Global and regional COVID-19 epidemic models situation report No 46 – 2022-05-27

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<mark>Combine and visualize international periodically updated estimates of COVID-19 pandemic
at the global level and for six WHO regions</mark>

Journal article for this work:

Pourmalek F. CovidVisualized: Visualized compilation of international updated models' estimates of COVID-19 pandemic at global and country levels. *BMC Res Notes*. 2022 Apr 9;15(1):136. doi: 10.1186/s13104-022-06020-4. PMID: 35397567.

Publisher || PubMed || PDF

Based on uptake 20220527 in https://github.com/pourmalek/CovidVisualizedGlobal

Study update dates in uptake 20220527

DELP 20220527, IHME 20220506, No IMPE, *SRIV 20220522*

Days old: DELP 0, IHME 14, IMPE 67, SRIV 5

IMPE update 20220315 was released on 20220505 and is > 60 days old on 20220527. Not included.

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

Summary 20220527:

Reported deaths show a small bounce up trend in Europe and United States.

Reported cases show a small bounce up trend in United States.

The SRIV model predicts increase in global daily deaths starting from mid-May 2022 reaching 12,000 per day in late August and above 3 million global cases about mid-August – primarily in United States and Europe.

The DELP model predicts a huge spike in daily deaths in Africa in June 2000, up to 950 per day, down to current levels in July.

NEXT-DEMICS:

NEXT-DEMICS:

(1) **MONKEY POX:** Status uncertain.

(2) **FOOD SCARCITY** and malnutrition plus **WATER SCARCITY** and **WEATHER CALAMITIES** (environmental degradation, global warming) culminate in epidemics of nutritional, infectious, and non-communicable diseases in many countries, probably resulting in a new pandemic.
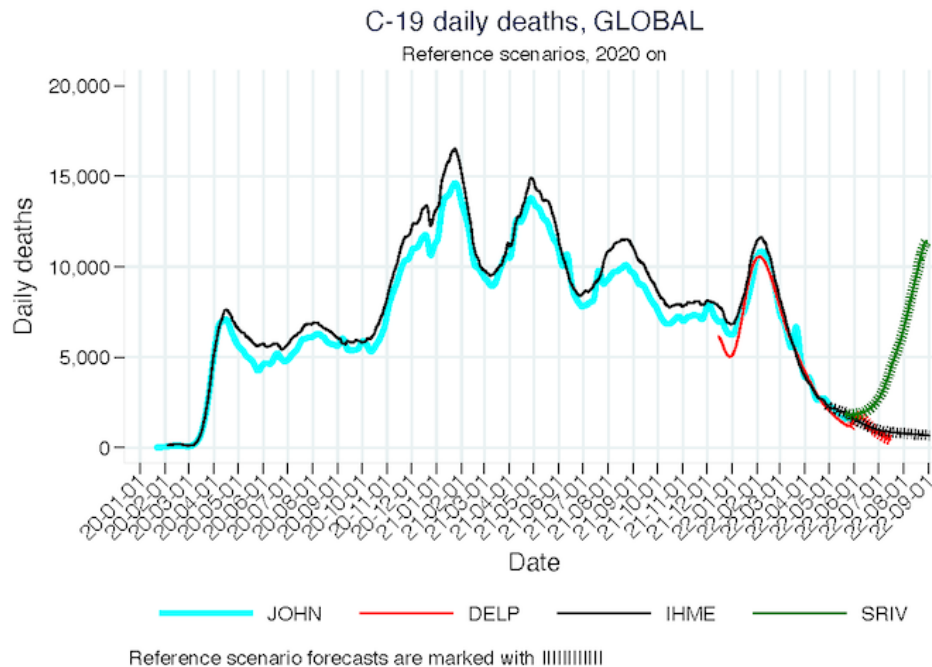
Table of Graphs

Selected graphs - Global

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(1) Global Daily deaths, reference scenarios, 2020 on

C-19 daily deaths, GLOBAL
Reference scenarios, 2020 on
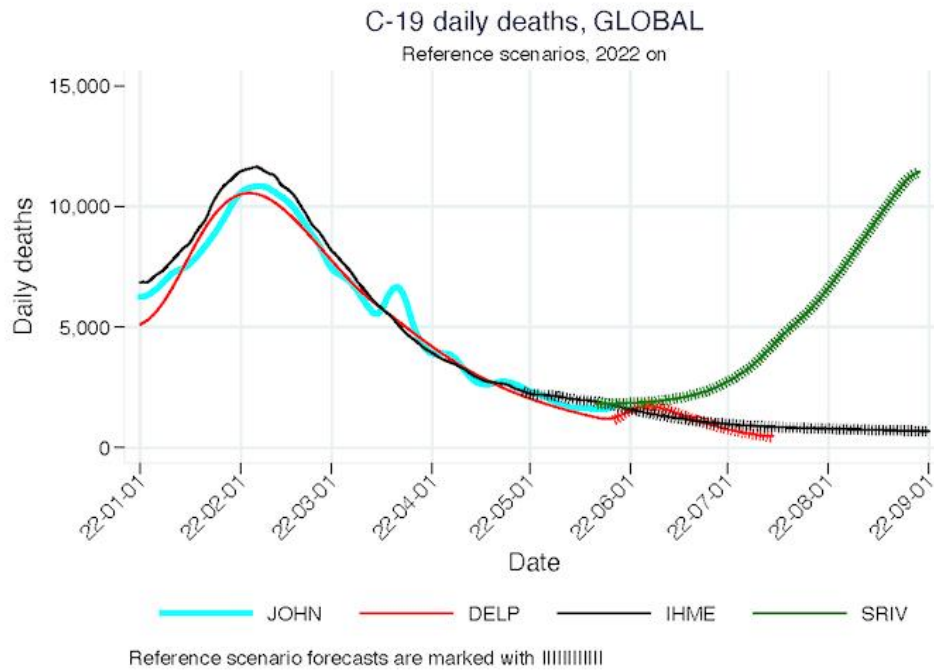
Reference scenario forecasts are marked with IIIIIIIIIII

(1b) Global Daily deaths, reference scenarios, with excess mortality, 2020 on

(2) Global Daily deaths, reference scenarios, 2021 on
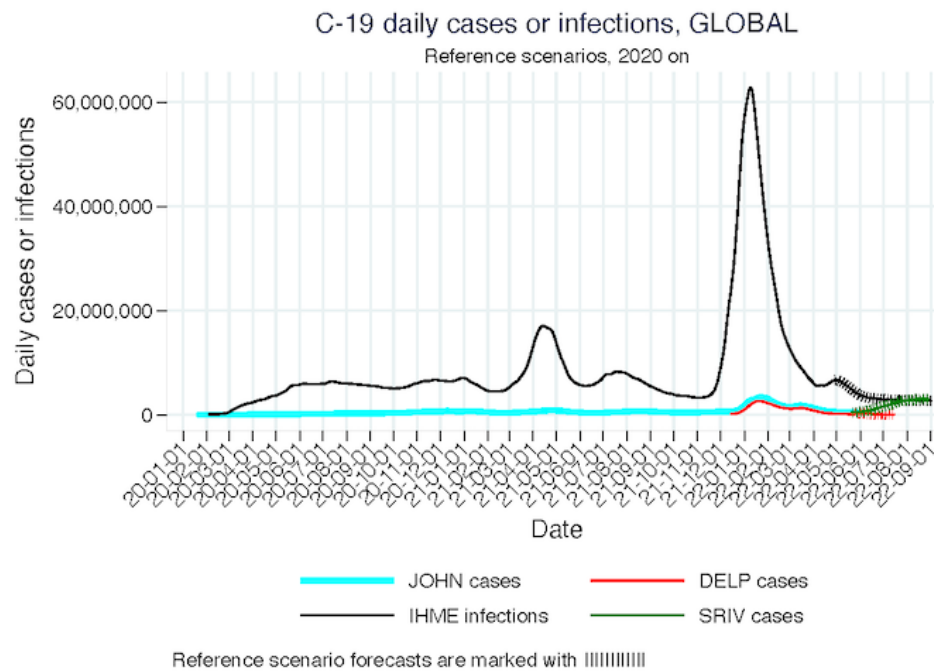
(3) Global Daily deaths, 3 scenarios, 2021 on

(3b) Global Daily deaths, 3 scenarios, 2021 on, IHME

(3d) Global Daily deaths, reference scenarios, 2022 on

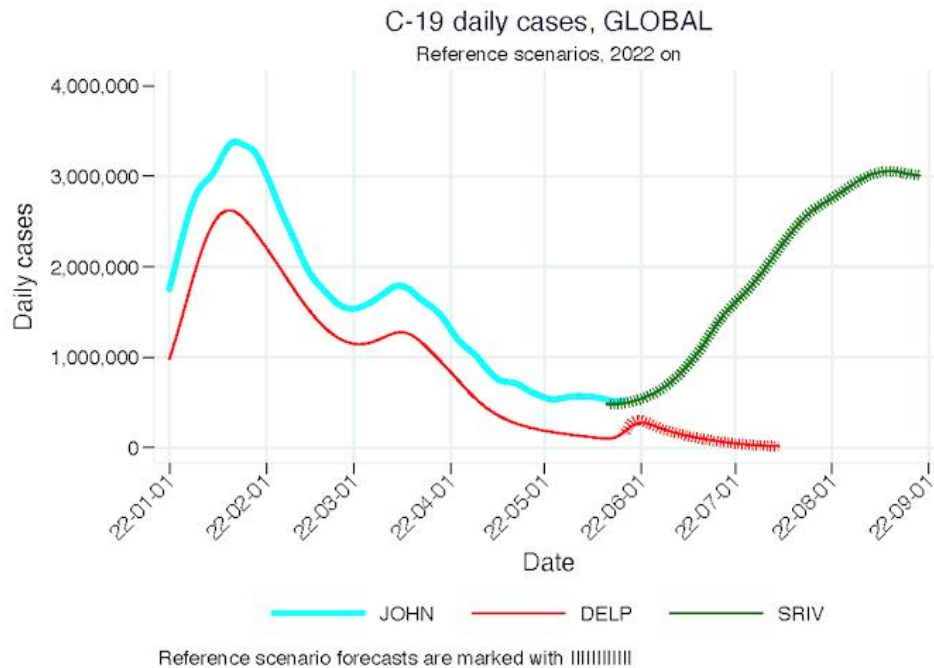C-19 daily deaths, GLOBAL
Reference scenarios, 2022 on

Reference scenario forecasts are marked with IIIIIIIIIII

(4) Global Daily cases or infections, reference scenarios, 2020 on

C-19 daily cases or infections, GLOBAL
Reference scenarios, 2020 on

Reference scenario forecasts are marked with ||||||||||||

(6) Global Daily cases or infections, 3 scenarios, 2021 on

(6b) Global Daily cases, 2022 on

C-19 daily cases, GLOBAL
Reference scenarios, 2022 on

Daily cases

4,000,000

3,000,000

2,000,000

1,000,000

0

22-01-01 22-02-01 22-03-01 22-04-01 22-05-01 22-06-01 22-07-01 22-08-01 22-09-01

Date

—— JOHN   —— DELP   —— SRIV

Reference scenario forecasts are marked with IIIIIIIIIII

(6c) Global Daily estimated infections IHME to reported cases JOHN, main scenarios, 2021 on

(7) Global Hospital-related outcomes, 2020 on

(8) Global Hospital-related outcomes, 2021 on, without IHME Bed need

(9) Global Daily deaths estimated to reported, reference scenarios, 2020 on

(11) Global Daily Infection outcomes ratios, 2 scenarios, 2020 on, IHME

(11b) Global Daily Infection -detection and -hospitalizations ratios, 2 scenarios, 2020 on, IHME

(12) Global Daily mobility, 2 scenarios, 2020 on, IHME

(13) Global Daily mask use, 2 scenarios, 2020 on, IHME

Selected graphs - Regions together

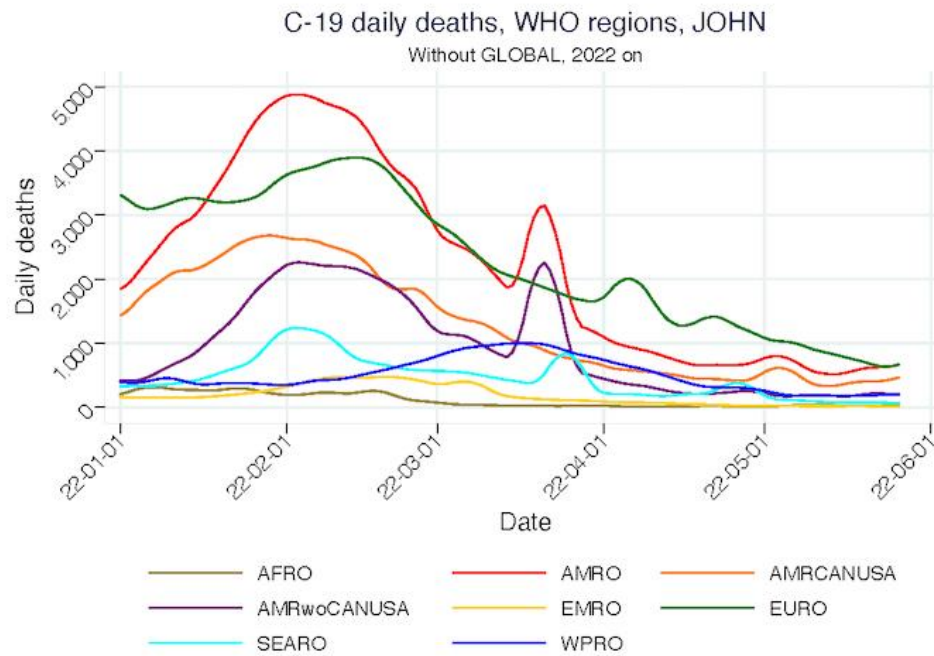(0a) Regions together Daily deaths, with GLOBAL, 2020 on, JOHN

C-19 daily deaths, WHO regions, JOHN
With GLOBAL, 2020 on
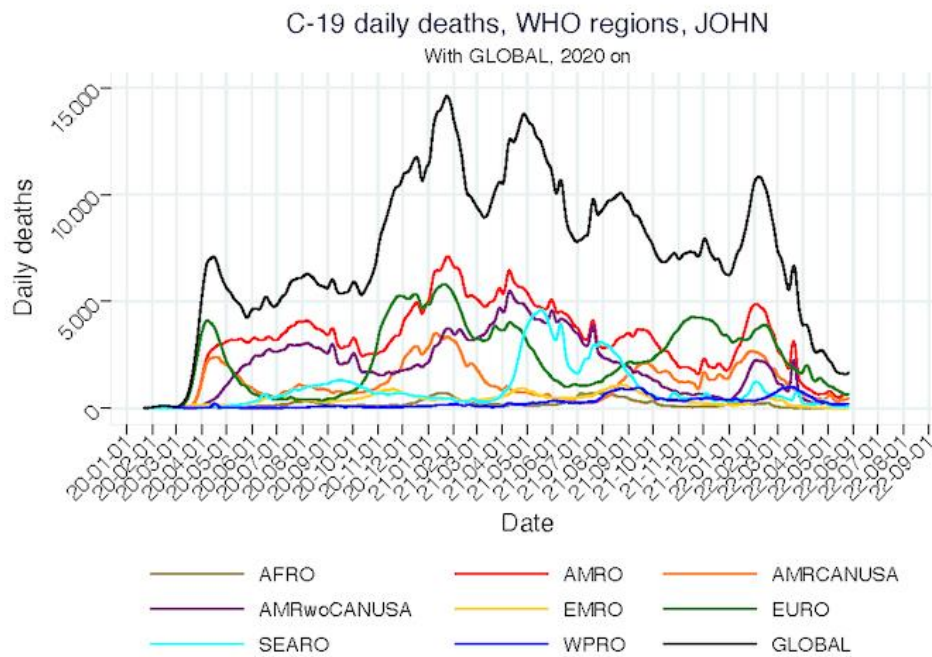
(0b) Regions together Daily deaths, without GLOBAL, 2020 on, JOHN

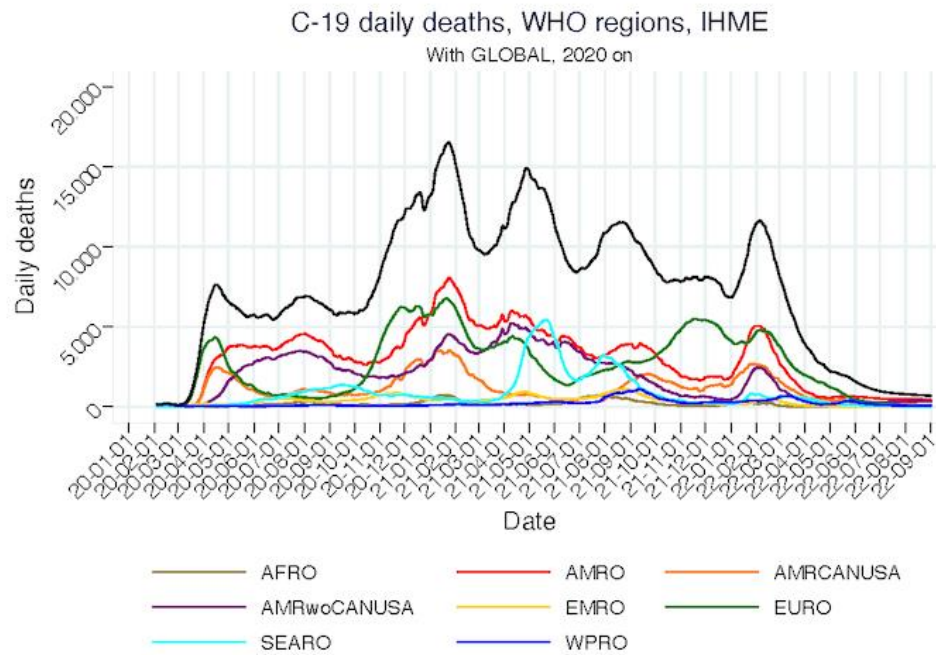(0c) Regions together Daily deaths, with GLOBAL, 2022 on, JOHN

(0d) Regions together Daily deaths, without GLOBAL, 2022 on, JOHN

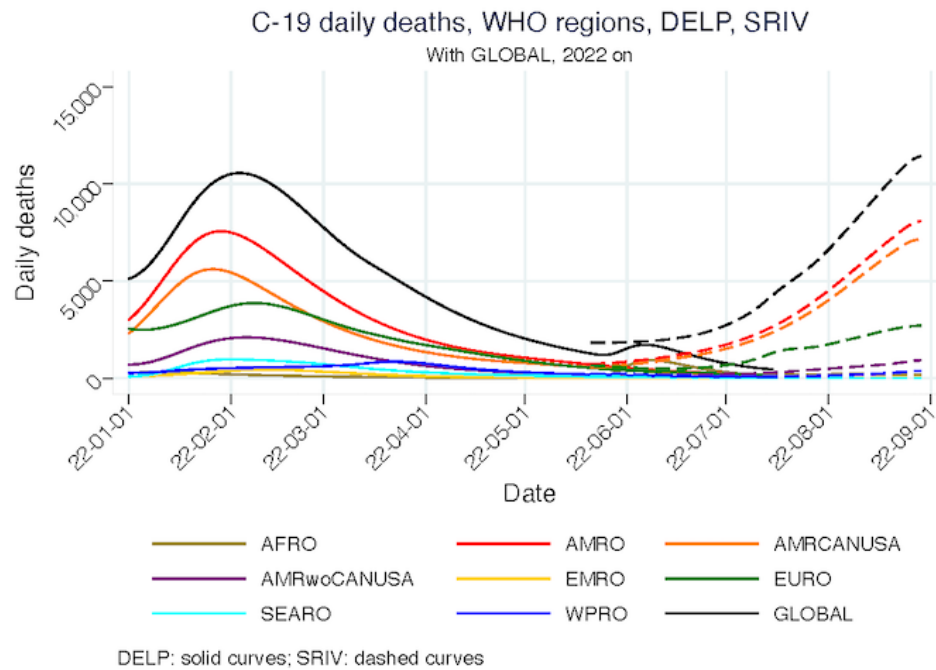C-19 daily deaths, WHO regions, JOHN
Without GLOBAL, 2022 on

(1) Regions together Daily deaths, with GLOBAL, 2020 on, IHME

C-19 daily deaths, WHO regions, IHME
With GLOBAL, 2020 on

(2) Regions together Daily deaths, without GLOBAL, 2020 on, IHME

(3) Regions together Daily deaths, with GLOBAL, 2022 on, DELP, SRIV

C-19 daily deaths, WHO regions, DELP, SRIV
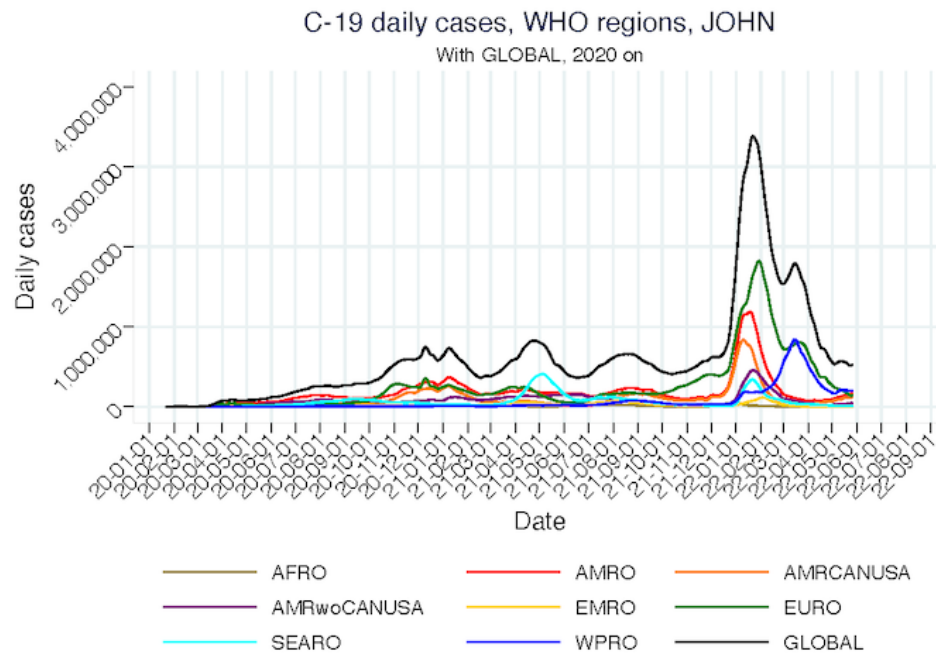With GLOBAL, 2022 on

DELP: solid curves; SRIV: dashed curves

(4) Regions together Daily deaths, without GLOBAL, 2022 on, DELP, SRIV

(5) Regions together Daily excess deaths, with GLOBAL, 2020 on, IHME

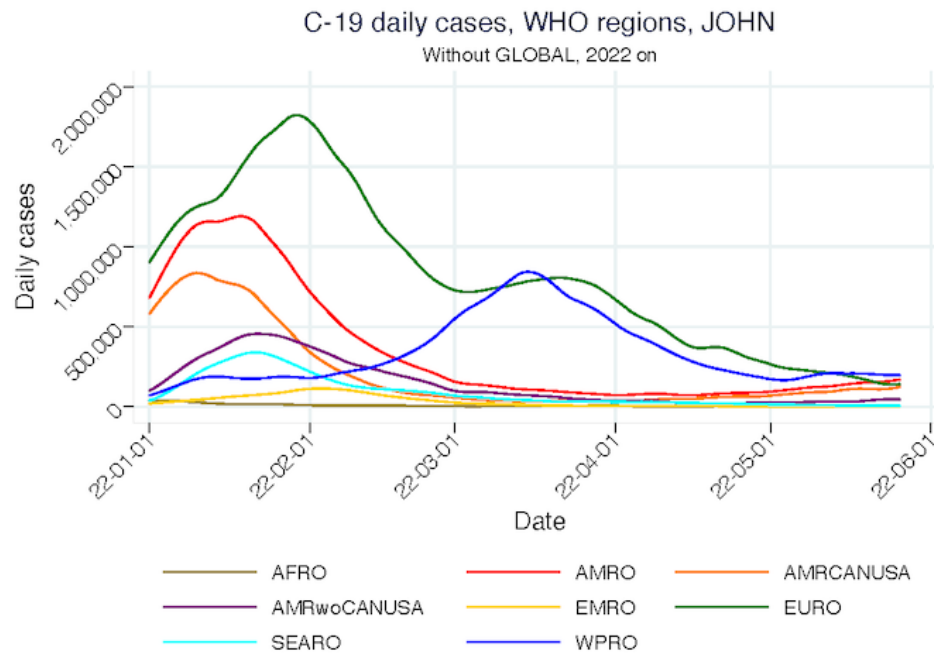(6) Regions together Daily excess deaths, without GLOBAL, 2020 on, IHME

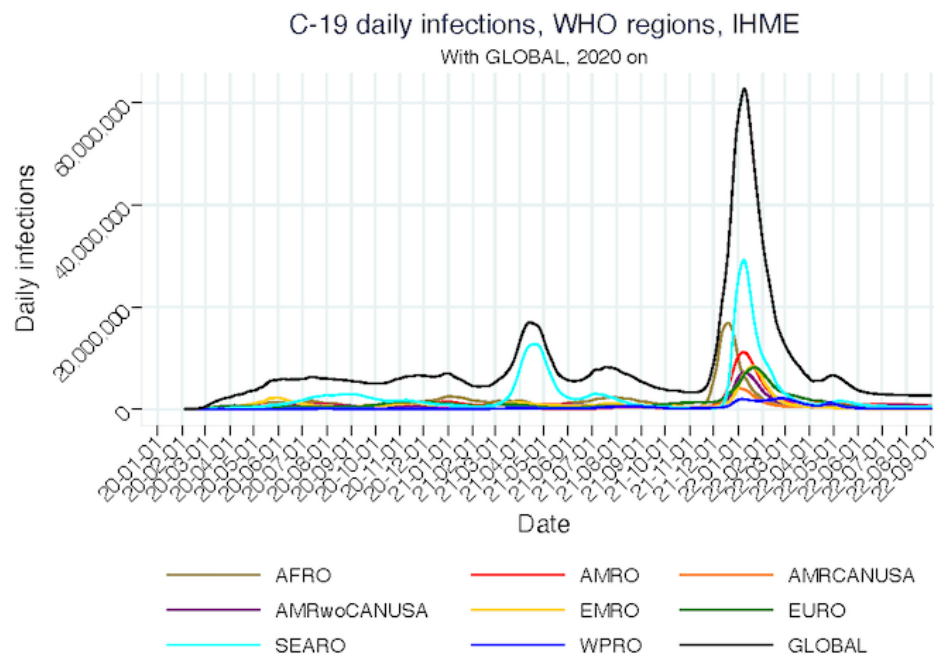(00a) Regions together Daily cases, with GLOBAL, 2020 on, JOHN

C-19 daily cases, WHO regions, JOHN
With GLOBAL, 2020 on

(00b) Regions together Daily cases, without GLOBAL, 2020 on, JOHN

(00c) Regions together Daily cases, without GLOBAL, 2022 on, JOHN

C-19 daily cases, WHO regions, JOHN
Without GLOBAL, 2022 on

(7) Regions together Daily infections, with GLOBAL, 2020 on, IHME

C-19 daily infections, WHO regions, IHME
With GLOBAL, 2020 on

(8) Regions together Daily infections, without GLOBAL, 2020 on, IHME

(9) Regions together Daily cases, with GLOBAL, 2022 on, DELP, SRIV

C-19 daily cases, WHO regions, DELP, SRIV
With GLOBAL, 2022 on

DELP cases: solid curves; SRIV: dashed curves
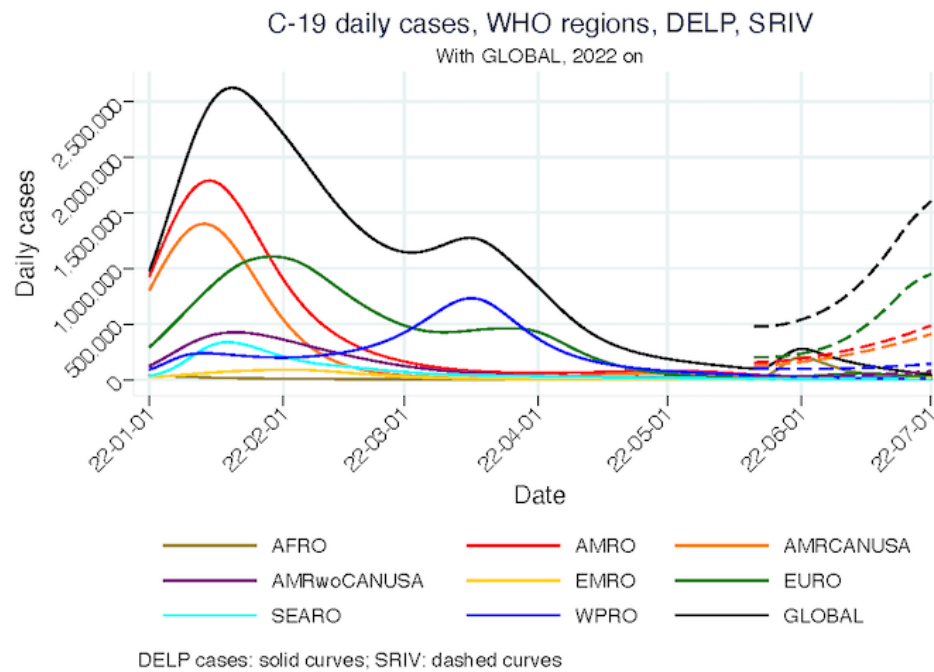
(10) Regions together Daily cases, without GLOBAL, 2022 on, DELP, SRIV

(11) Regions together Total deaths, with GLOBAL, 2020 on, IHME

(12) Regions together Total deaths, without GLOBAL, 2020 on, IHME

(13) Regions together Total deaths, with GLOBAL, 2022 on, DELP, SRIV

(14) Regions together Total deaths, without GLOBAL, DELP, SRIV

(15) Regions together Total excess deaths, with GLOBAL, 2020 on, IHME

(16) Regions together Total excess deaths, without GLOBAL, 2020 on, IHME

(17) Regions together Total infections, with GLOBAL, 2020 on, IHME

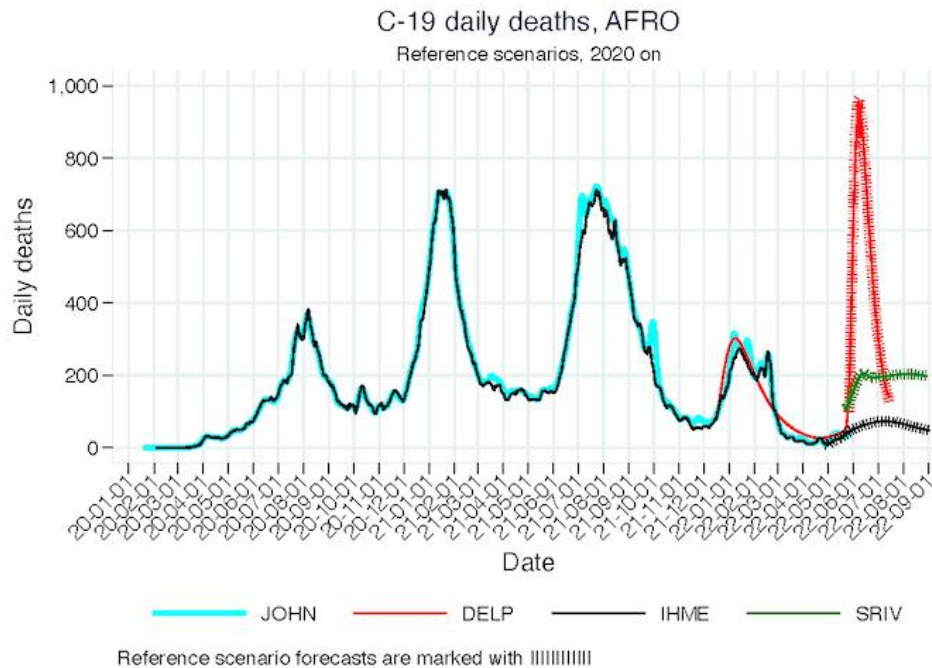(18) Regions together Total infections, without GLOBAL, 2020 on, IHME

(19) Regions together Total cases, with GLOBAL, 2022 on, DELP, SRIV

(20) Regions together Total cases, without GLOBAL, 2022 on, DELP, SRIV
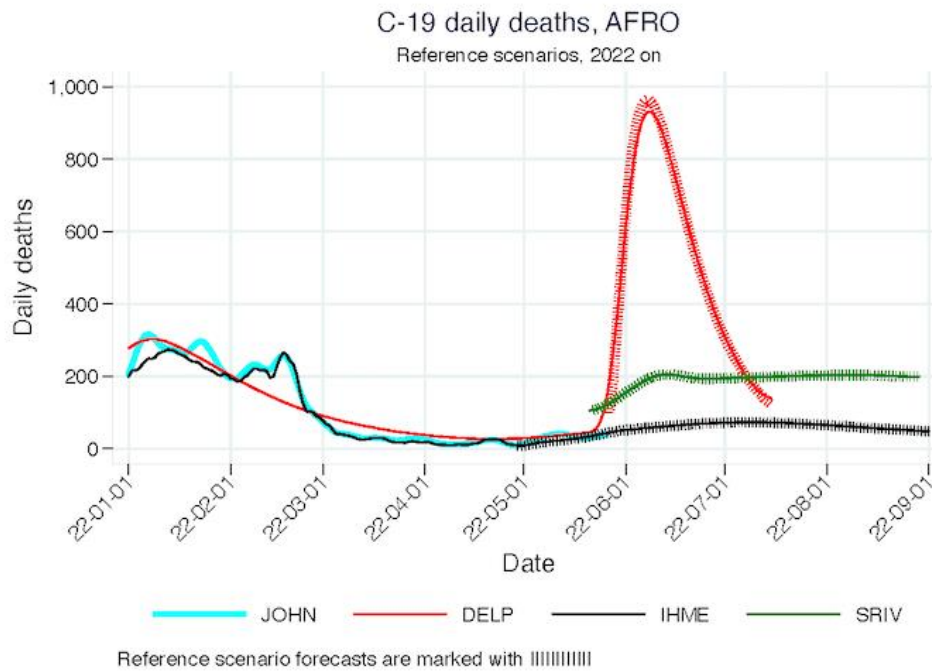
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Selected graphs - African region (AFRO)

(1) African region Daily deaths, reference scenarios, 2020 on

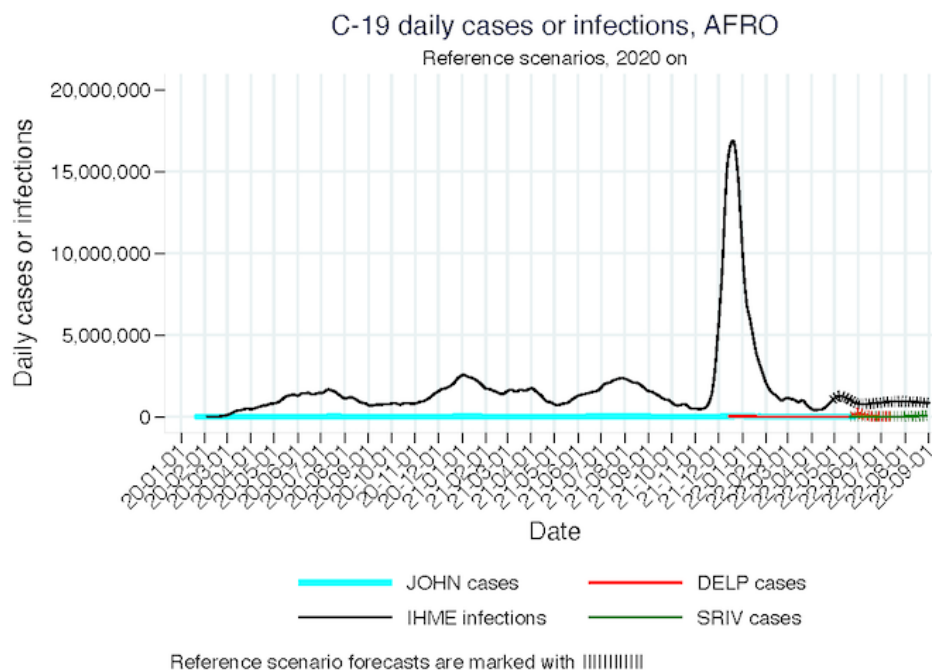C-19 daily deaths, AFRO
Reference scenarios, 2020 on

(3) African region Daily deaths, 3 scenarios, 2021 on

(3b) African region Daily deaths, reference scenarios, 2022 on

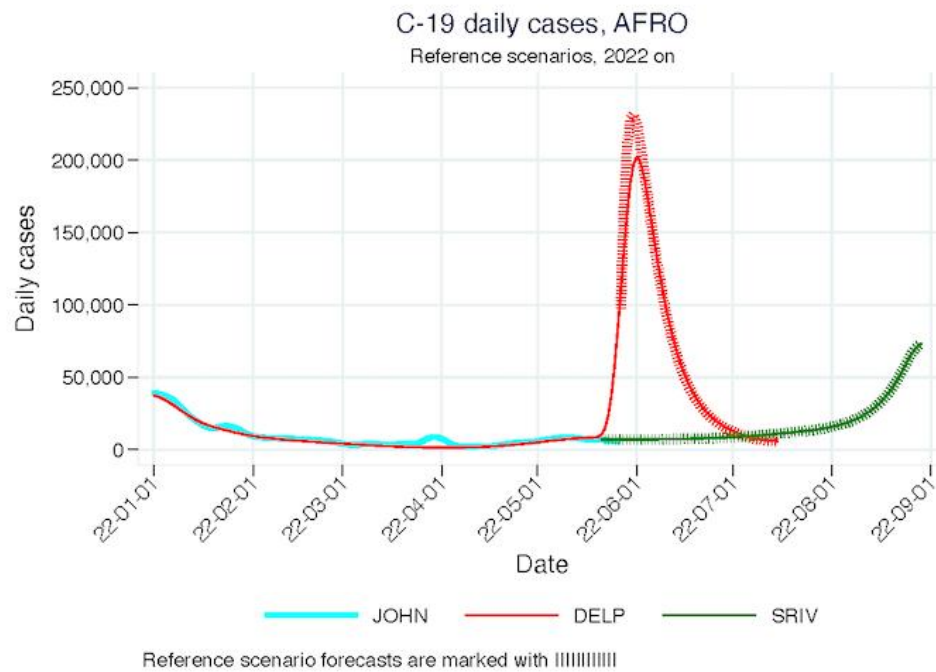C-19 daily deaths, AFRO
Reference scenarios, 2022 on

(4) African region Daily cases or infections, reference scenarios, 2020 on

C-19 daily cases or infections, AFRO
Reference scenarios, 2020 on

(6) African region Daily cases or infections, 3 scenarios, 2021 on

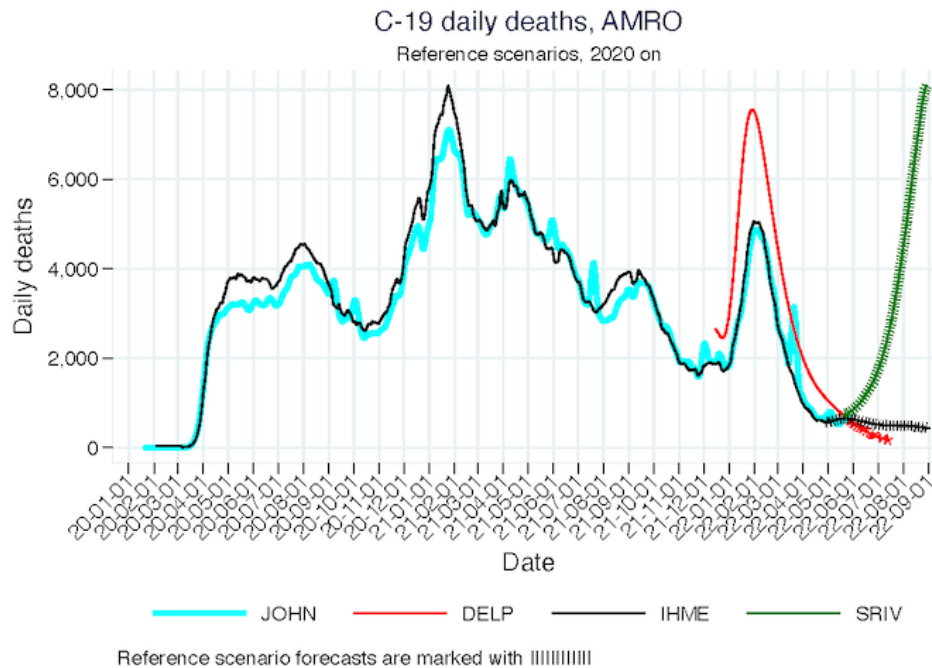(6b) African region Daily cases or infections, reference scenarios, 2022 on

C-19 daily cases, AFRO
Reference scenarios, 2022 on

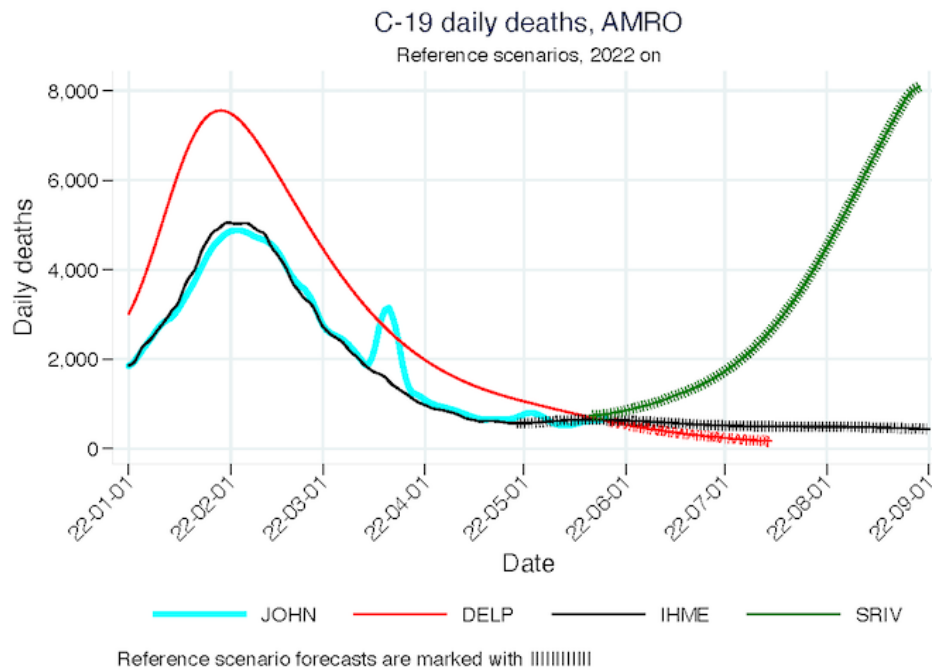Reference scenario forecasts are marked with |||||||||||

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Selected graphs – Americas region (AMRO)
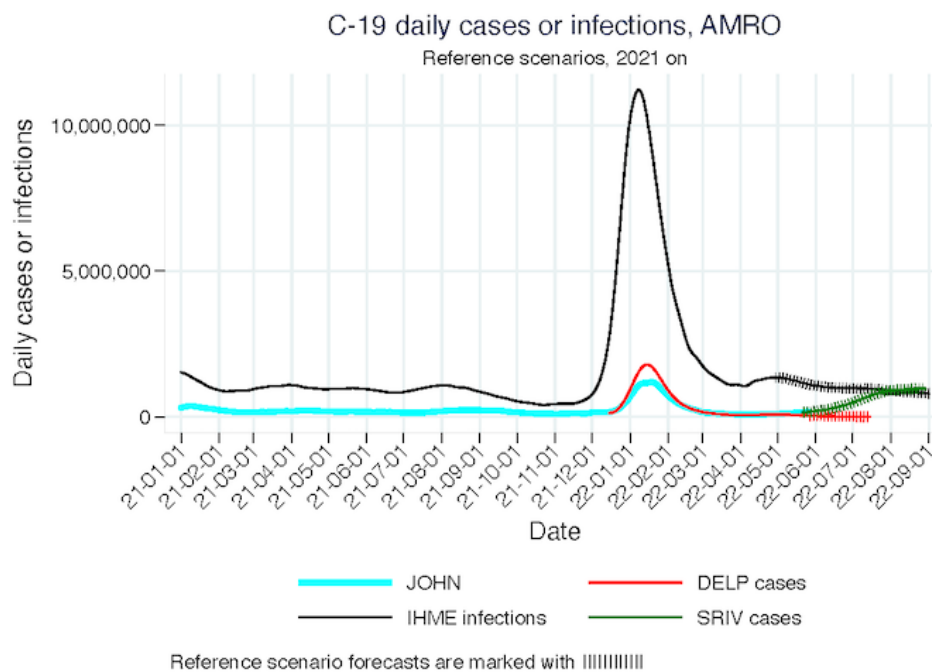
(1) Americas region Daily deaths, reference scenarios, 2020 on

(3) Americas region Daily deaths, 3 scenarios, 2021 on

(3b) Americas region Daily deaths, reference scenarios, 2022 on

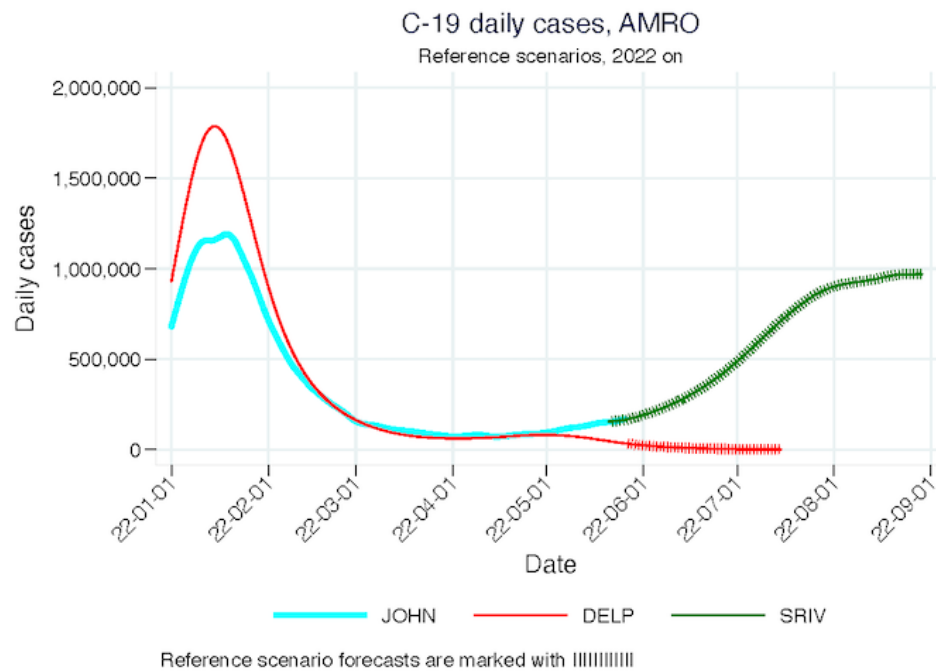C-19 daily deaths, AMRO
Reference scenarios, 2022 on

Reference scenario forecasts are marked with IIIIIIIIIII

(4) Americas region Daily cases or infections, reference scenarios, 2020 on

C-19 daily cases or infections, AMRO
Reference scenarios, 2021 on

Reference scenario forecasts are marked with IIIIIIIIIII

(6) Americas region Daily cases or infections, 3 scenarios, 2021 on

(6b) Americas region Daily reference, 3 scenarios, 2022 on

C-19 daily cases, AMRO
Reference scenarios, 2022 on

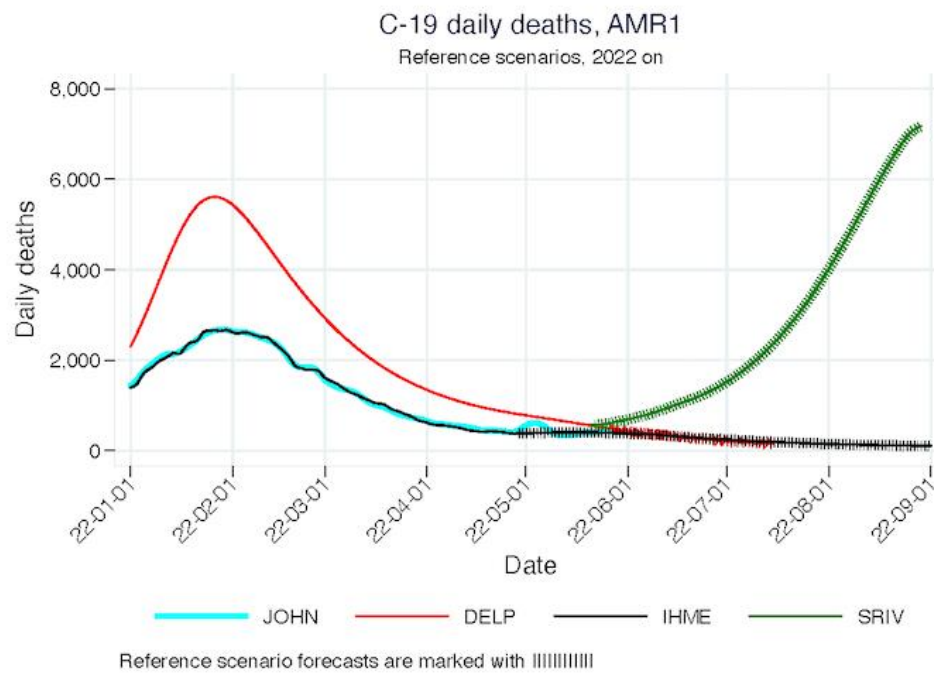Reference scenario forecasts are marked with llllllllll

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Selected graphs – Americas region, Canada and United States (AMR1)

(1) Americas region, Canada and United States Daily deaths, reference scenarios, 2020 on
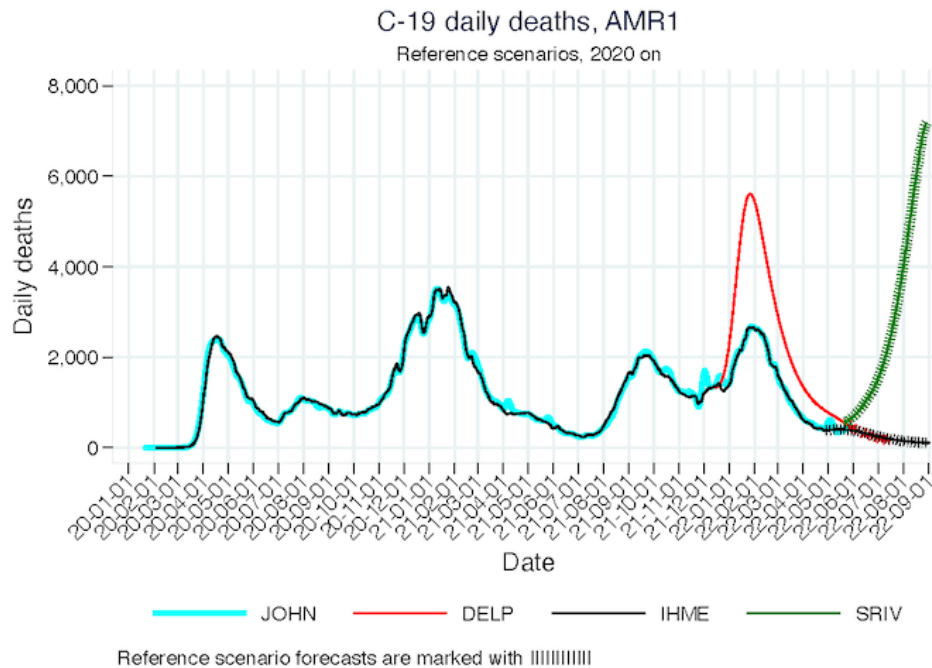
**C-19 daily deaths, AMR1**
Reference scenarios, 2020 on

Legend: JOHN, DELP, IHME, SRIV

Reference scenario forecasts are marked with IIIIIIIIIII

(3) Americas region, Canada and United States Daily deaths, 3 scenarios, 2021 on

(3b) Americas region, Canada and United States Daily deaths, reference scenarios, 2022 on

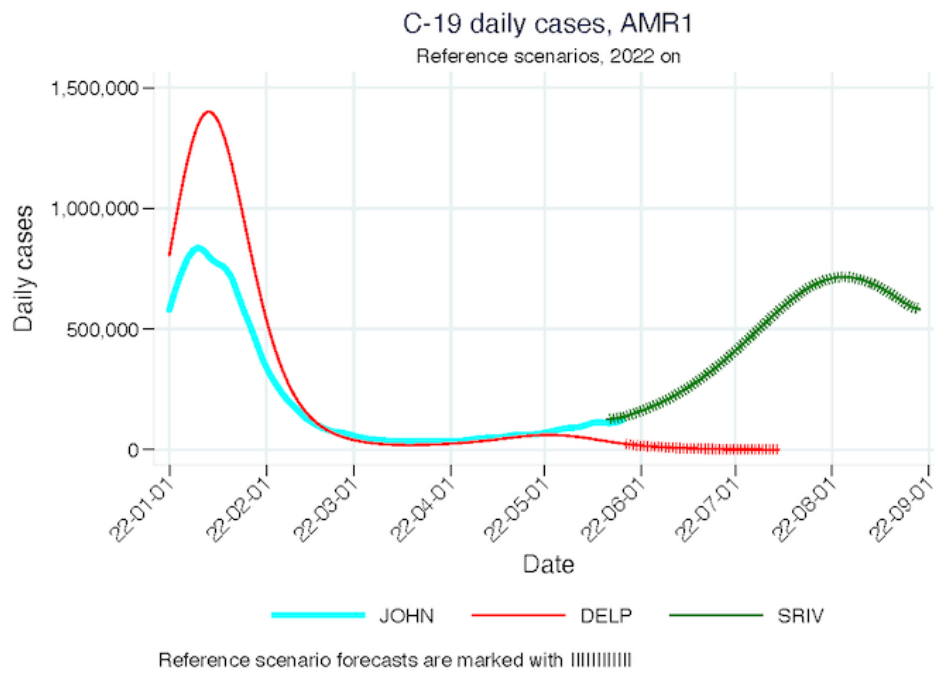C-19 daily deaths, AMR1
Reference scenarios, 2022 on

Reference scenario forecasts are marked with ‖‖‖‖‖‖‖‖‖‖

(4) Americas region, Canada and United States Daily cases or infections, reference scenarios, 2020 on

C-19 daily cases or infections, AMR1
Reference scenarios, 2021 on

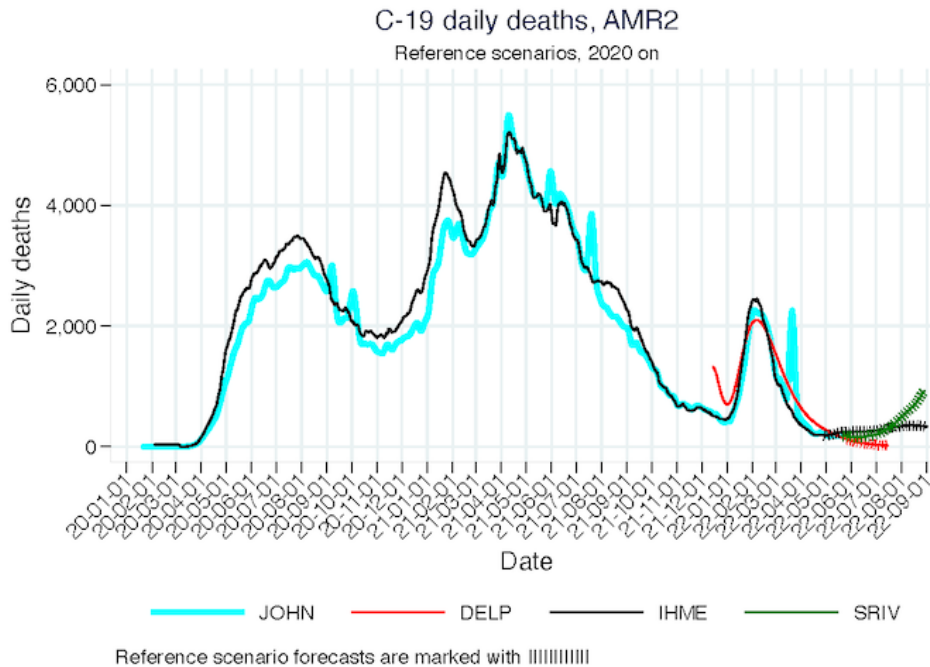(6) Americas region, Canada and United States Daily cases or infections, 3 scenarios, 2021 on

(6b) Americas region, Canada and United States Daily cases or infections, reference scenarios, 2022 on

C-19 daily cases, AMR1
Reference scenarios, 2022 on

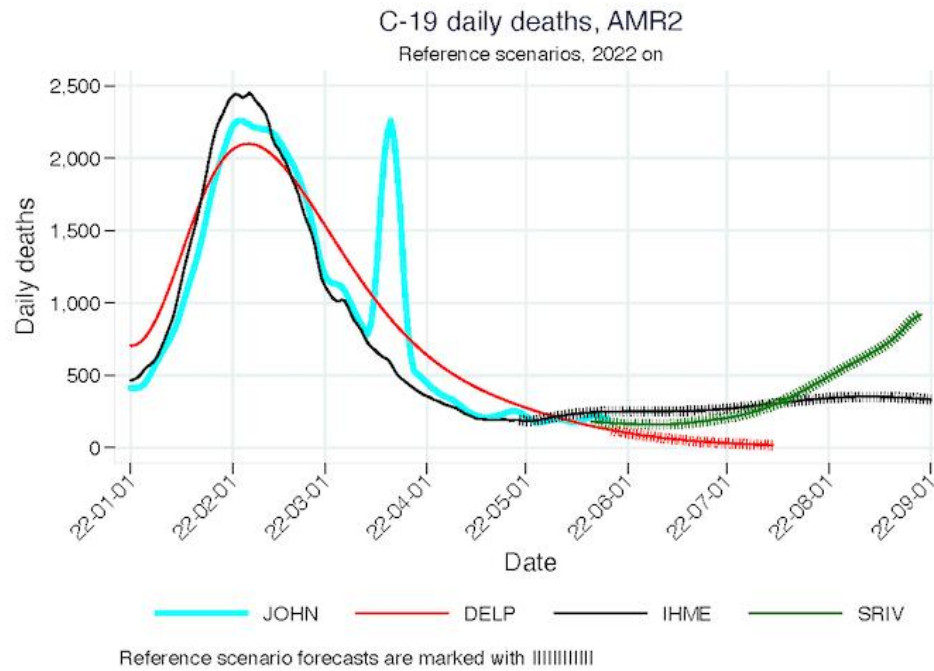Reference scenario forecasts are marked with IIIIIIIIIII

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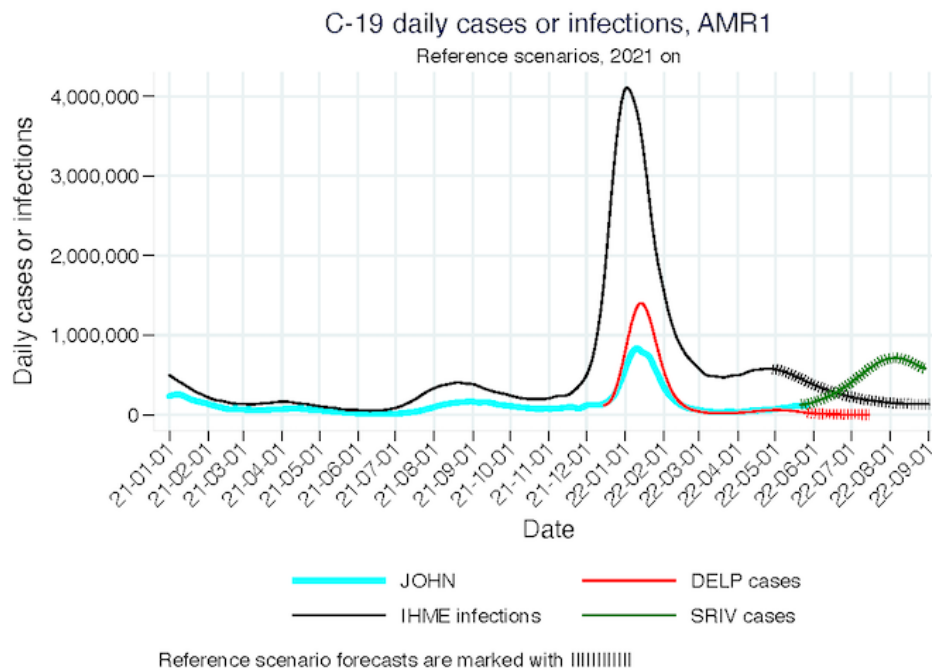
Selected graphs – Americas region, without Canada and United States (AMR2)

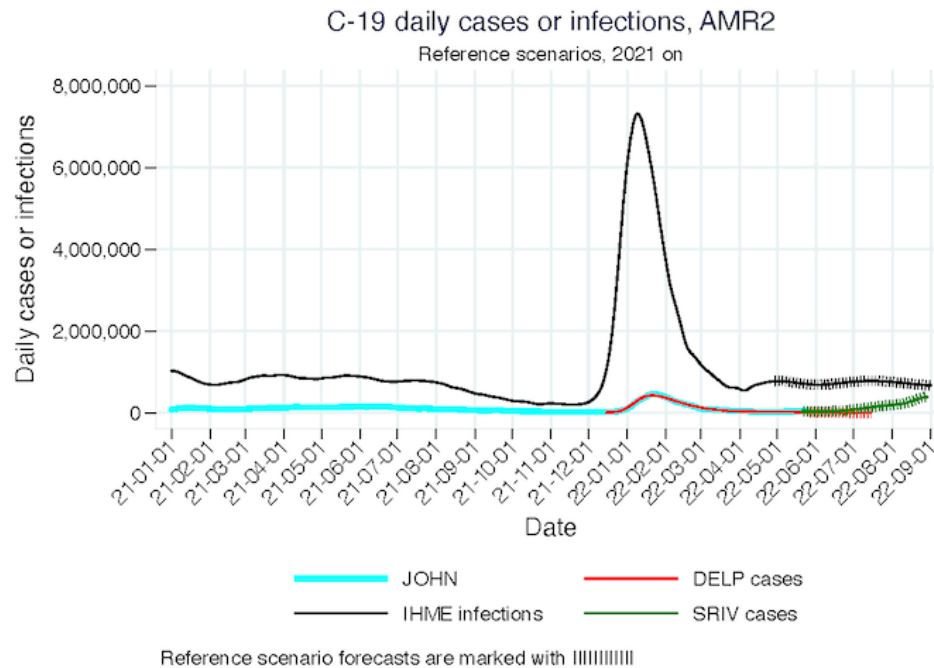(1) Americas region, without Canada and United States Daily deaths, reference scenarios, 2020 on

C-19 daily deaths, AMR2
Reference scenarios, 2020 on

(3) Americas region, without Canada and United States Daily deaths, 3 scenarios, 2021 on

(3b) Americas region, without Canada and United States Daily deaths, reference scenarios, 2022 on

C-19 daily deaths, AMR2
Reference scenarios, 2022 on

Reference scenario forecasts are marked with |||||||||||

(4) Americas region, without Canada and United States Daily cases or infections, reference scenarios, 2020 on

C-19 daily cases or infections, AMR2
Reference scenarios, 2021 on

Reference scenario forecasts are marked with |||||||||||

(6) Americas region, without Canada and United States Daily cases or infections, 3 scenarios, 2021 on

(6b) Americas region, without Canada and United States Daily cases or infections, reference scenarios, 2022 on
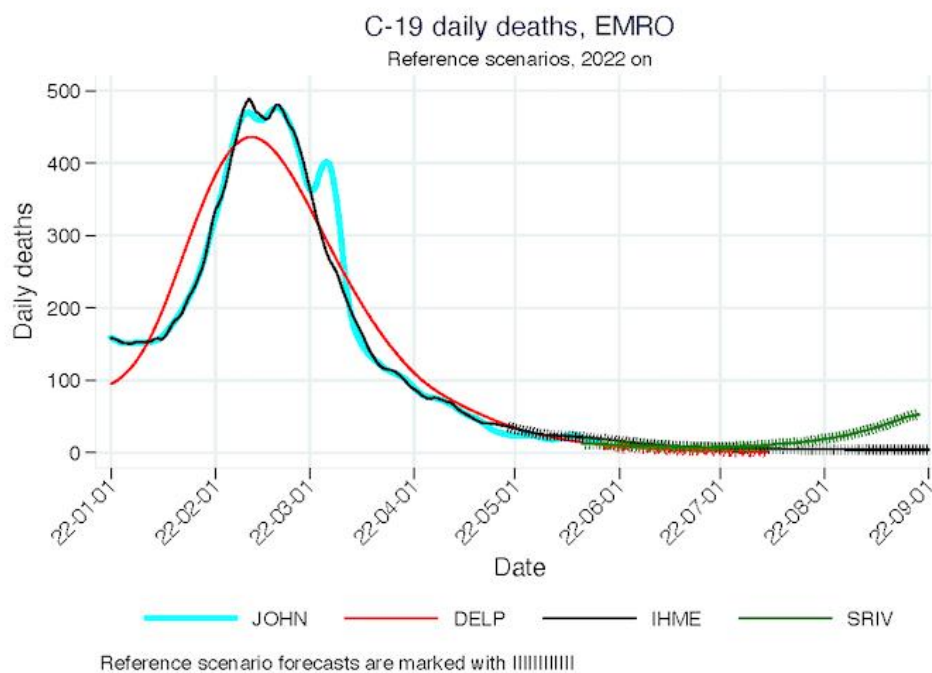

C-19 daily cases, AMR2
Reference scenarios, 2022 on

Reference scenario forecasts are marked with |||||||||||||

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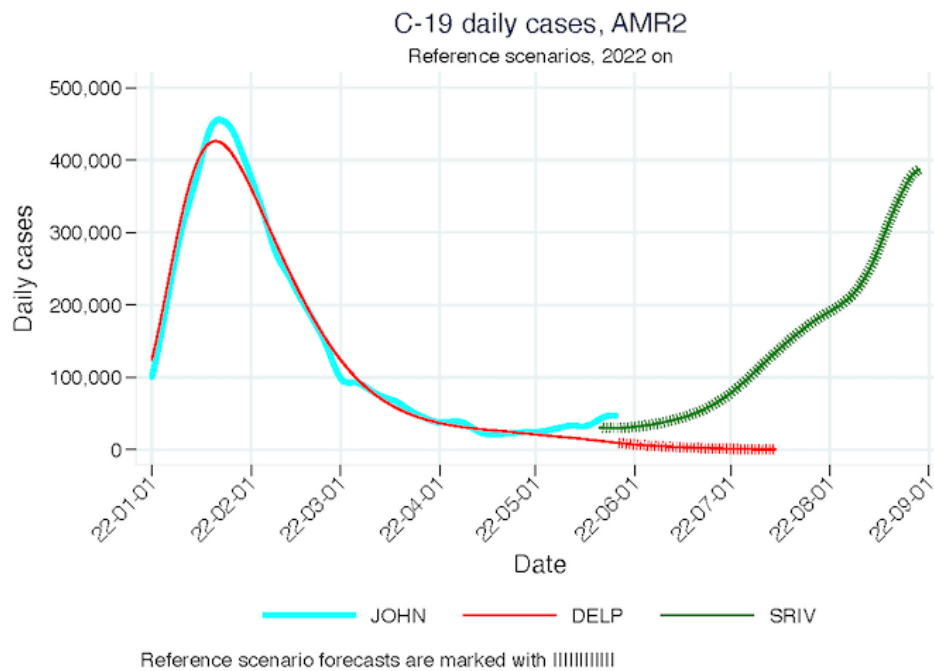
Selected graphs – Eastern Mediterranean region (EMRO)

(1) Eastern Mediterranean region Daily deaths, reference scenarios, 2020 on
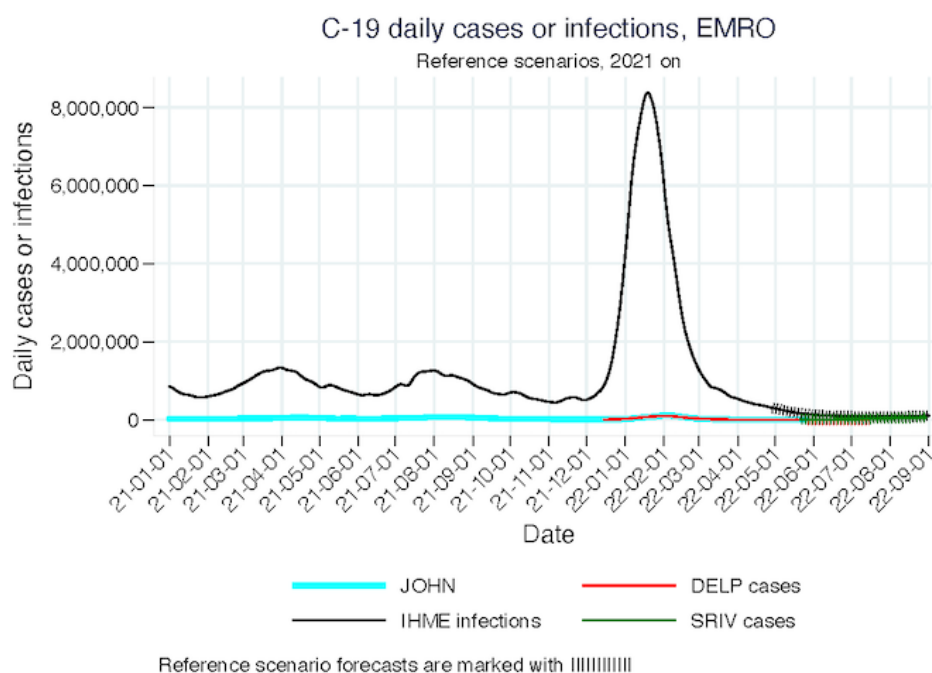

C-19 daily deaths, EMRO
Reference scenarios, 2020 on
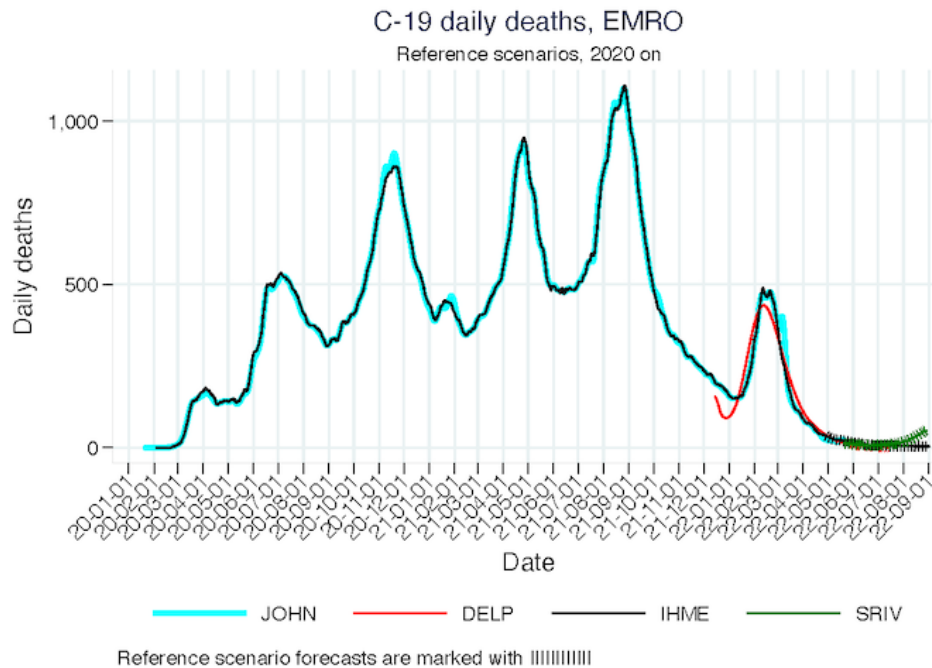
(3) Eastern Mediterranean region Daily deaths, 3 scenarios, 2021 on

(3b) Eastern Mediterranean region Daily deaths, reference scenarios, 2022 on

C-19 daily deaths, EMRO
Reference scenarios, 2022 on

Reference scenario forecasts are marked with |||||||||||

(4) Eastern Mediterranean region Daily cases or infections, reference scenarios, 2020 on

C-19 daily cases or infections, EMRO
Reference scenarios, 2021 on

Reference scenario forecasts are marked with |||||||||||

(6) Eastern Mediterranean region Daily cases or infections, 3 scenarios, 2021 on

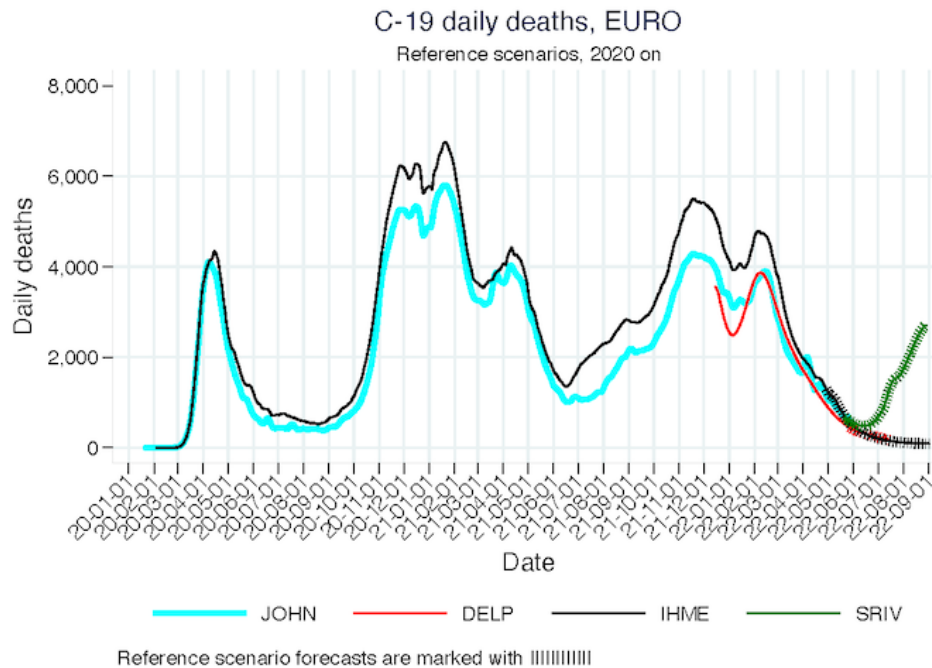(6b) Eastern Mediterranean region Daily cases or infections, reference scenarios, 2022 on

C-19 daily cases, EMRO
Reference scenarios, 2022 on

Reference scenario forecasts are marked with |||||||||||

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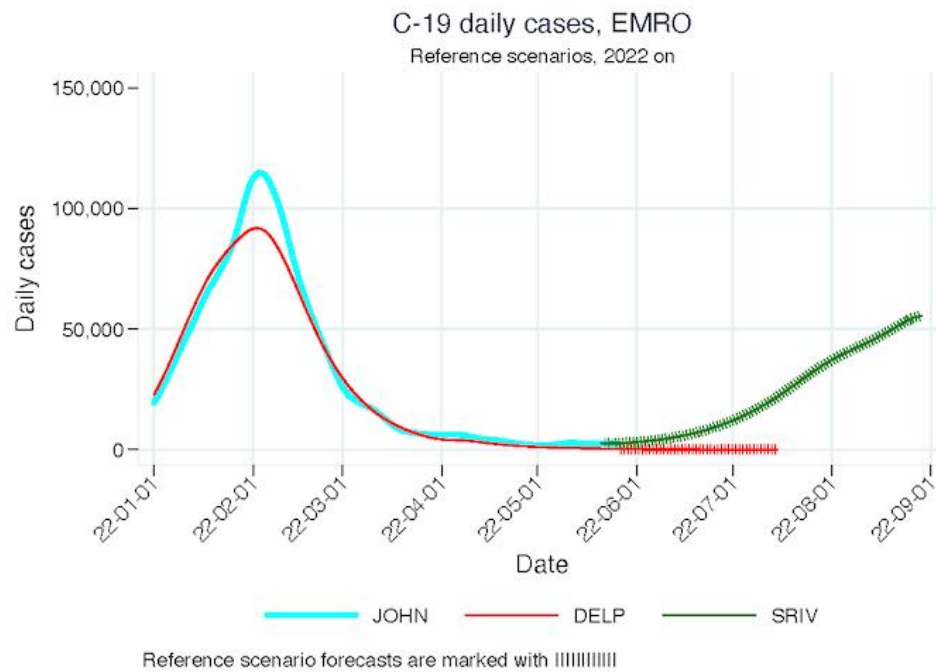
Selected graphs – European region (EURO)

(1) European region Daily deaths, reference scenarios, 2020 on

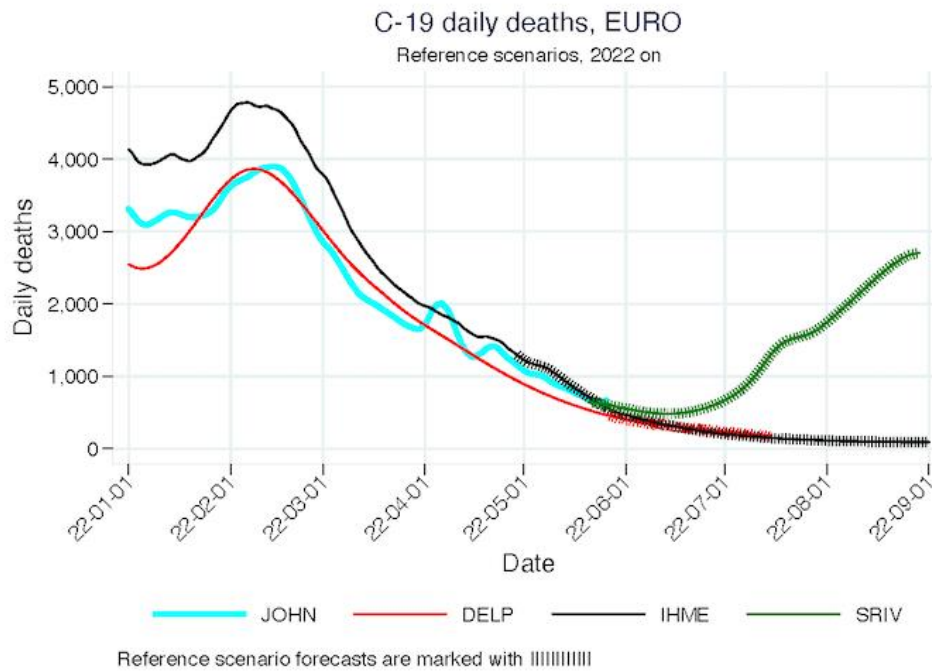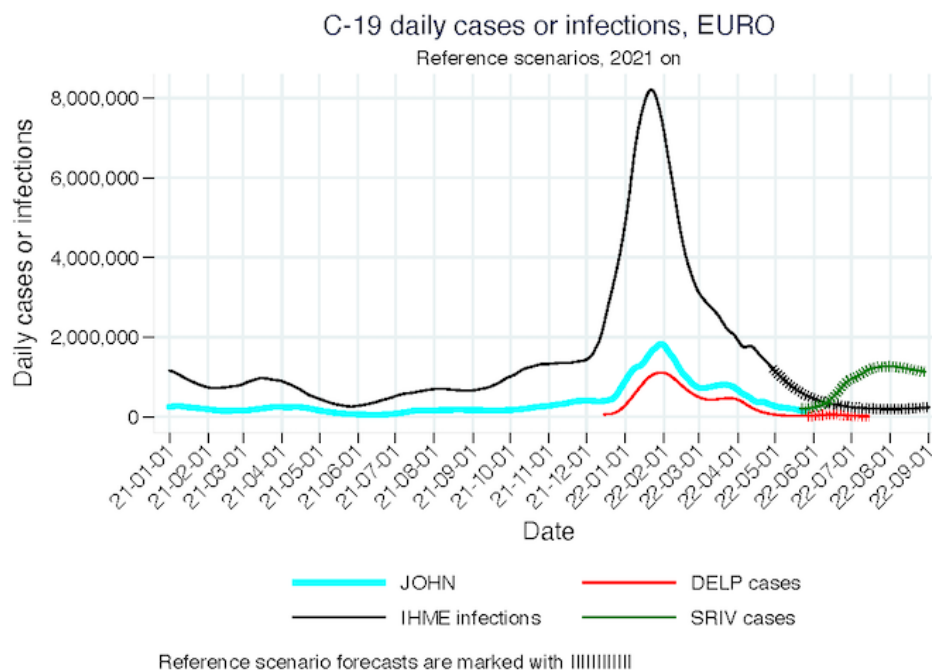C-19 daily deaths, EURO
Reference scenarios, 2020 on

(3) European region Daily deaths, 3 scenarios, 2021 on

(3b) European region Daily deaths, reference scenarios, 2022 on

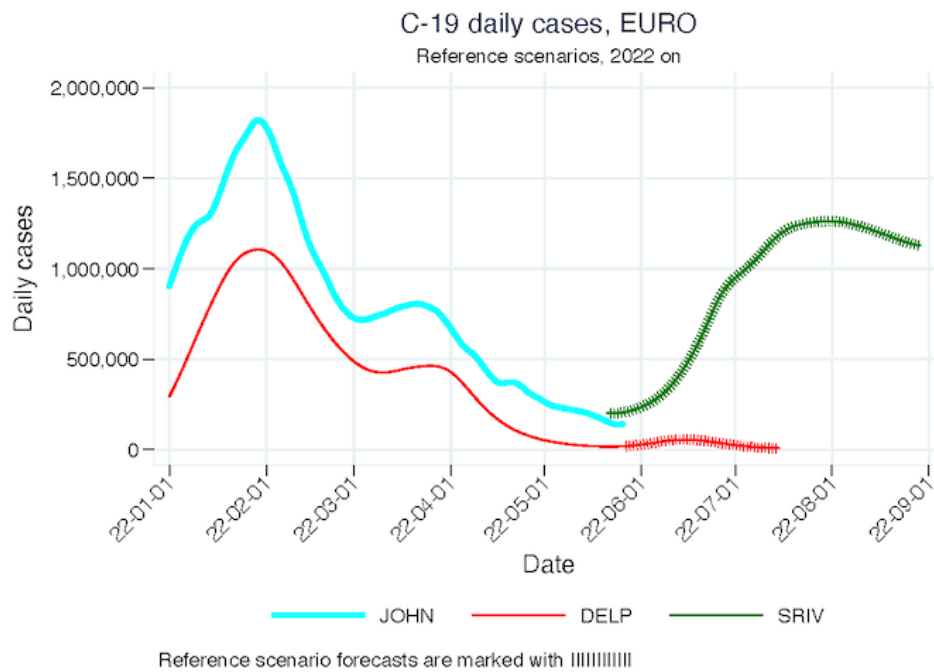C-19 daily deaths, EURO
Reference scenarios, 2022 on

Reference scenario forecasts are marked with IIIIIIIIIII

(4) European region Daily cases or infections, reference scenarios, 2020 on

C-19 daily cases or infections, EURO
Reference scenarios, 2021 on

Reference scenario forecasts are marked with IIIIIIIIIII

(6) European region Daily cases or infections, 3 scenarios, 2021 on

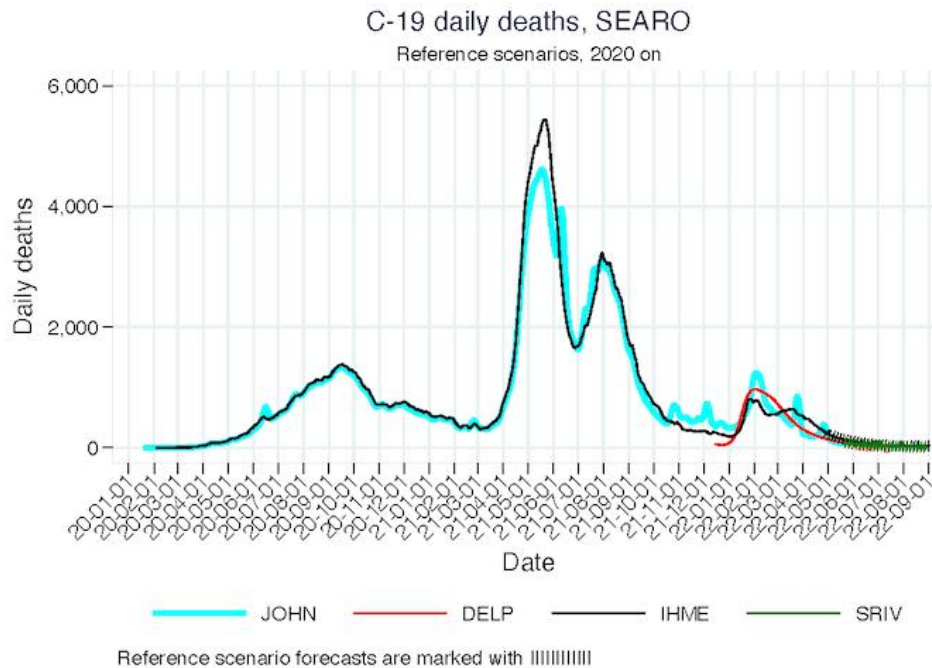(6b) European region Daily cases or infections, reference scenarios, 2022 on

C-19 daily cases, EURO
Reference scenarios, 2022 on

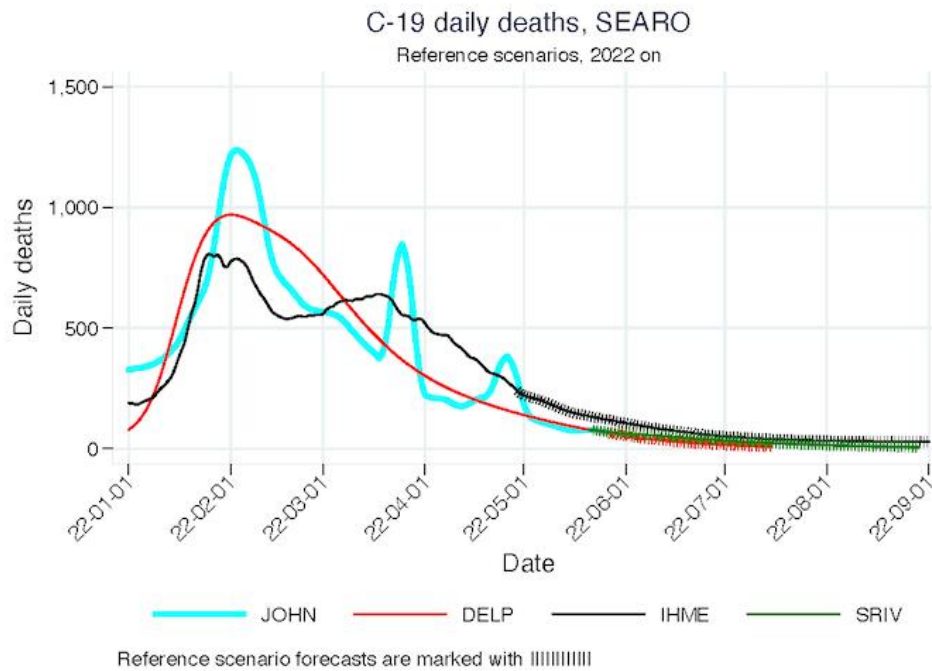Reference scenario forecasts are marked with IIIIIIIIIII

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Selected graphs – South-East Asian region (SEARO)

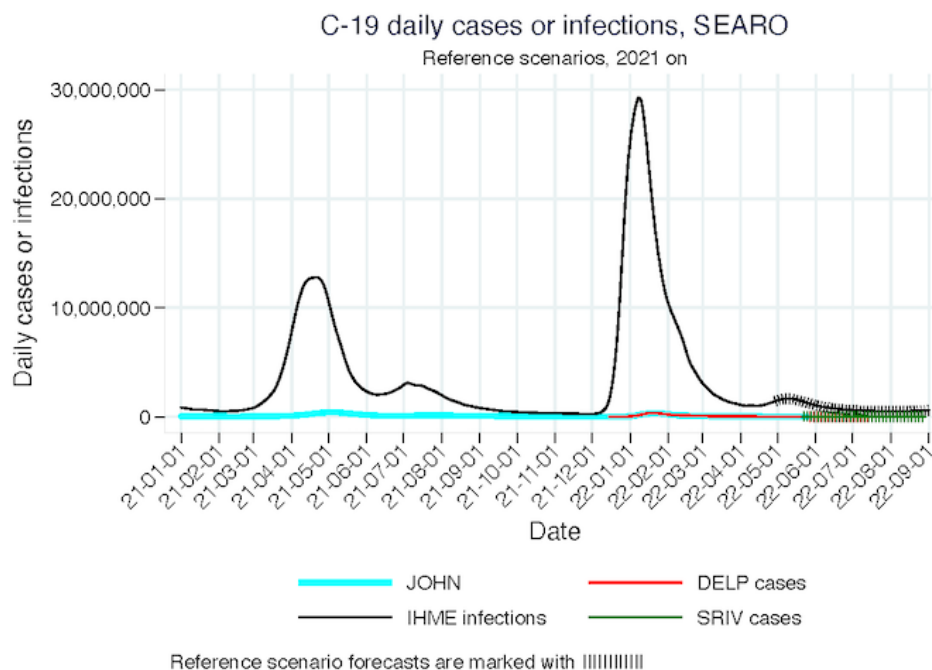(1) South-East Asian region Daily deaths, reference scenarios, 2020 on

(3) South-East Asian region Daily deaths, 3 scenarios, 2021 on

(3b) South-East Asian region Daily deaths, reference scenarios, 2022 on

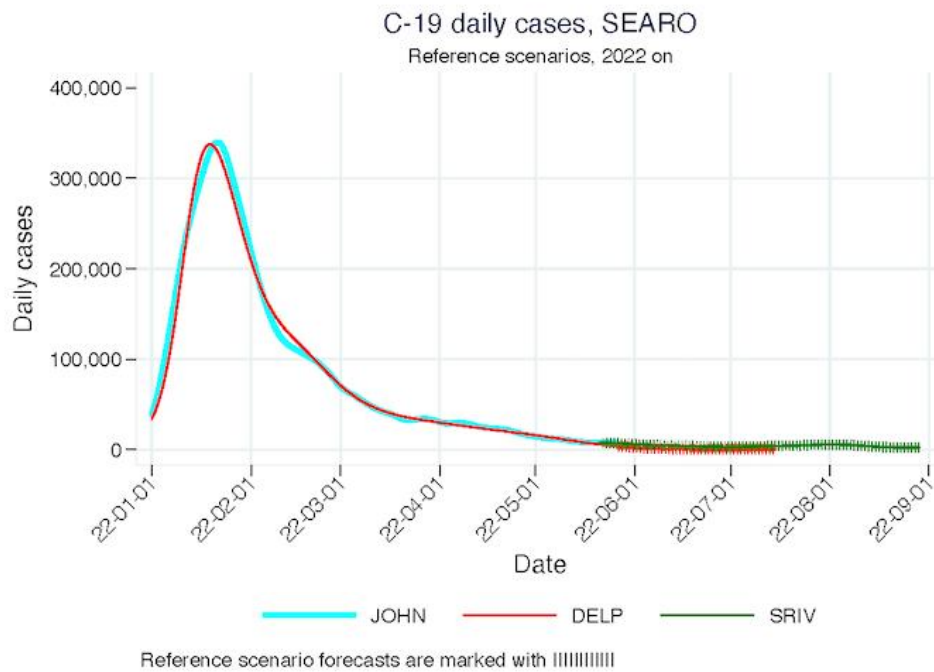C-19 daily deaths, SEARO
Reference scenarios, 2022 on

(4) South-East Asian region Daily cases or infections, reference scenarios, 2020 on

C-19 daily cases or infections, SEARO
Reference scenarios, 2021 on

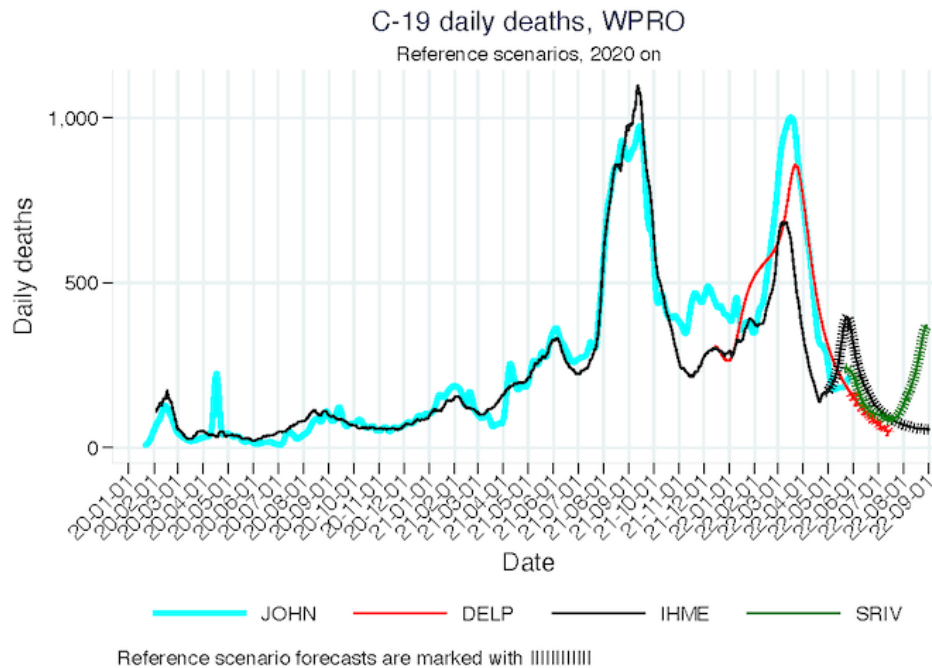(6) South-East Asian region Daily cases or infections, 3 scenarios, 2021 on

(6b) South-East Asian region Daily cases or infections, reference scenarios, 2022 on

C-19 daily cases, SEARO
Reference scenarios, 2022 on

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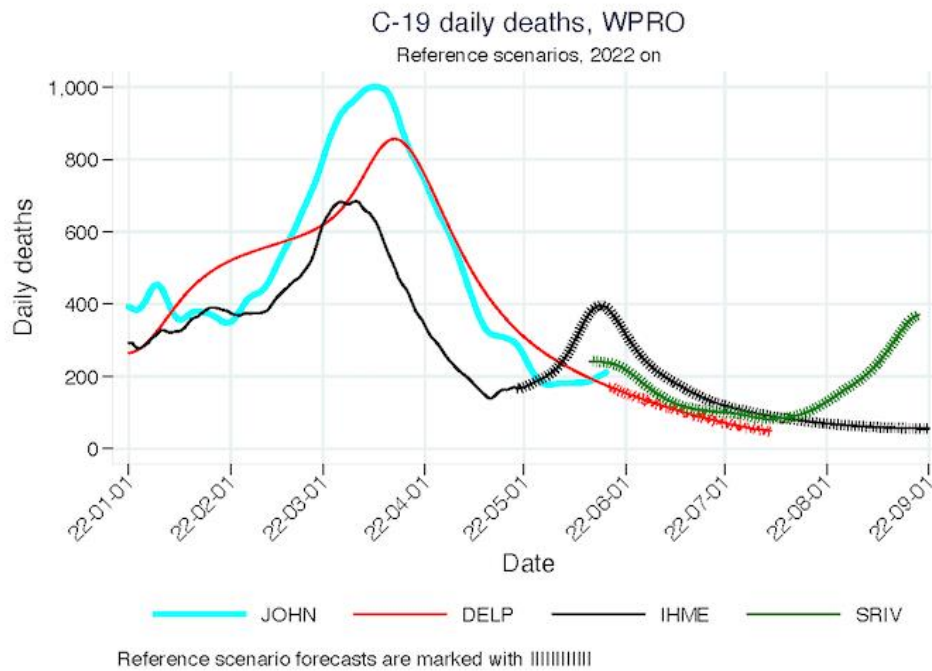
Selected graphs – Western Pacific region (WPRO)

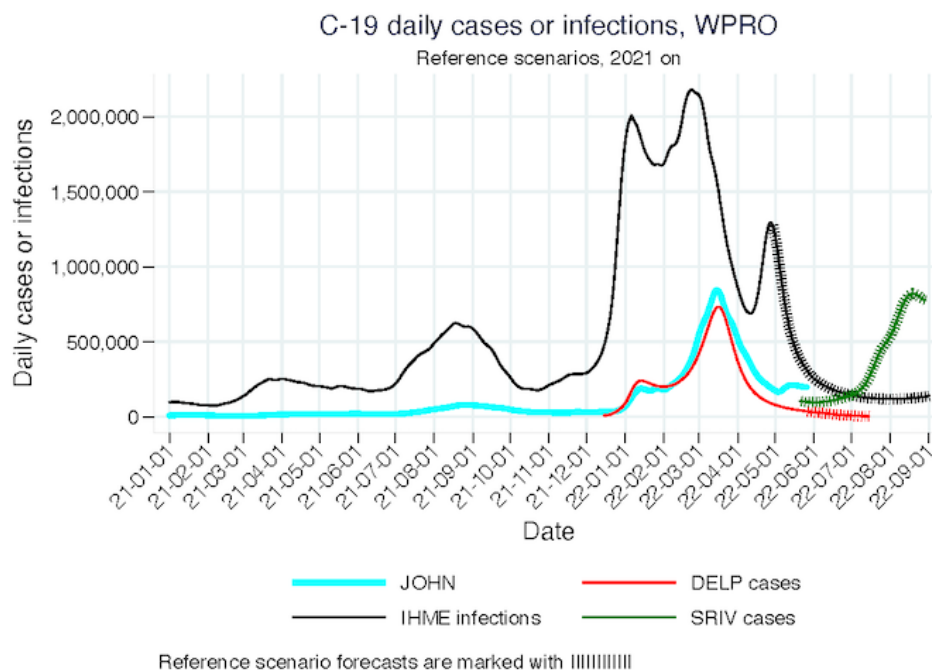(1) Western Pacific region Daily deaths, reference scenarios, 2020 on

C-19 daily deaths, WPRO
Reference scenarios, 2020 on

(3) Western Pacific region Daily deaths, 3 scenarios, 2021 on

(3b) Western Pacific region Daily deaths, reference scenarios, 2022 on

C-19 daily deaths, WPRO
Reference scenarios, 2022 on

JOHN — DELP — IHME — SRIV

Reference scenario forecasts are marked with IIIIIIIIIIII

(4) Western Pacific region Daily cases or infections, reference scenarios, 2020 on

C-19 daily cases or infections, WPRO
Reference scenarios, 2021 on

JOHN — DELP cases
IHME infections — SRIV cases

Reference scenario forecasts are marked with IIIIIIIIIIII

(6) Western Pacific region Daily cases or infections, 3 scenarios, 2021 on

(6b) Western Pacific region Daily cases or infections, reference scenarios, 2022 on

C-19 daily cases, WPRO
Reference scenarios, 2022 on

Reference scenario forecasts are marked with |||||||||||||