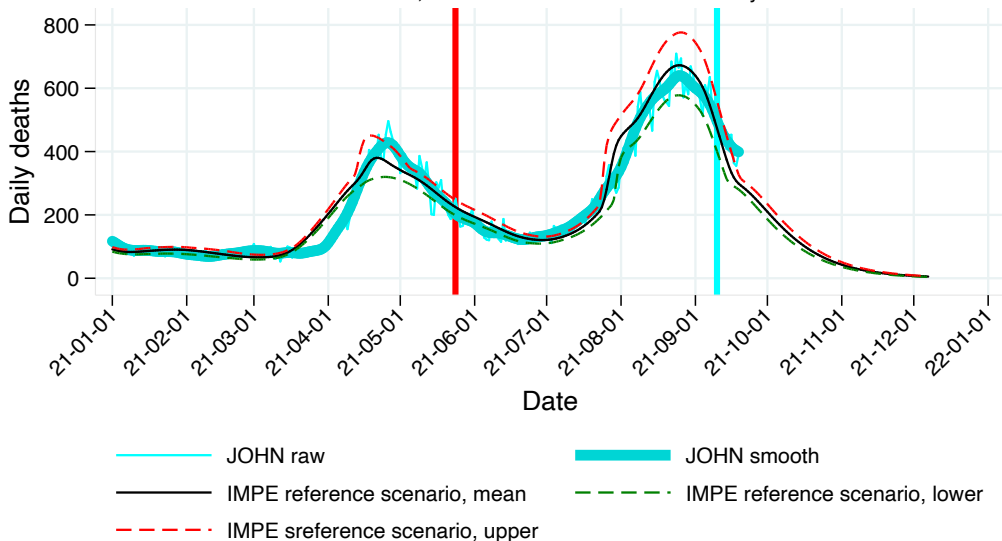
2021 on, 3 scenarios



- 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.
- 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 deaths, Iran, IMPE

2021 on, reference scenario with uncertainty

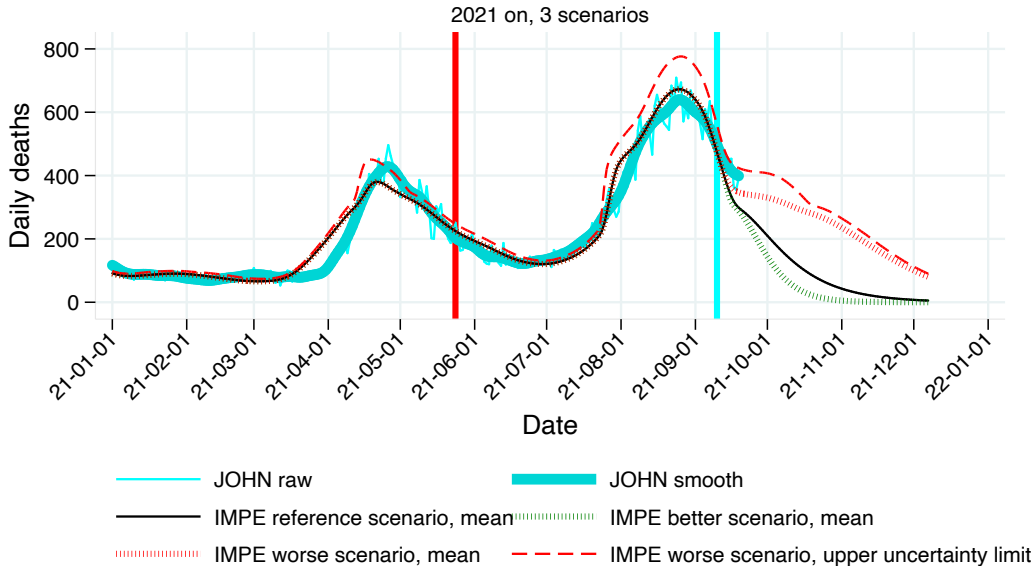


- Uncertainty limits: dashed (---) curves.

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

- 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.

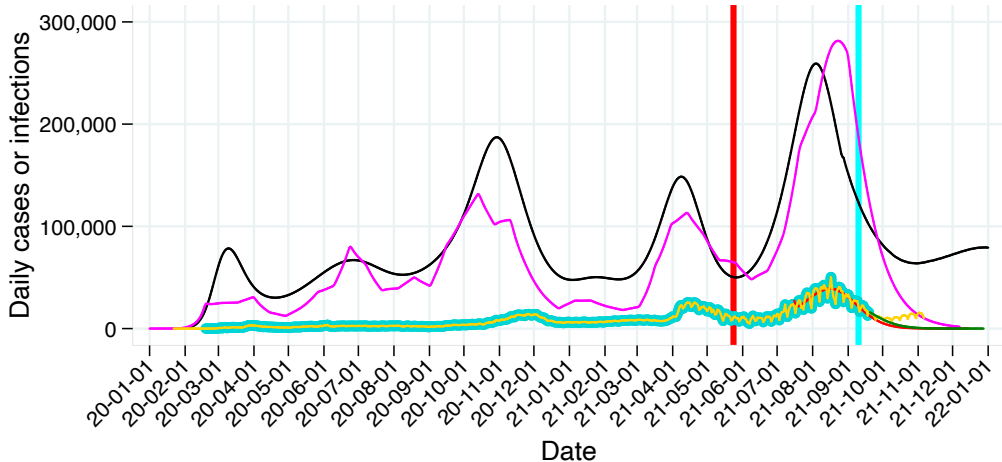
# COVID-19 daily deaths, Iran, IMPE



- Better and worse scenarios: tight dot (lllll) 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.
- 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, Iran

reference scenarios



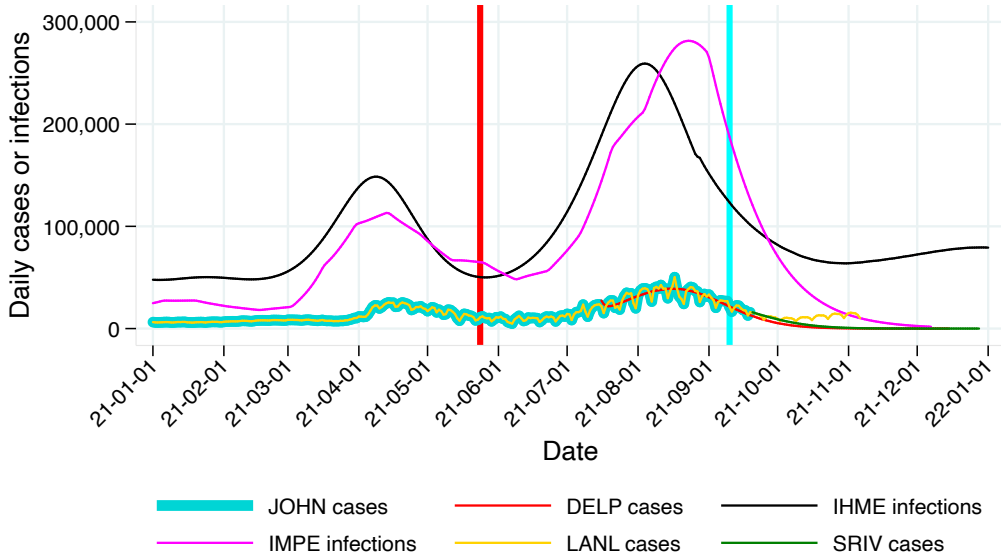
 JOHN cases	 DELP cases	 IHME infections
 IMPE infections	 LANL cases	 SRIV cases

- 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, Iran

2021 on, reference scenarios

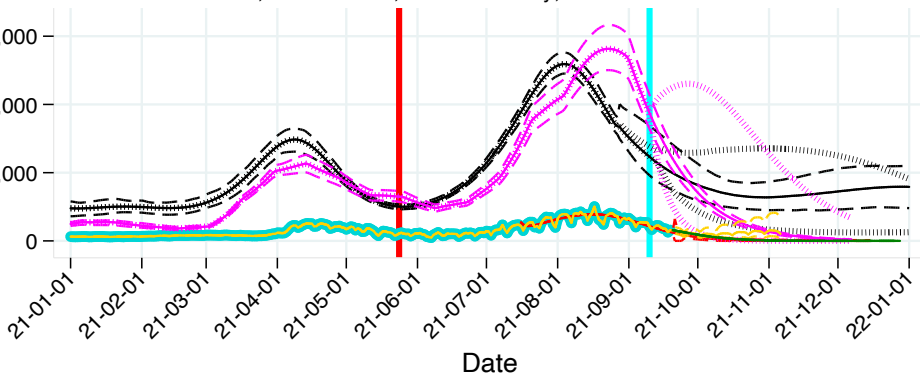


- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.
- Cyan line: 20210910; Travel restrictions to Iraq, inter alia, to delay and attenuate the SIXTH wave,  $\Lambda$ ,  $\pm$   $\mu$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

# COVID-19 daily cases or infections, Iran

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

Daily cases or infections

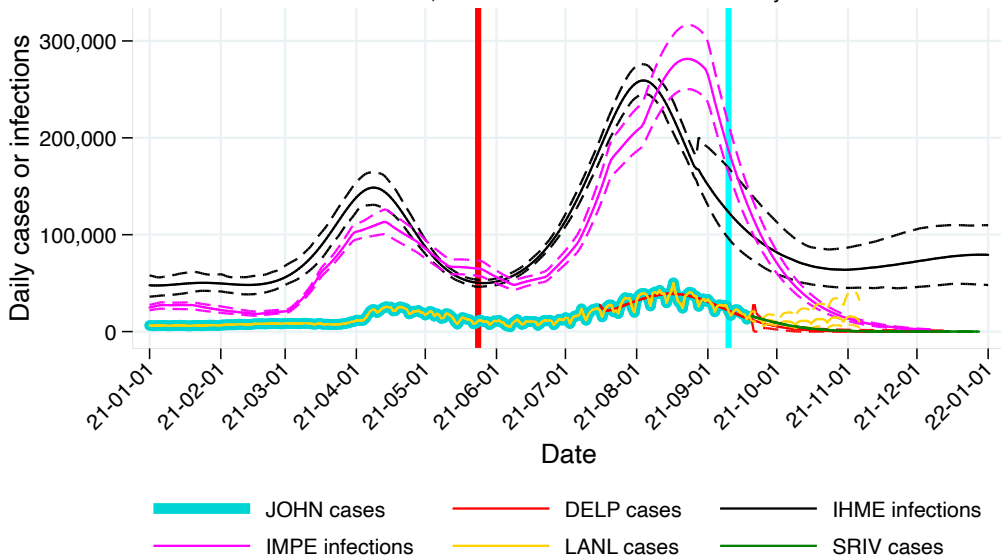


- JOHN cases
- DELP cases
- IHME reference, mean
- IHME ref, uncertainty
- IHME better and worse
- IMPE reference, mean
- IMPE ref, uncertainty
- IMPE better and worse
- LANL cases
- SRIV cases

- 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.
- 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, Iran

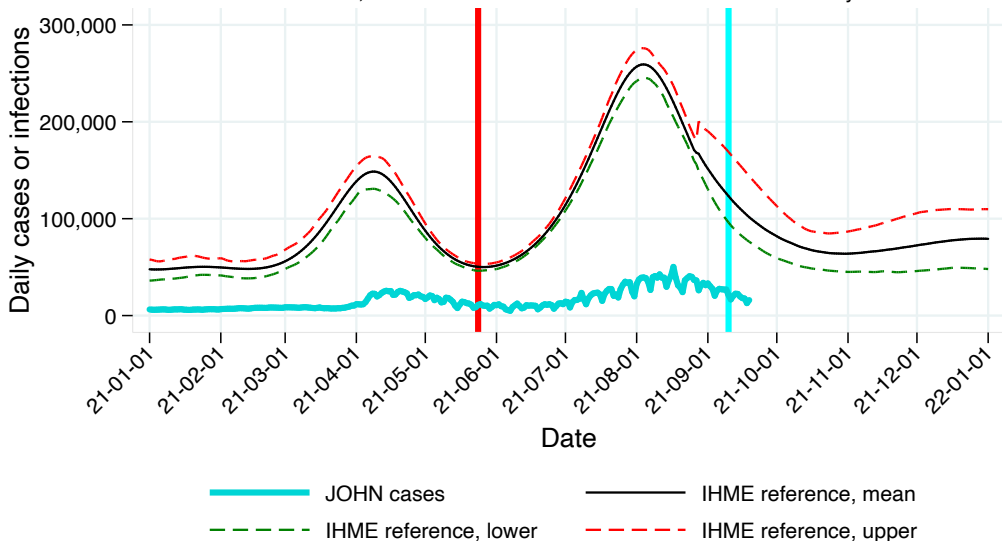
2021 on, reference scenarios with uncertainty



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

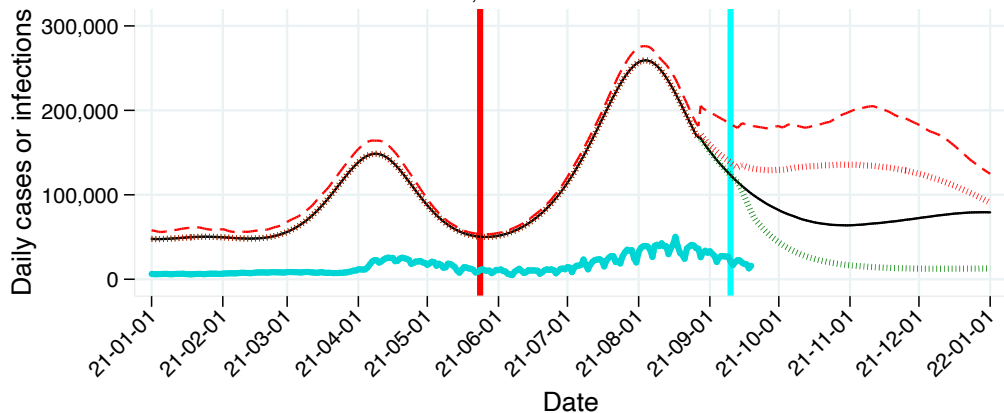
2021 on, IHME infections reference scenario with uncertainty



- 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.
- 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 JOHN, and infections IHME, Iran

2021 on, IHME infections 3 scenarios



JOHN cases

IHME better, mean

IHME worse scenario, upper uncertainty limit

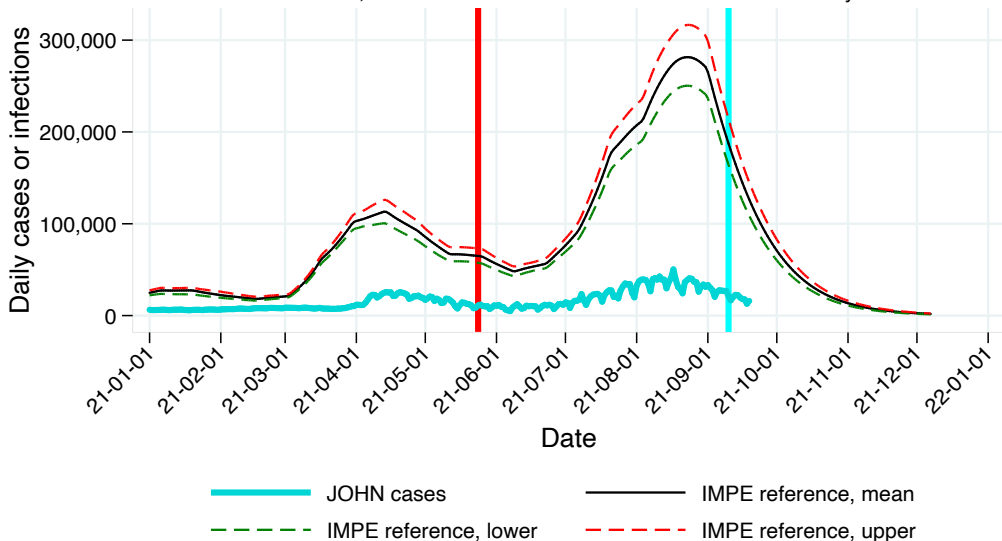
IHME reference, mean

IHME worse, mean

- 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.
- 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 JOHN, and infections IMPE, Iran

2021 on, IMPE infections reference scenario with uncertainty

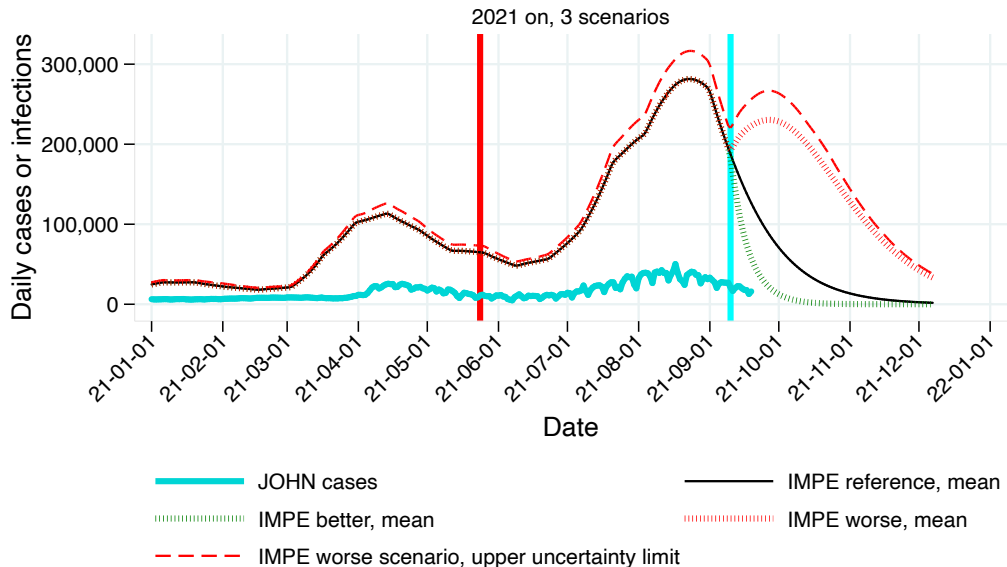


- Uncertainty limits: dashed (---) curves.

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

- 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.

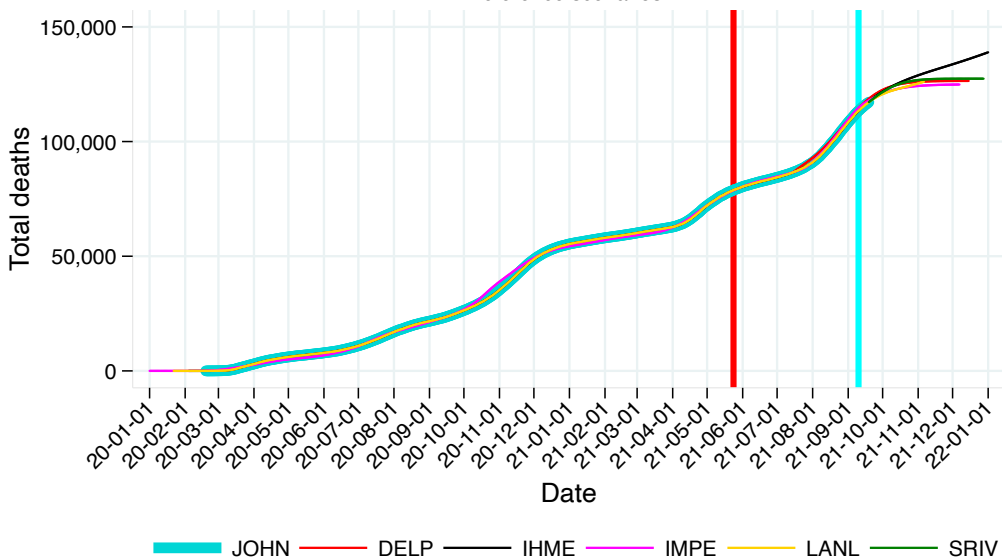
# COVID-19 daily JOHN, and infections IMPE, Iran



- 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.
- 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

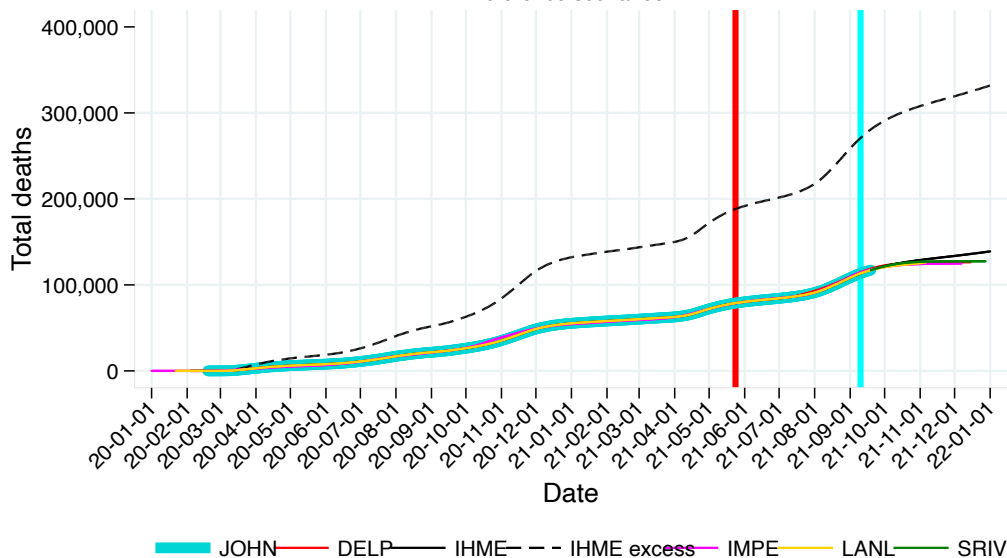


- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.
- Cyan line: 20210910; Travel restrictions to Iraq, surveillance of variants, inter alia, to delay and attenuate the SIXTH wave, Lambda,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



# COVID-19 total deaths, Iran

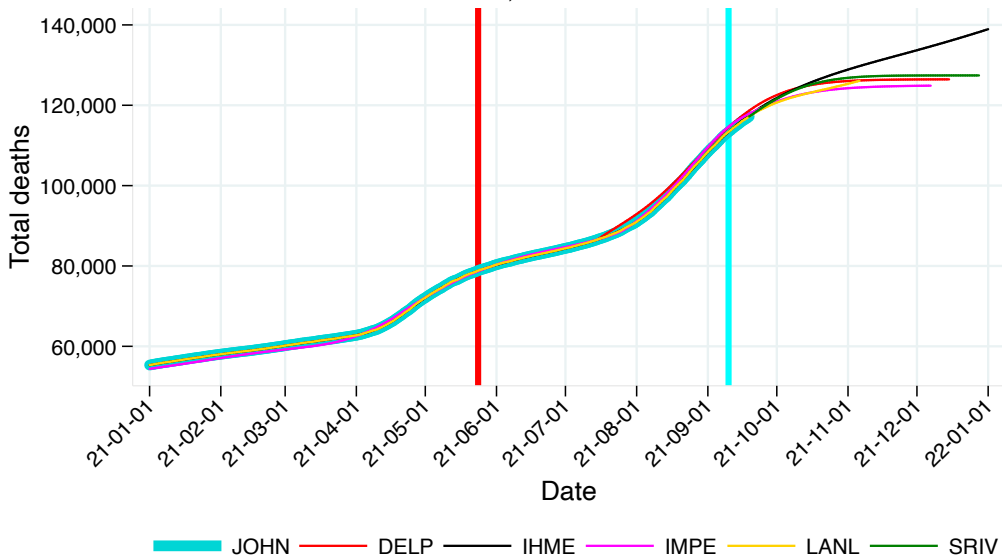
reference scenarios



- 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

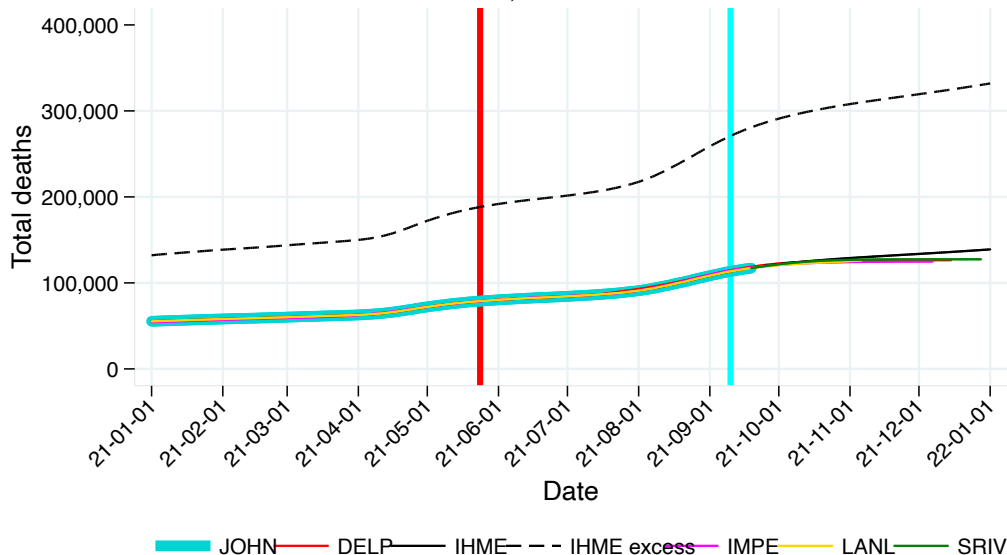
2021 on, reference scenarios



- 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

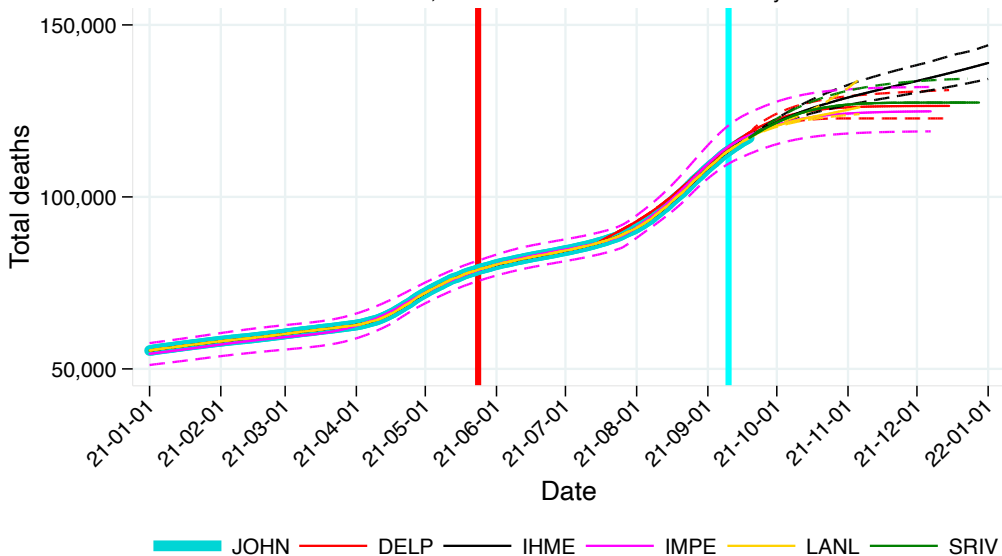
2021 on, reference scenarios



- 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.

# COVID-19 total deaths, Iran

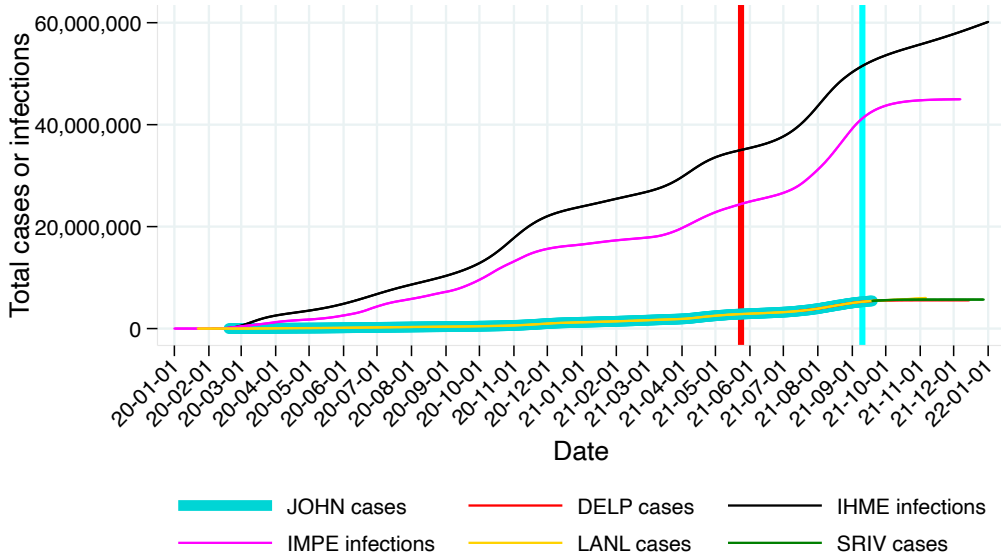
2021 on, reference scenarios with uncertainty



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

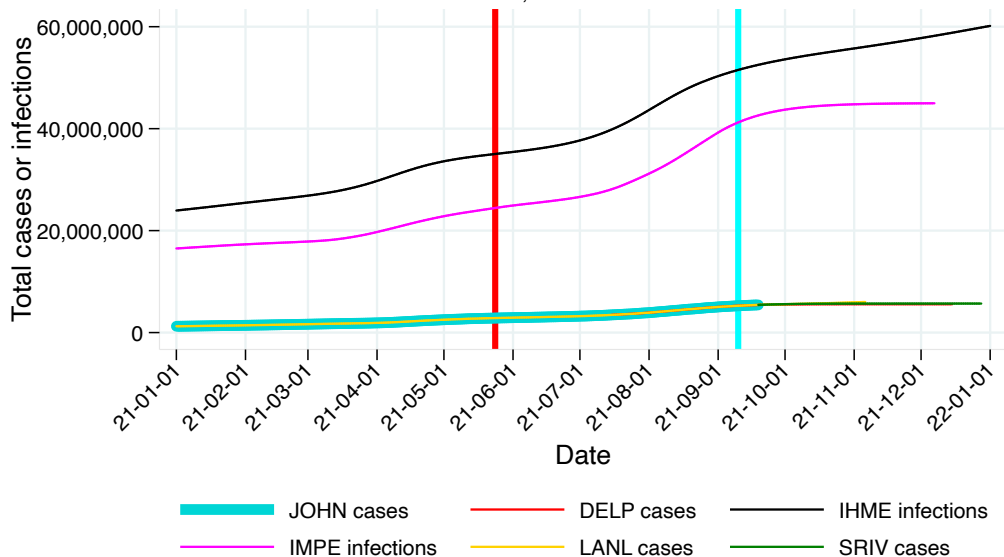
reference scenarios



- 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

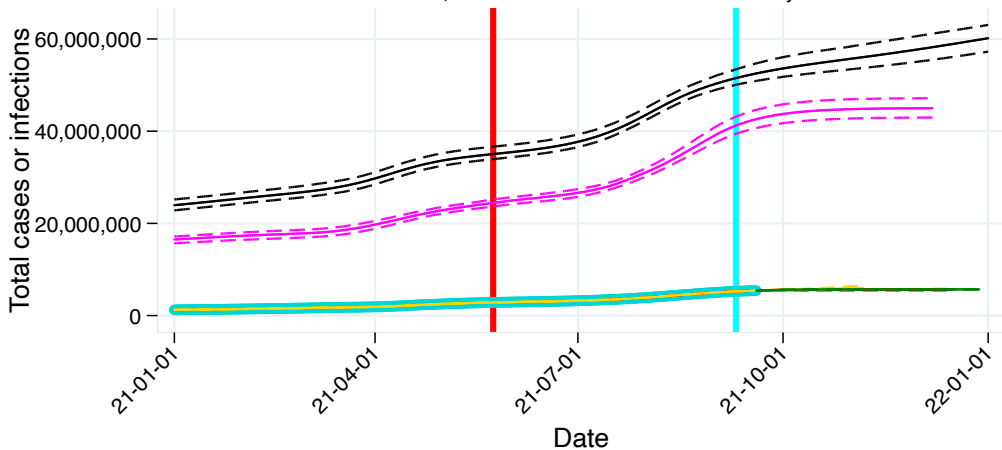
2021 on, reference scenarios



- 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.

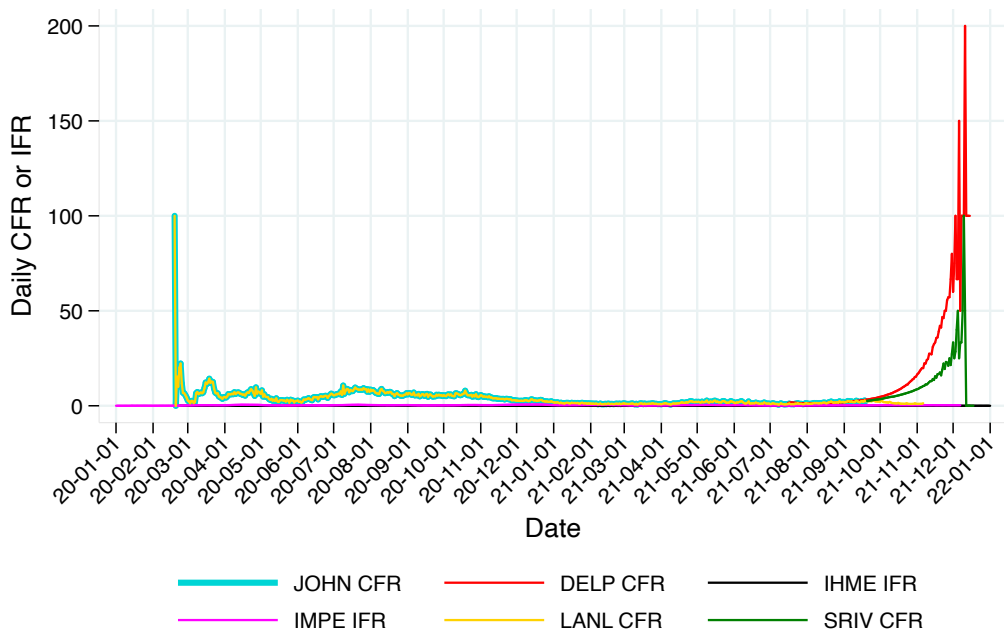
# COVID-19 total cases or infections, Iran

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.
- JOHN cases      DELP cases      IHME infections  
IMPE infections      LANL cases      SRIV cases

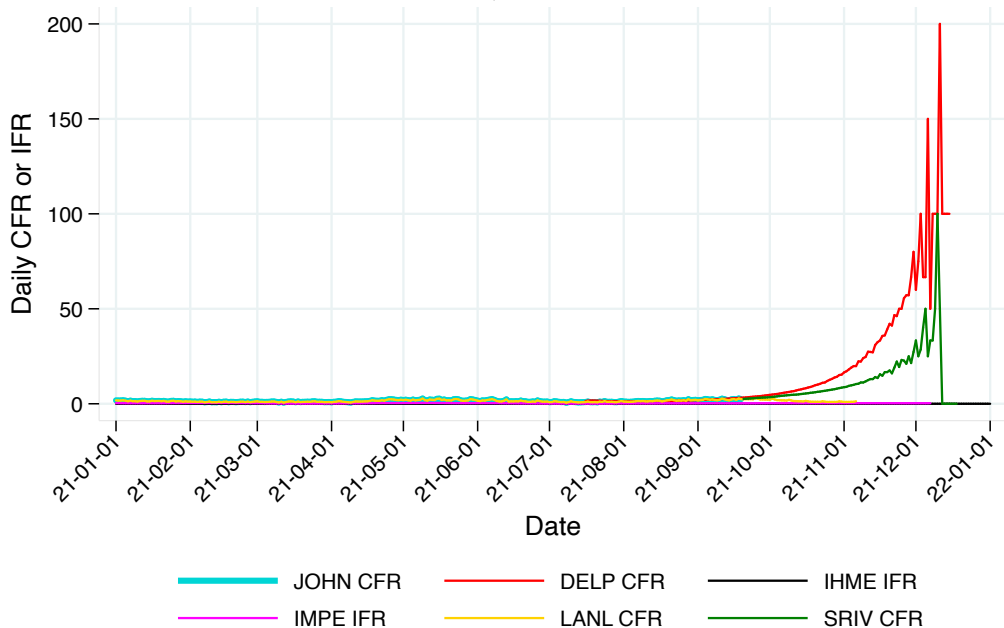
## COVID-19 daily CFR or IFR, Iran



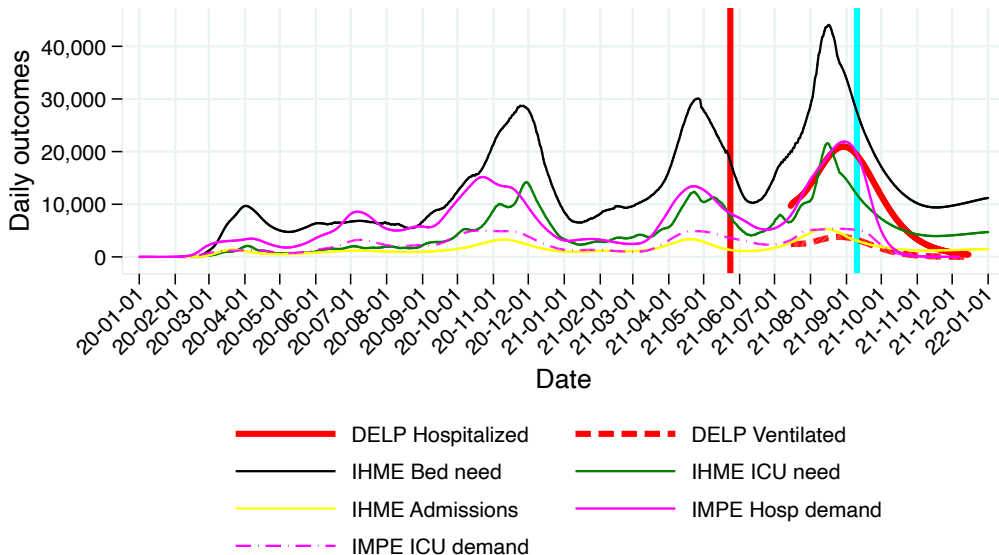


# COVID-19 daily CFR or IFR, Iran

2021 on, reference scenarios

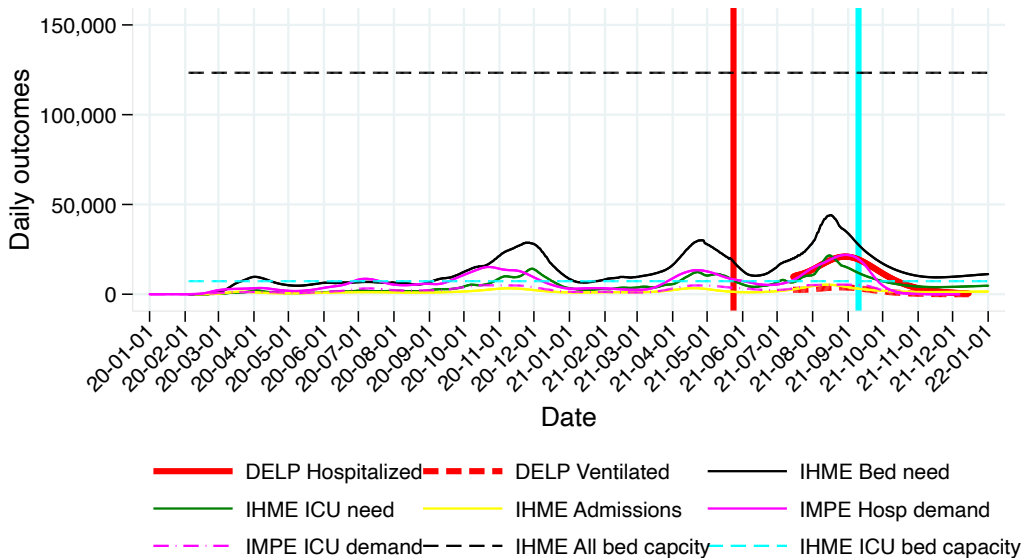


## COVID-19 daily hospital-related outcomes Iran



- 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.

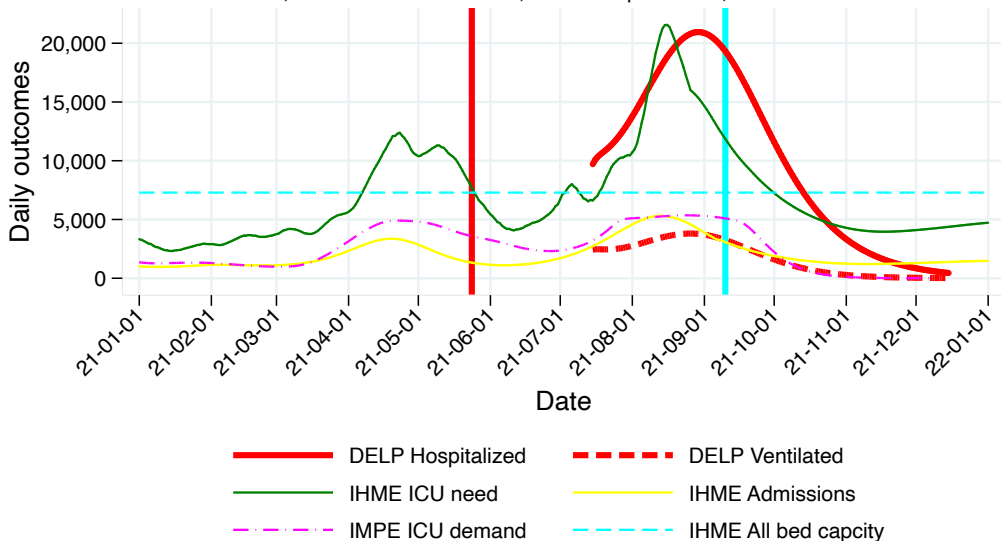
## COVID-19 daily hospital-related outcomes Iran



- 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.

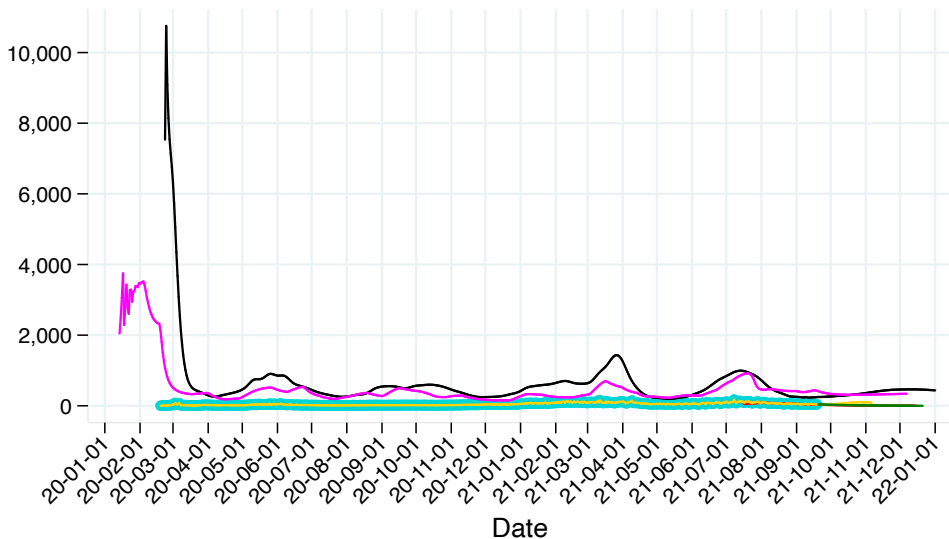
- Red line: 20210424 online meeting; The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.

- 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

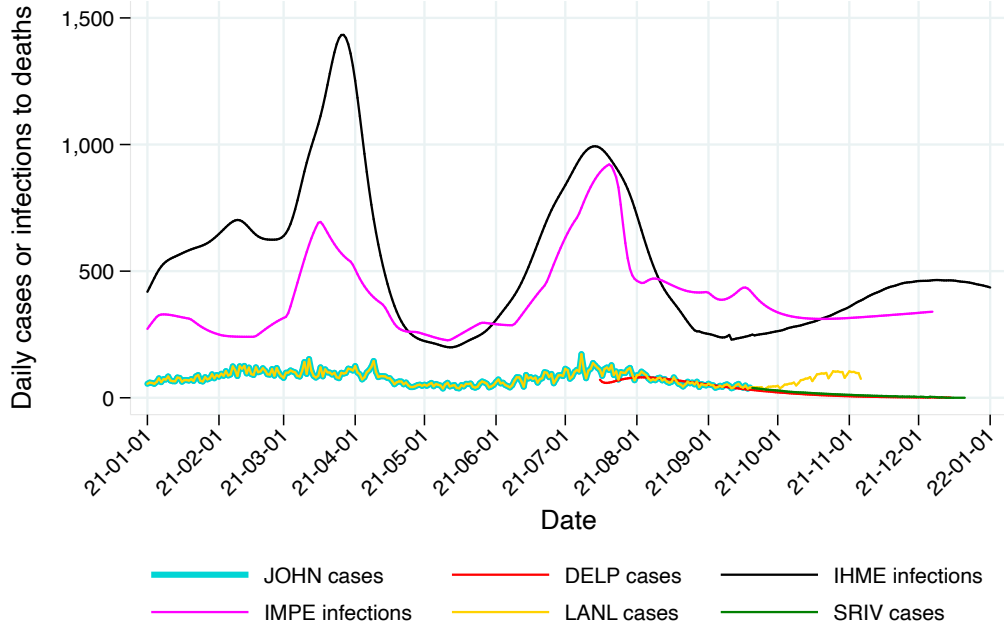
Daily cases or infections to deaths



JOHN cases      DELP cases      IHME infections  
IMPE infections      LANL cases      SRIV cases

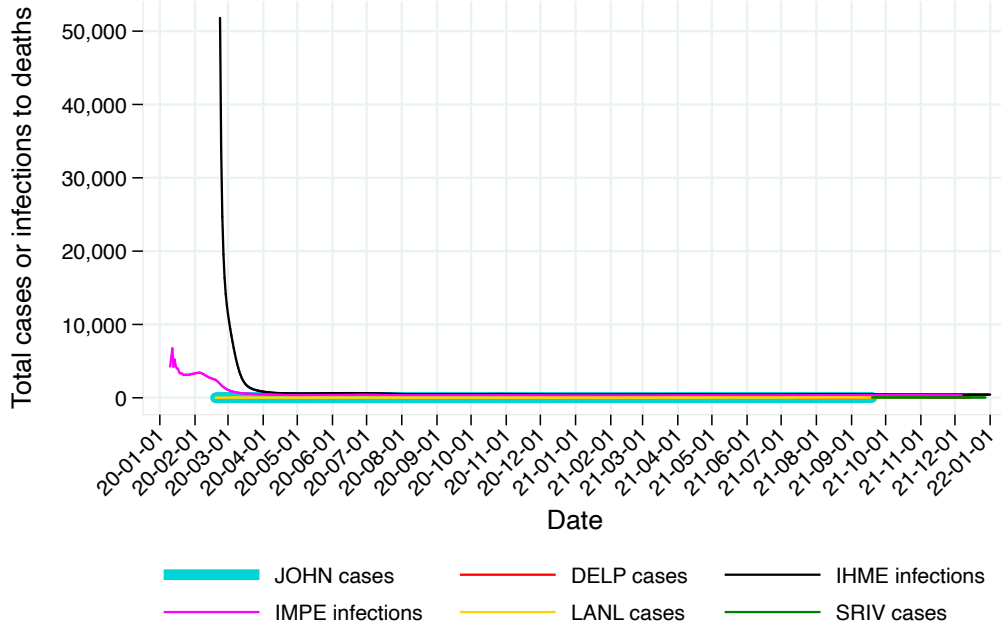
# COVID-19 daily cases or infections, to deaths, Iran

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

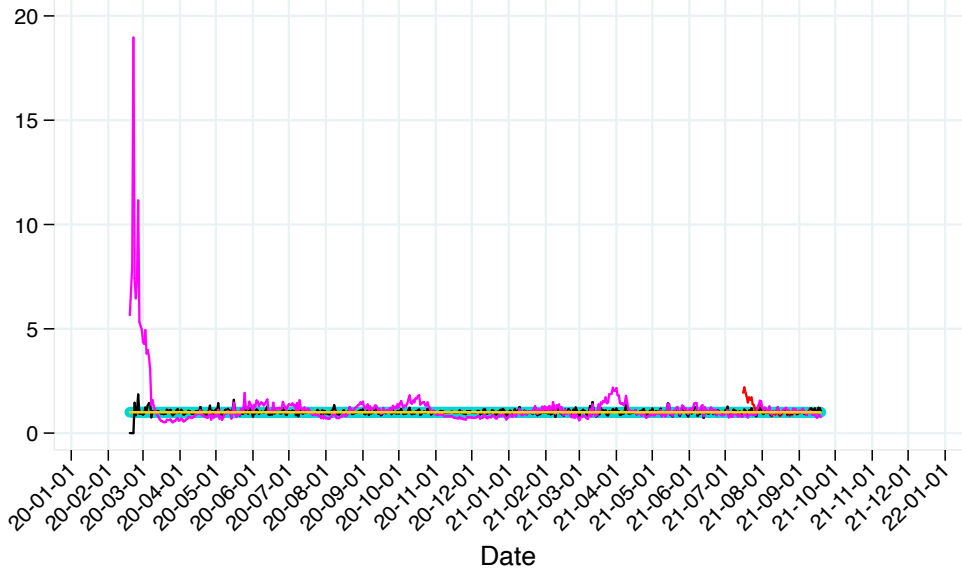




# COVID-19 daily deaths, estimated to reported, Iran

reference scenarios

Daily deaths estimated to reported

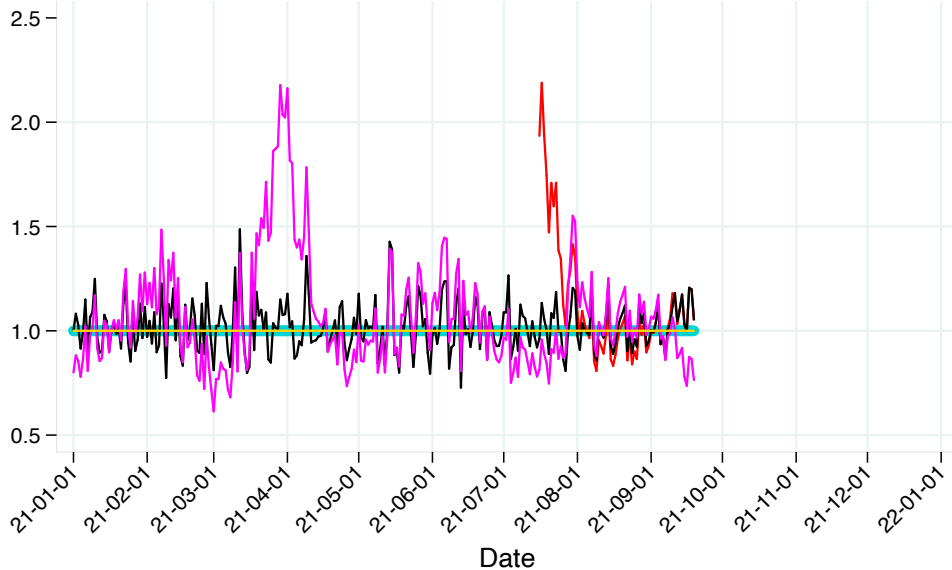


JOHN DELP IHME IMPE LANL SRIV

# COVID-19 daily deaths, estimated to reported, Iran

reference scenarios

Daily deaths estimated to reported

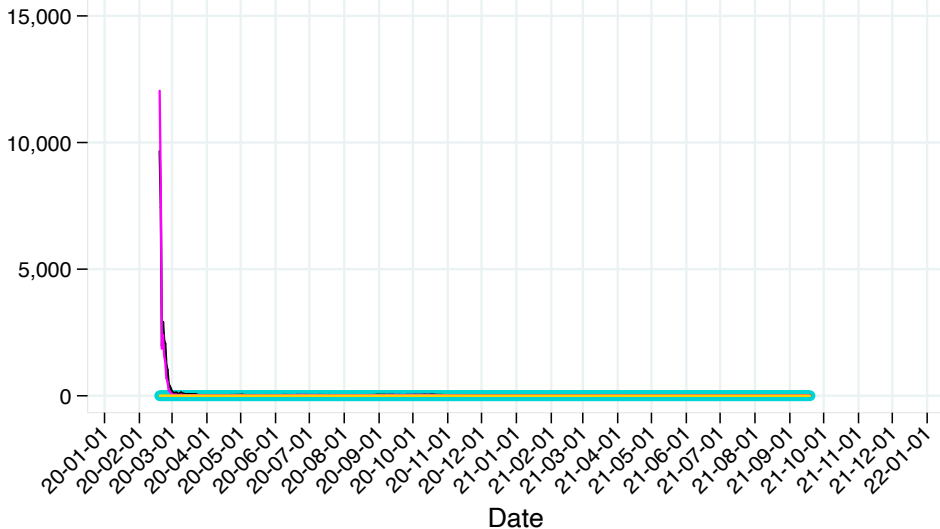


JOHN DELP IHME IMPE LANL SRIV

# 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

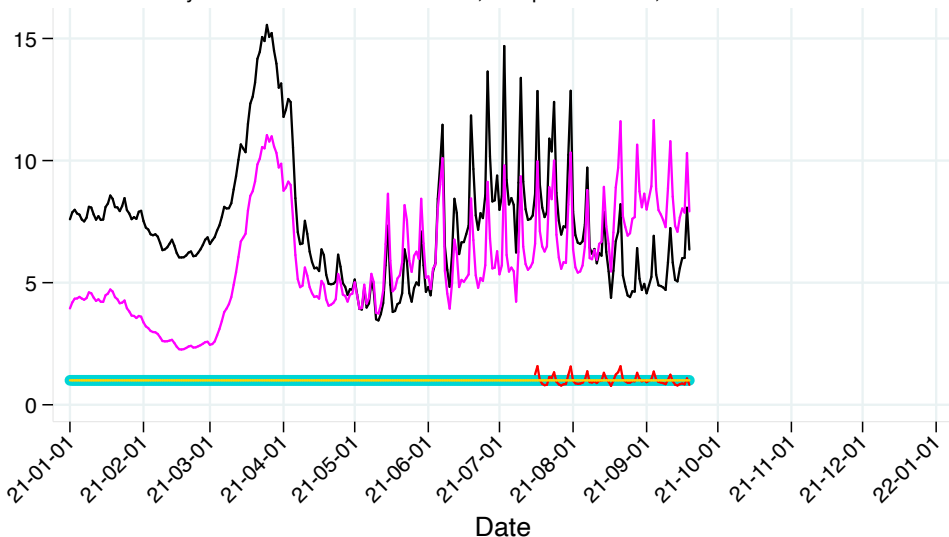


JOHN cases      DELP cases      IHME infections  
IMPE infections      LANL cases      SRIV cases

# 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



JOHN cases

DELP cases

IHME infections

IMPE infections

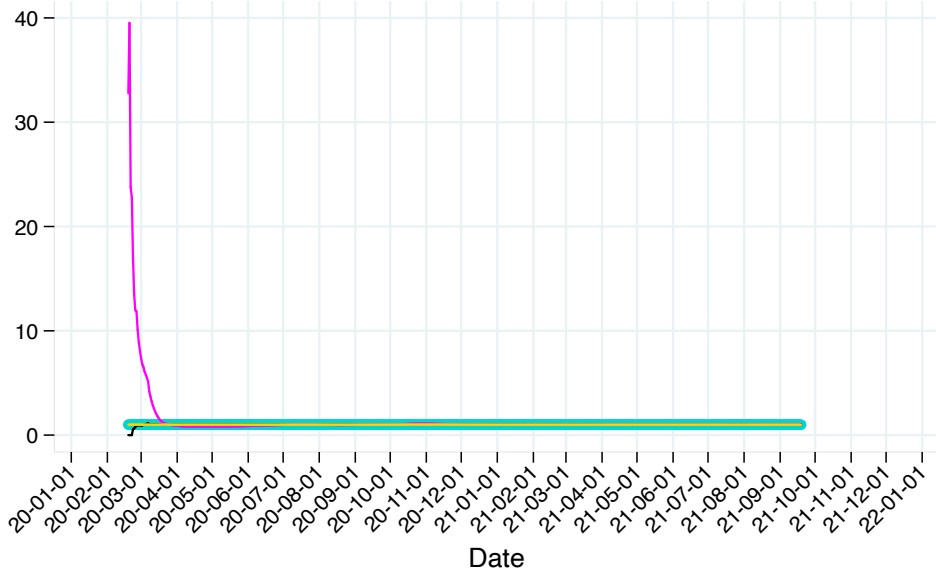
LANL cases

SRIV cases

# COVID-19 total deaths, estimated to reported, Iran

reference scenarios

Total deaths estimated to reported

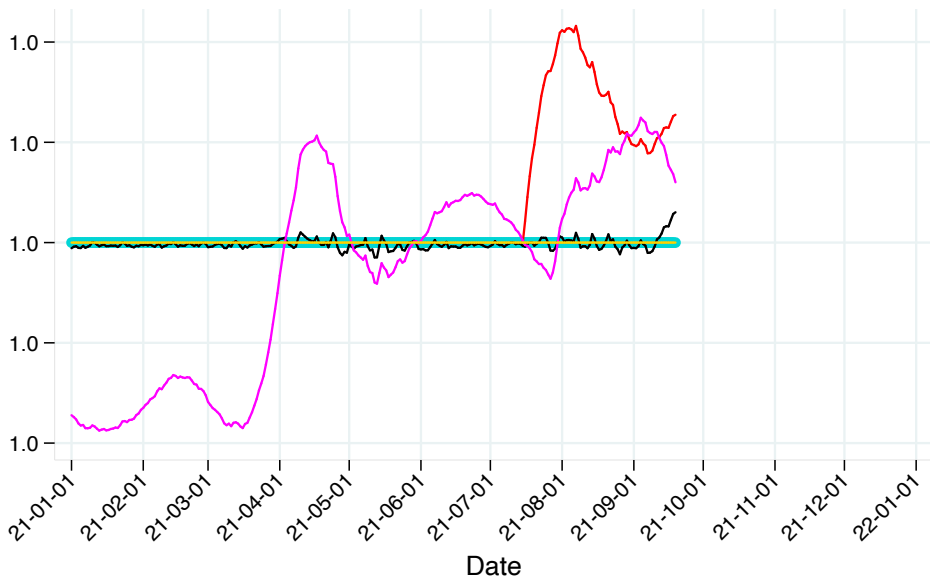


JOHN DELP IHME IMPE LANL SRIV

# COVID-19 total deaths, estimated to reported, Iran

reference scenarios

Total deaths estimated to reported

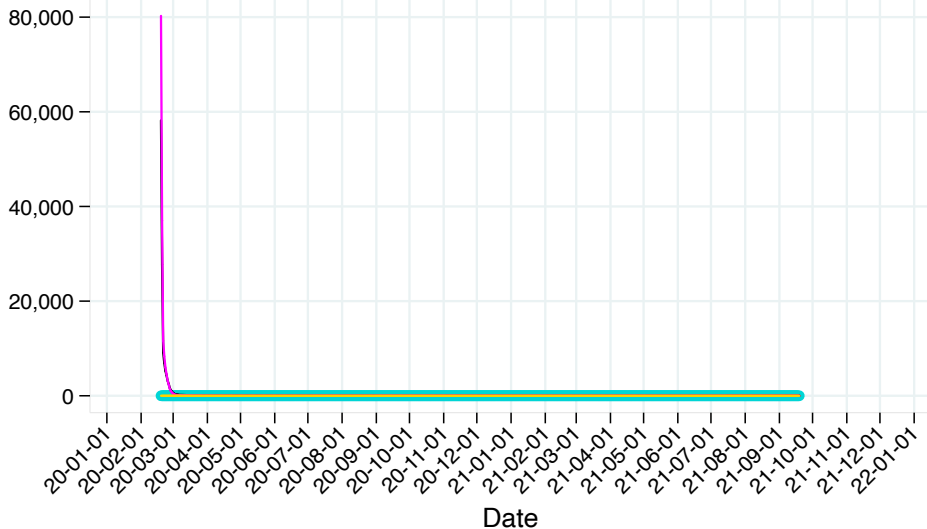


JOHN DELP IHME IMPE LANL SRIV

# 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

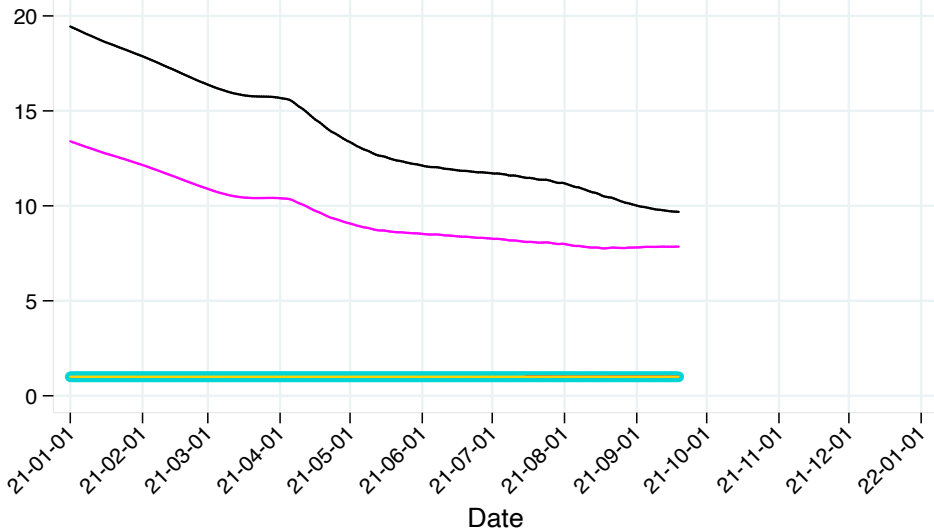


JOHN cases DELP cases IHME infections  
IMPE infections LANL cases SRIV cases

# COVID-19 total cases estimated to reported, Iran

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

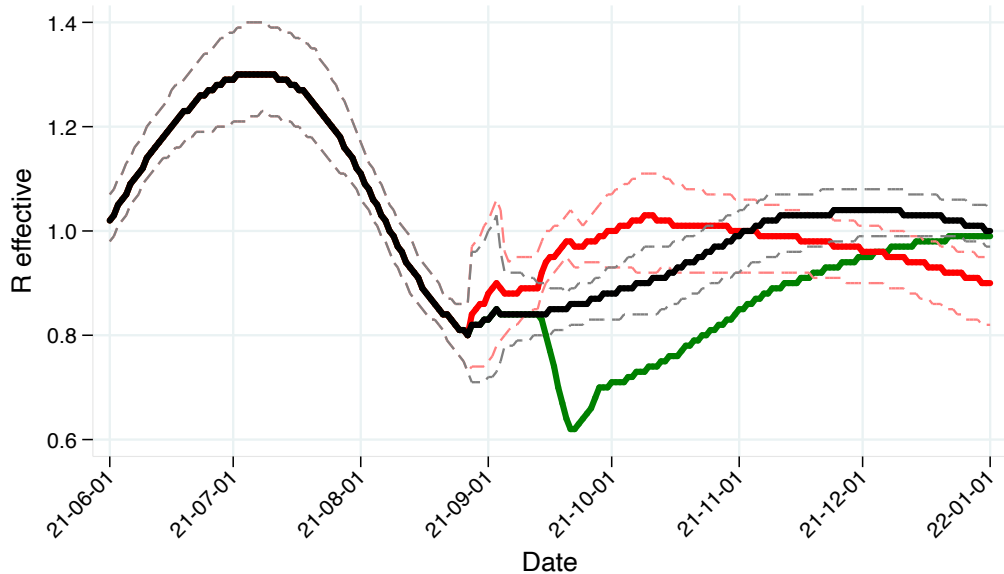
Total cases or infections estimated to reported



JOHN cases DELP cases IHME infections  
IMPE infections LANL cases SRIV cases



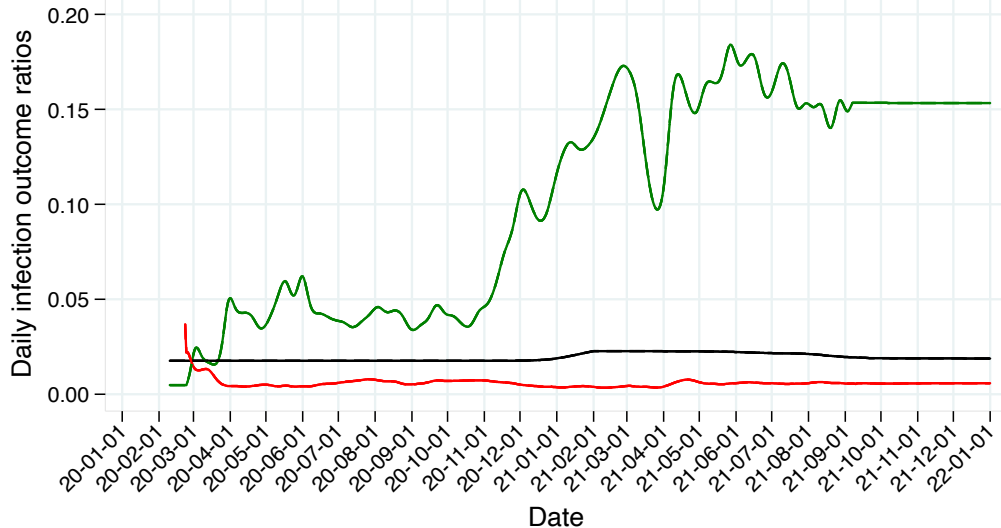
COVID-19 R effective, Iran, IHME, 3 scenarios



— Better — Worse — Reference

Uncertainty limits: dashed curves

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



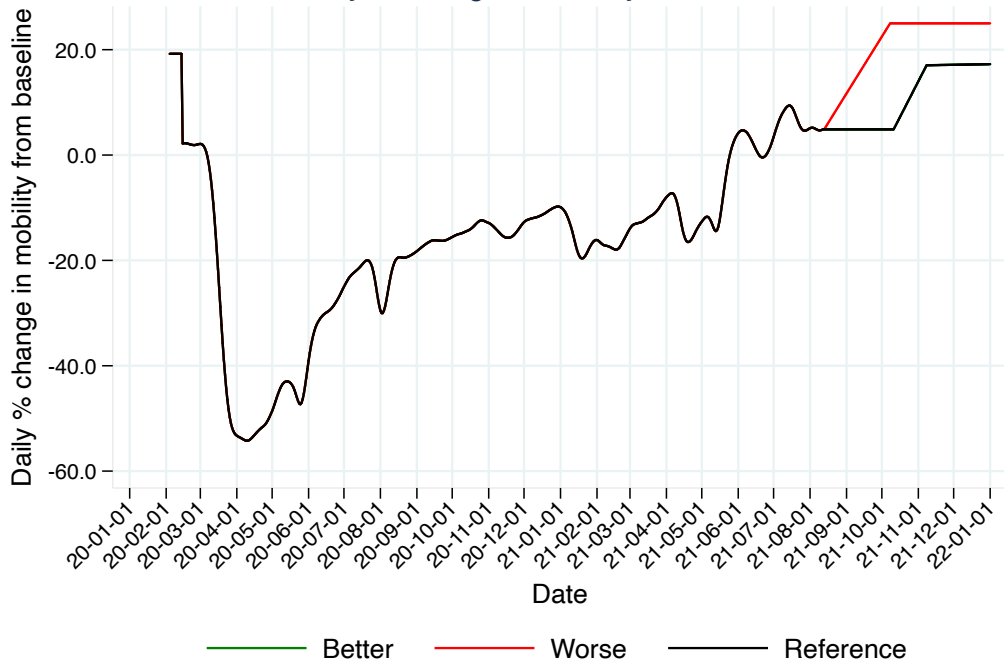
— Infection detection ratio

— Infection hospitalization ratio

— Infection fatality ratio

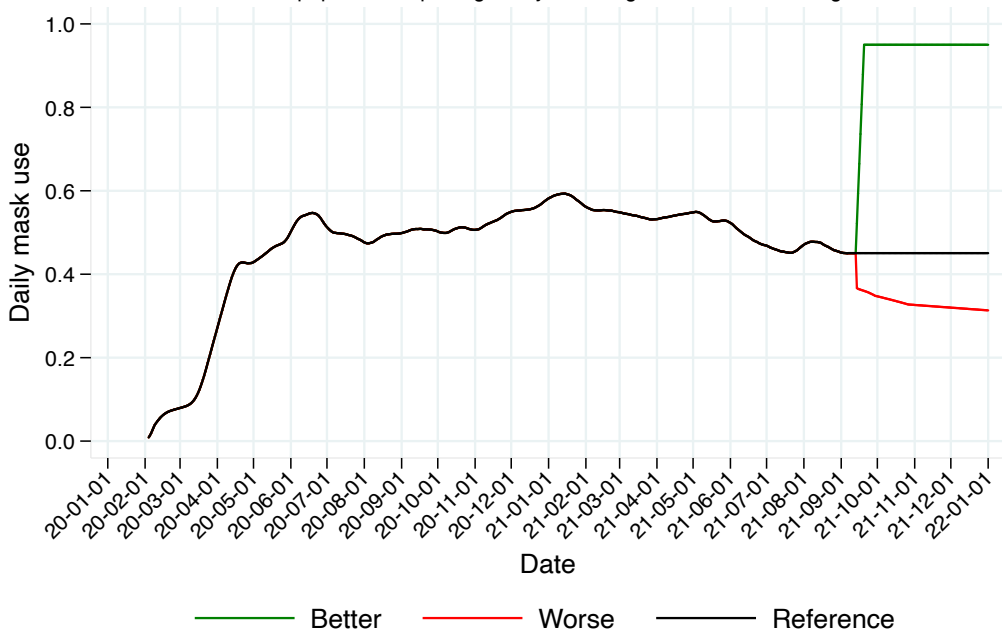
Better and worse scenarios: dashed curves

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

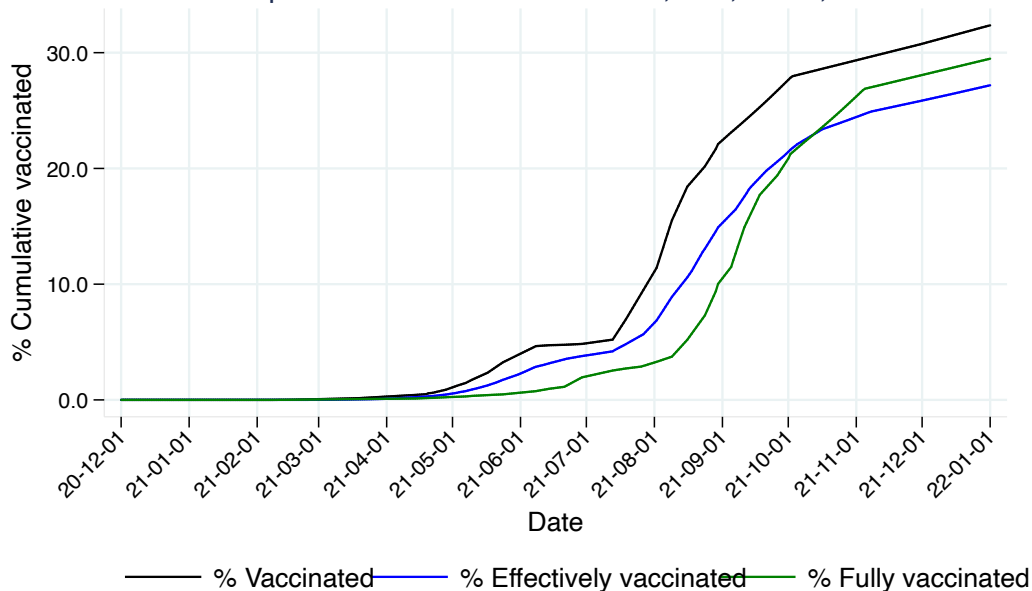


# COVID-19 daily mask use, Iran, IHME, 3 scenarios

Percent of population reporting always wearing a mask when leaving home



COVID-19 percent cumulative vaccinated, 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