

Update on COVID19 pandemic: what's the new normal?

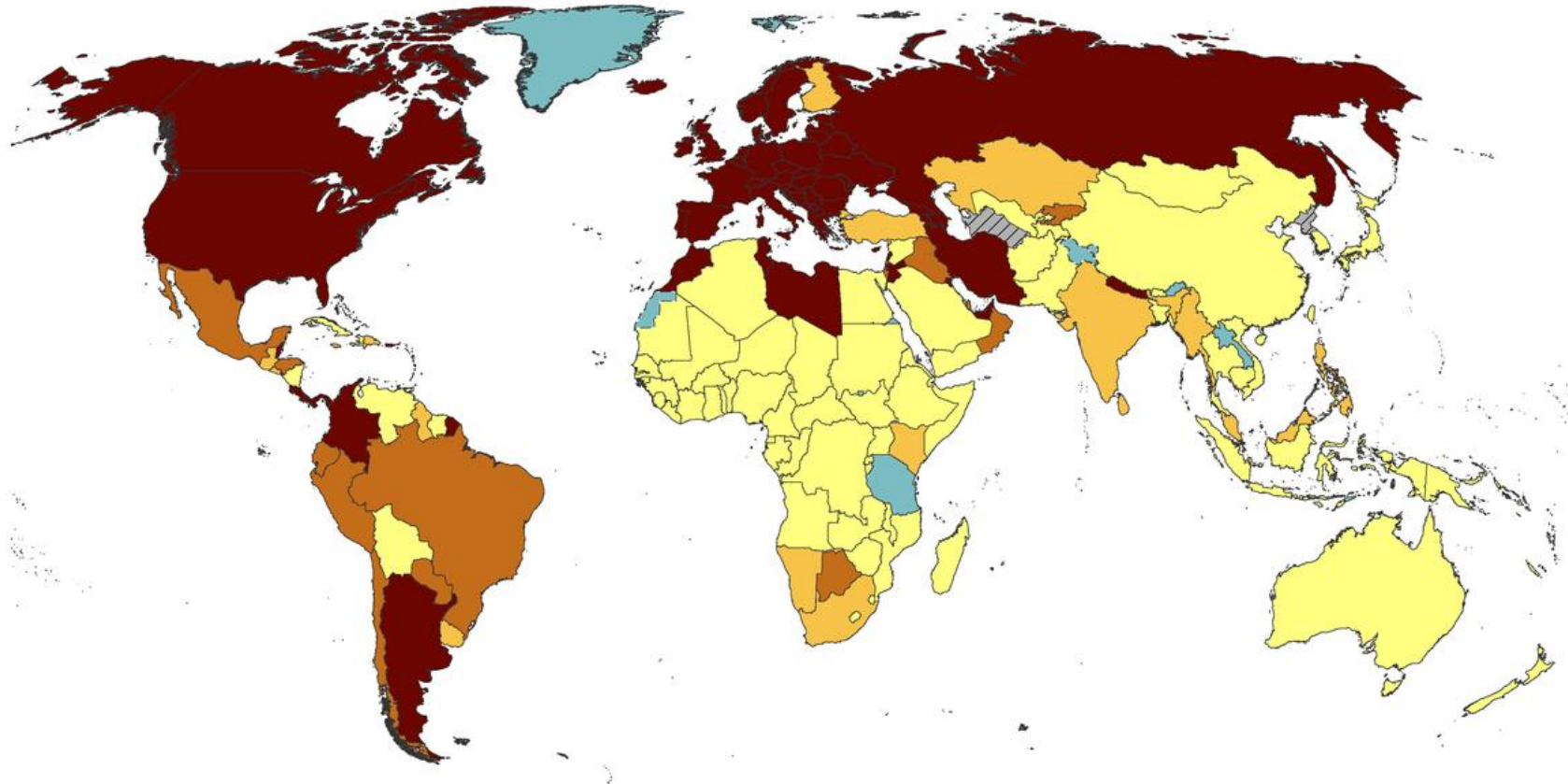
HPV Prevention and Control Board - Nov 12-13 2020

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University of Antwerpen

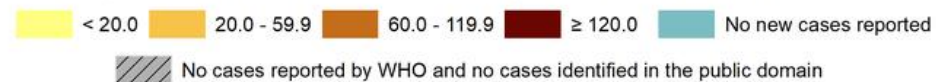




Geographic distribution of 14-day cumulative number of reported COVID-19 cases per 100 000 population, worldwide, as of 11 November 2020



14-day COVID-19 case notification rate per 100 000, as of 11 of November, 2020



Distribution of cases as of Nov 11, 2020 (www.who.int)



Search by Country, Territory, or Area



[Overview](#)

[Data Table](#)

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WHO Coronavirus Disease (COVID-19) Dashboard

Data last updated: 2020/11/11, 5:52pm CET

[Back to top](#)

Source: World Health Organization

Data may be incomplete for the current day or week.

Jan 31

Feb 29

Mar 31

Apr 30

May 31

Jun 30

Jul 31

Aug 31

Sep 30

Oct 31

Situation by WHO Region



Daily

Weekly

Cases

Deaths

Count



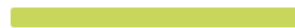
Americas

22,006,044
confirmed



Europe

13,890,009
confirmed



South-East Asia

9,797,966
confirmed



Eastern Mediterranean

3,403,839
confirmed



Africa

1,374,303
confirmed



Western Pacific

778,813
confirmed



Source: World Health Organization

Data may be incomplete for the current day or week.

ic 31

Jan 31

Feb 29

Mar 31

Apr 30

May 31

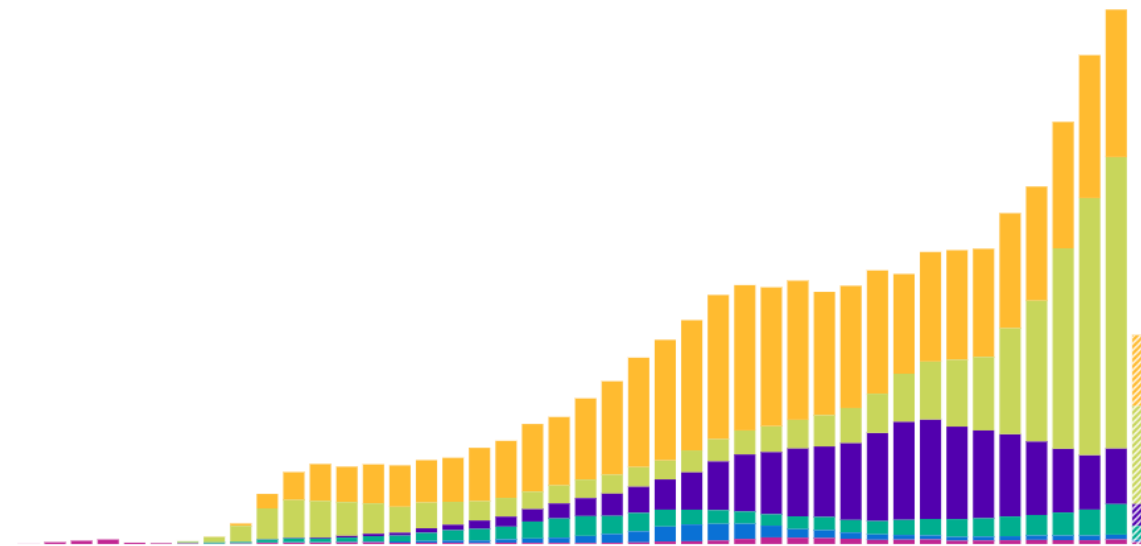
Jun 30

Jul 31

Aug 31

Sep 30

Oct 31



What will be the new normal?

- Different rules and measures per continent/country?
- Travel restrictions?
- Same measures per country per continent
- What kind of measures?
- Geopolitical influences?
 - Distribution of vaccines COVID19
 - Distribution of lab material



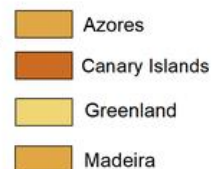
Situation in Europe: 13-day COVID-19 case notification rate per 100 000, weeks 43-44



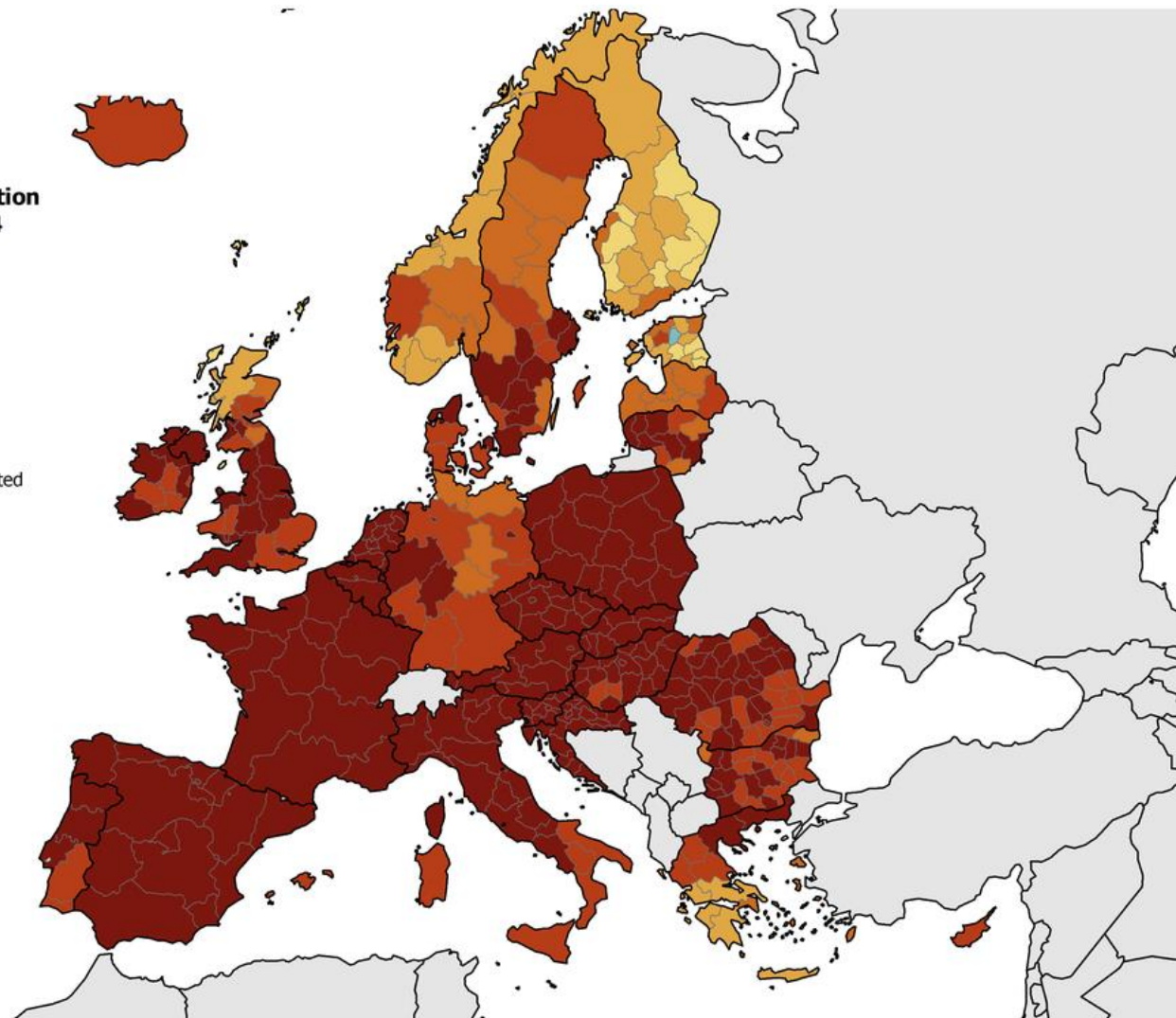
13-day COVID-19 case notification rate per 100 000 weeks 43 - 44



Regions not visible in the main map extent



Countries not visible in the main map extent



Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat. Office for National Statistics licensed under the Open Government Licence v.3.0. Contains OS data © Crown copyright and database right 2020. ©Kartverket
 ©Instituto Nacional de Estatística - Statistics Portugal. The boundaries and names shown on this map do not imply official endorsement or acceptance by the European Union. ECDC. This map, showing cases at sub-national level, is based on data recorded once a week. Therefore, the time frame for this map and the national table above is not the same, which can result in different values in the table and the map. In addition, as of 3 November 2020 ECDC moved the collection of sub-national data from Wednesdays to Tuesdays. As a result of this, and due to methodological limitations in place, the data displayed in the map for weeks 43-44 and 44-45 correspond to a 13-day period. The change in reporting day also affected the timeliness of the data, meaning that the data for some countries do not necessarily correspond to the latest 14-day period at the time of data collection. The sub-national maps for weeks 45-46 will revert again to a 14-day period. Users are advised to interpret this map with caution and an awareness of the current limitations.
 Map produced on: 5 Nov 2020



LET'S
FLATTEN THE CURVE

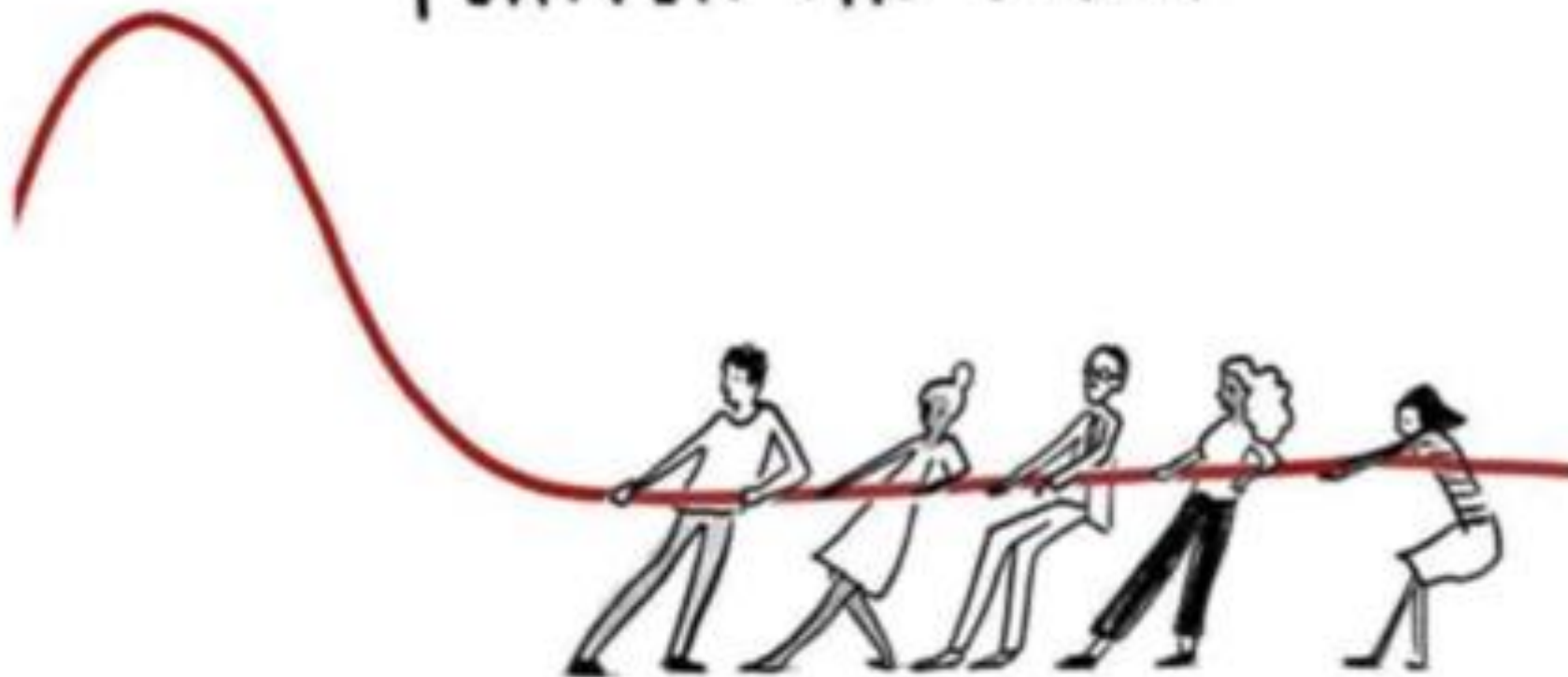
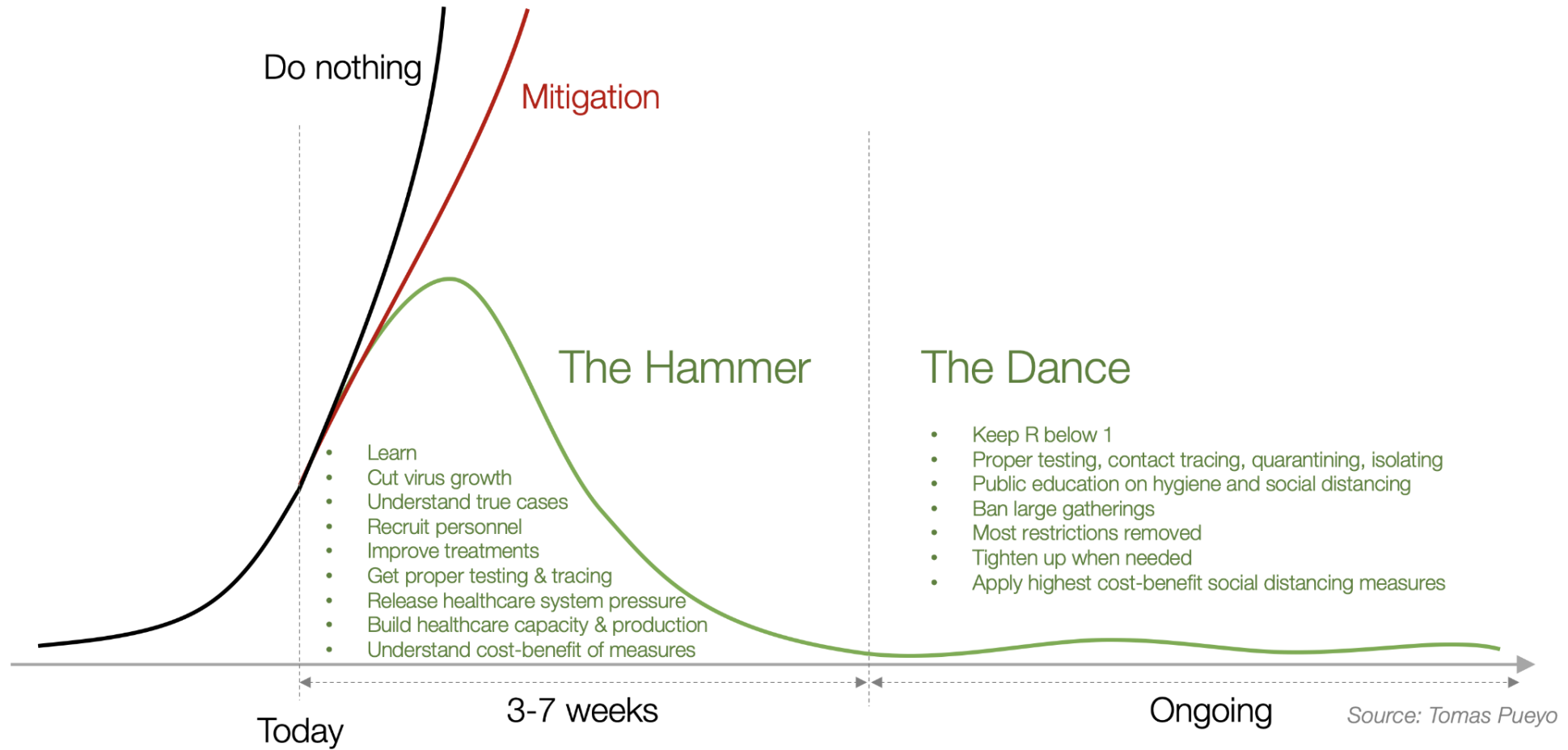
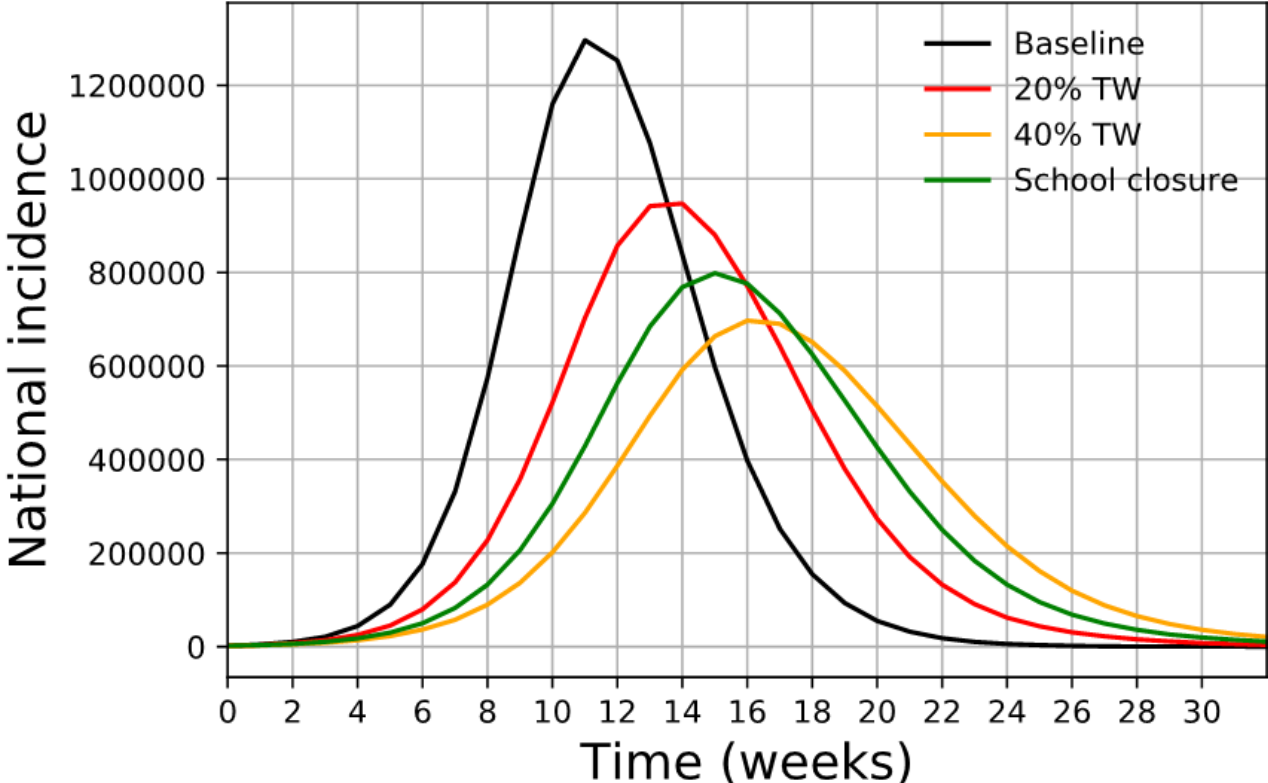


Chart 13: Suppression vs. Mitigation vs. Do Nothing — early on

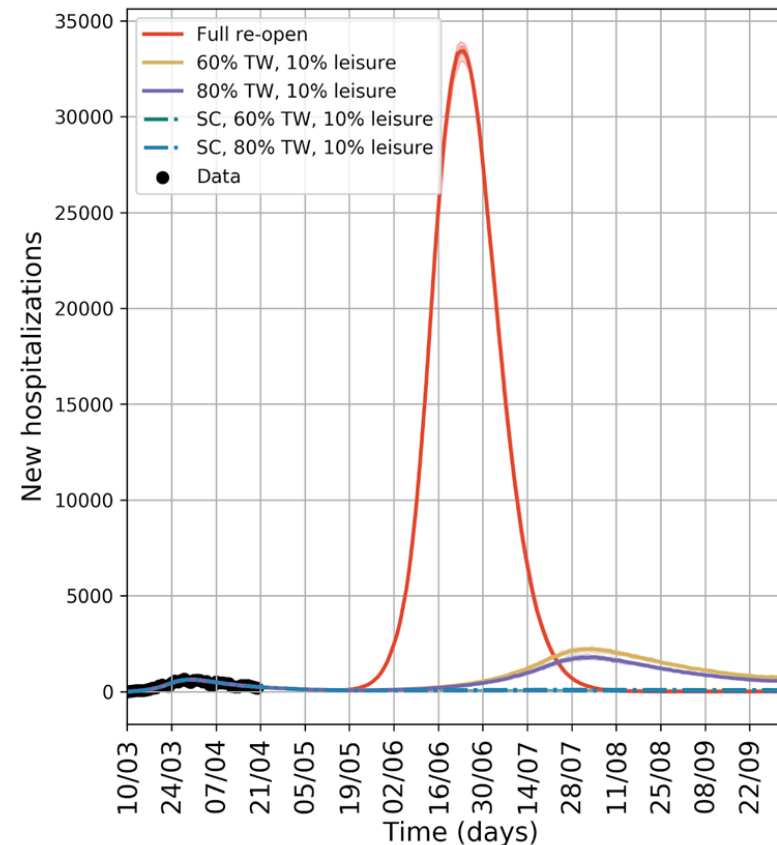
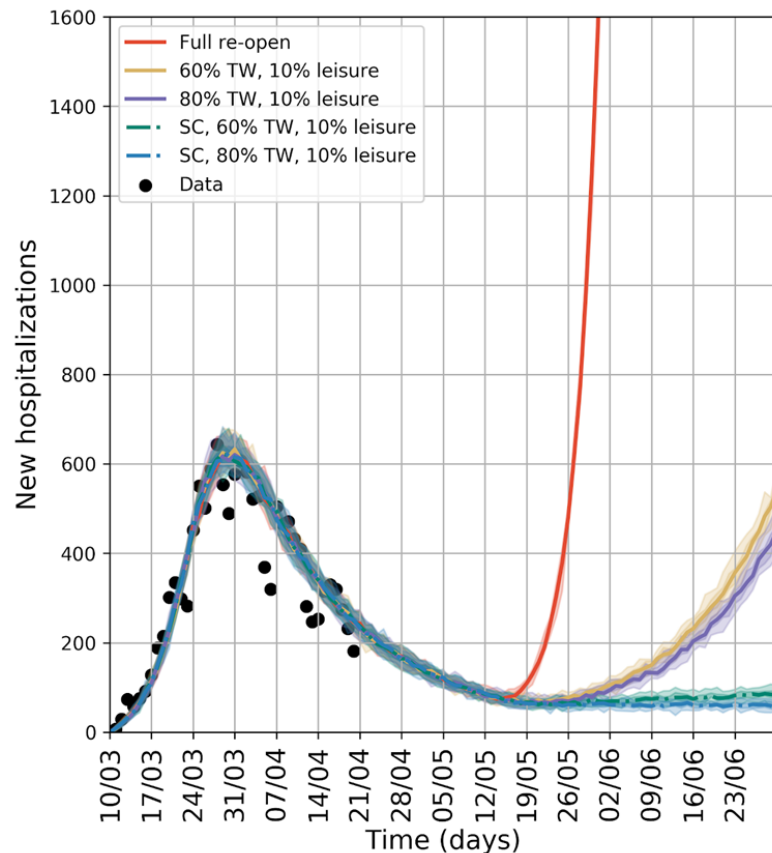


Potential epidemic scenarios for Belgium



Exit strategies on May 4th (preliminary)

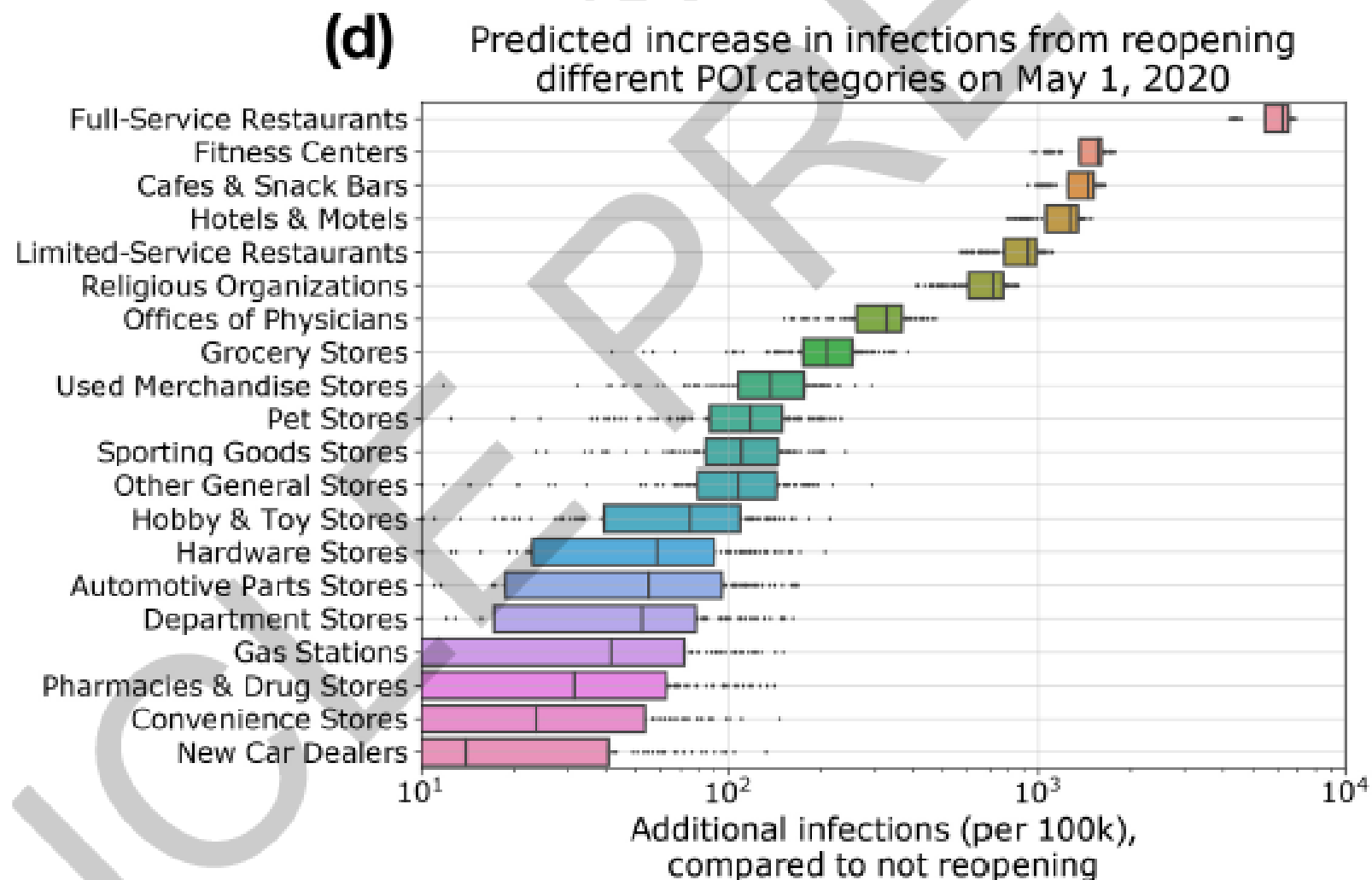
	Telework	School open	Leisure contacts	Peak day	New hospitalizations at peak	New ICU at peak
Full re-open	0	Yes	100%	24-Jun	33000	8250
60% TW, 10% leisure	60%	Yes	10%	03-Aug	2220	555
80% TW, 10% leisure	80%	Yes	10%	04-Aug	1800	450
SC, 60% TW, 10% leisure	60%	No	10%	30-Mar	620	155
SC, 80% TW, 10% leisure	80%	No	10%	30-Mar	620	155



What will be the new normal?

- Wave 1: flatten the curve
- Wave 2: crush the curve
- Different parameters:
 - Number of cases per day
 - Incidence of cases per 14 days per 100,000
 - R_t
 - Test positivity
 - ...
- Policy according
 - to number of beds, manpower, ...
 - To control of the epidemic
- Understanding the epidemiology of an ID
 - Exponential growth
 - Timing of measures – kind of measures

Mobility network models of COVID-19 explain inequities and inform reopening



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 - To control of the epidemic
- Understanding the epidemiology of an ID
 - Exponential growth
 - Timing of measures – kind of measures
- Define exit-strategy



National Framework for living with COVID-19



Very low rate of COVID-19 infections Low R-Number → Very high rate of COVID-19 infections High R-Number

	Level 1	Level 2	Level 3	Level 4	Level 5
Social & Family Gatherings	 Max: 10 from 3 other households	 Max: 6 from 3 other households	 Max: 6 from 1 other household	✗ No visitors	✗ No visitors
Weddings	 Max: 100	 Max: 50	 Max: 25	 Max: 6	 Max: 6
Indoor Events	Depending on venue size 100 200	Depending on venue size 50 100	✗ No organised events	✗ No organised events	✗
Outdoor Events	Depending on venue size 200 500	Depending on venue size 100 200	Gatherings of up to 15	Gatherings of up to 15	No organised events
Sports Training	 Normal training with protective measures	Indoors Pods of 6 Outdoors Pods of 15	1 Individual only Pods of 15 Non-contact	1 Individual only Pods of 15 Non-contact	✗ Individual training only
Matches & Events	100 indoor 200 outdoor 500 stadia	50 indoor 100 outdoor 200 stadia	✗ Except specific exemptions	✗ Except specific exemptions	✗ No events
Gyms, Pools & Leisure Centres	 Open with protective measures	 Open with protective measures	 Individual training only	✗ Closed	✗ Closed
Religious Services	 50 (or sub-groups of 50)	 50 (or sub-groups of 50)	✗ Services move online Funerals 25	✗ Services move online Funerals 25	✗ Services move online Funerals 10
Bars serving food, Cafés & Restaurants	 Open with protective measures	 Open Groups of 6 from up to 3 households	Range of restrictions up to and including no indoor dining	Outdoor dining only Max: 15 Takeaway/Delivery	✗ Takeaway/Delivery only
Wet Pubs	 Open with protective measures	 Open Groups of 6 from up to 3 households	Range of restrictions up to and including no indoor service*	Outdoor only Max: 15 persons Takeaway/Delivery	✗ Takeaway/Delivery only
Hotels, Guesthouses B&Bs	 Open with protective measures	 Open with protective measures	✗ Services limited to Residents only	✗ Existing Guests & Essential Purposes only	✗ Essential Purposes only
Retail & Services				✗	✗

Ireland: exit barometer

What will be the new normal?

- Travel limitations
- Systematic screening and testing
- Absorb the consequences of COVID19 priority
 - Daily activities
 - Research
 - PCR, lab material, non-COVID-research activities, trials, ...
 - Exchange of personnel, students, ...
 - Delay in medical and lab activities
 - Screening programs
 - Therapy
 - Surgical interventions
 - ...

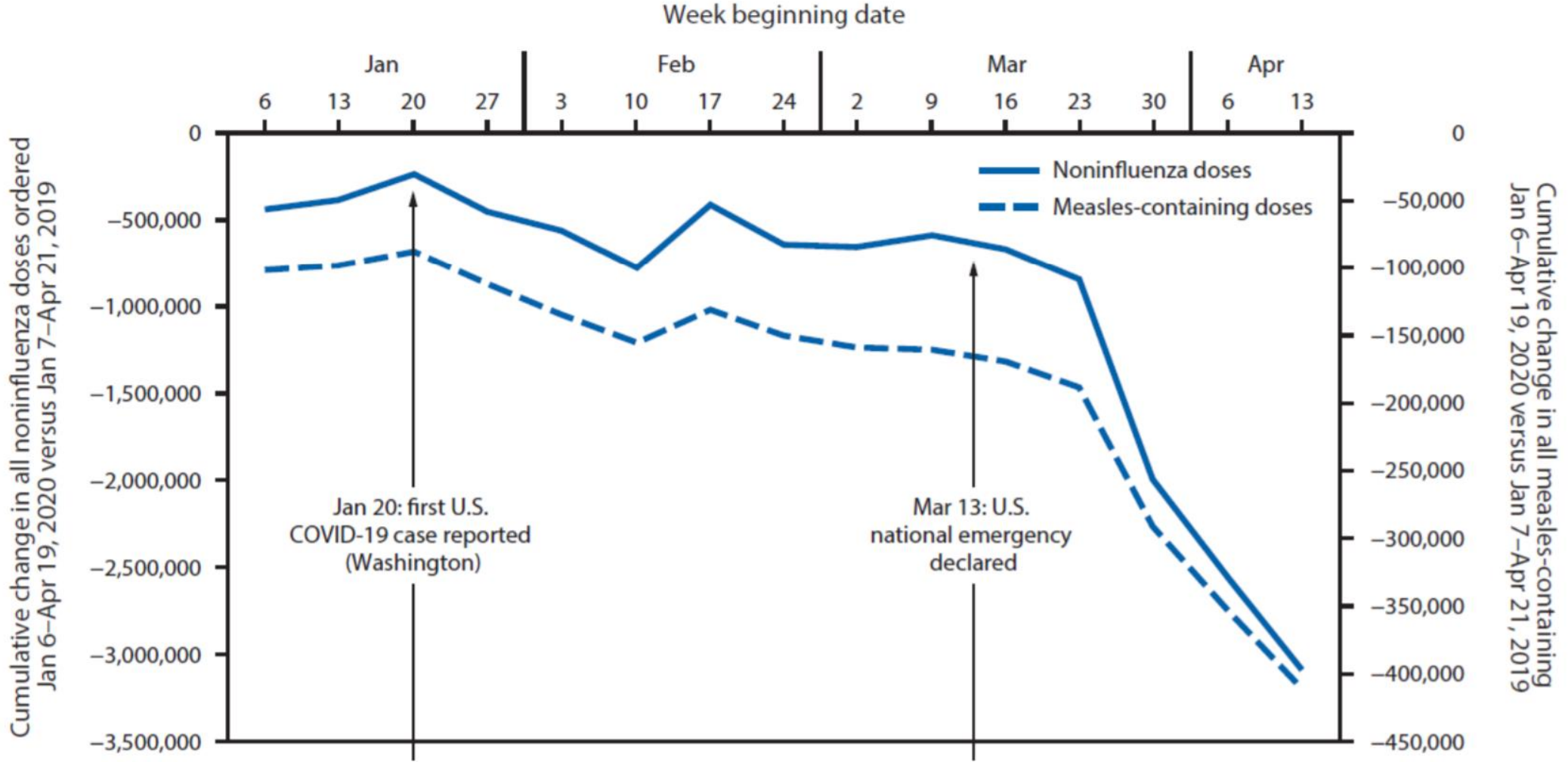


Direct impact of COVID19 on universal immunization programmes

- Disruption of childhood immunization programmes/uptake
- interruption of universal childhood immunization programmes
- Delay in infant & school immunization
- outbreak response activities postponed
- Care-givers are reluctant
- Parents are afraid
- Facilities are closed

COVID-19 pandemic and disruptions to routine childhood vaccination

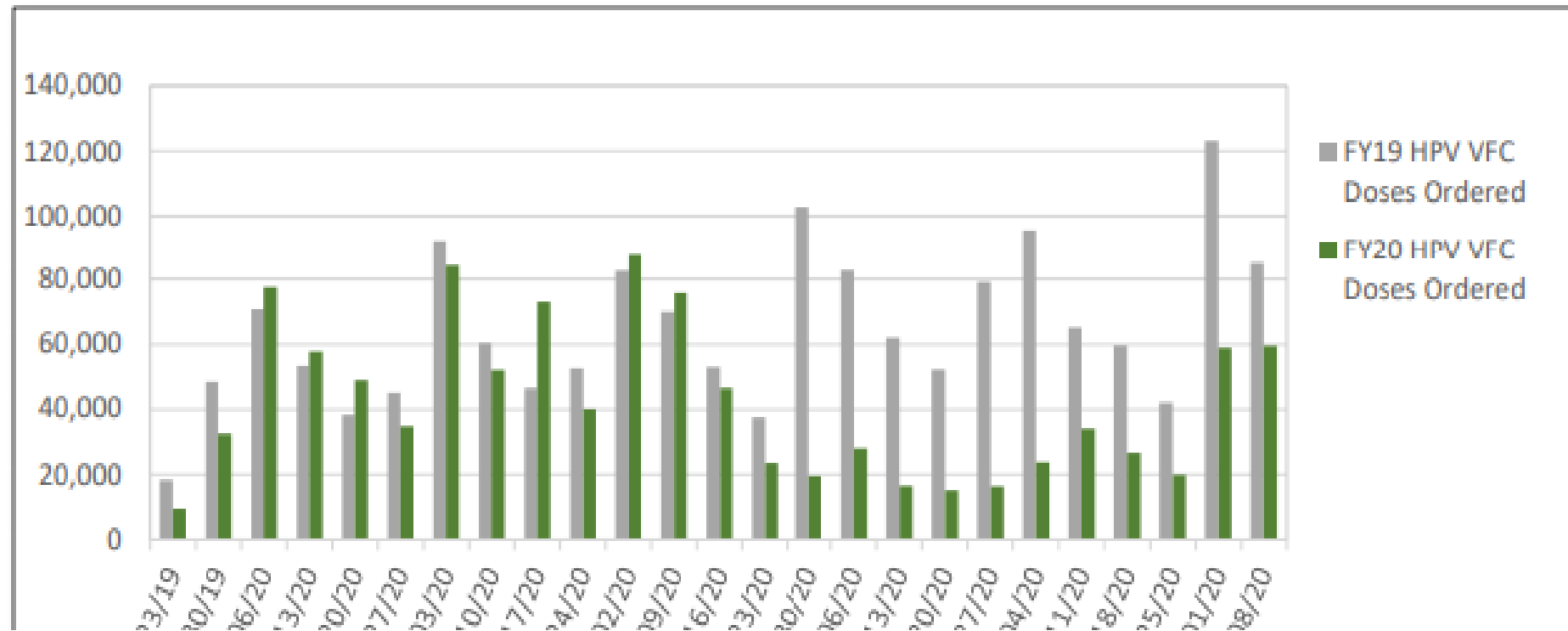
Weekly decreases in Vaccines for Children program provider orders for pediatric vaccines – United States, January 6-April 19, 2020



Santoli JM et al, MMWR (May 8, 2020)

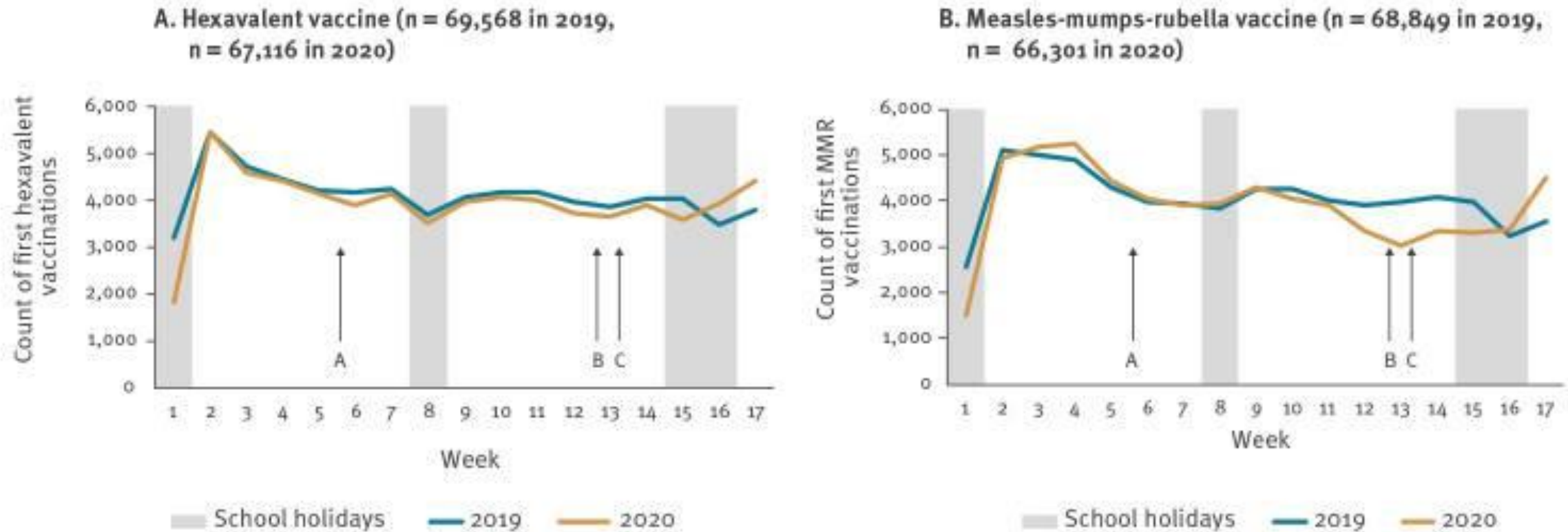
SUPPLEMENTARY FIGURE 1. Weekly provider order comparisons, human papillomavirus (HPV) vaccine (A), tetanus and diphtheria toxoids vaccine (Td) and tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap) (B), and meningococcal conjugate vaccine (MenACWY, MCV4) (C) — Vaccines for Children (VFC), United States, fiscal years 2019 and 2020

A. HPV



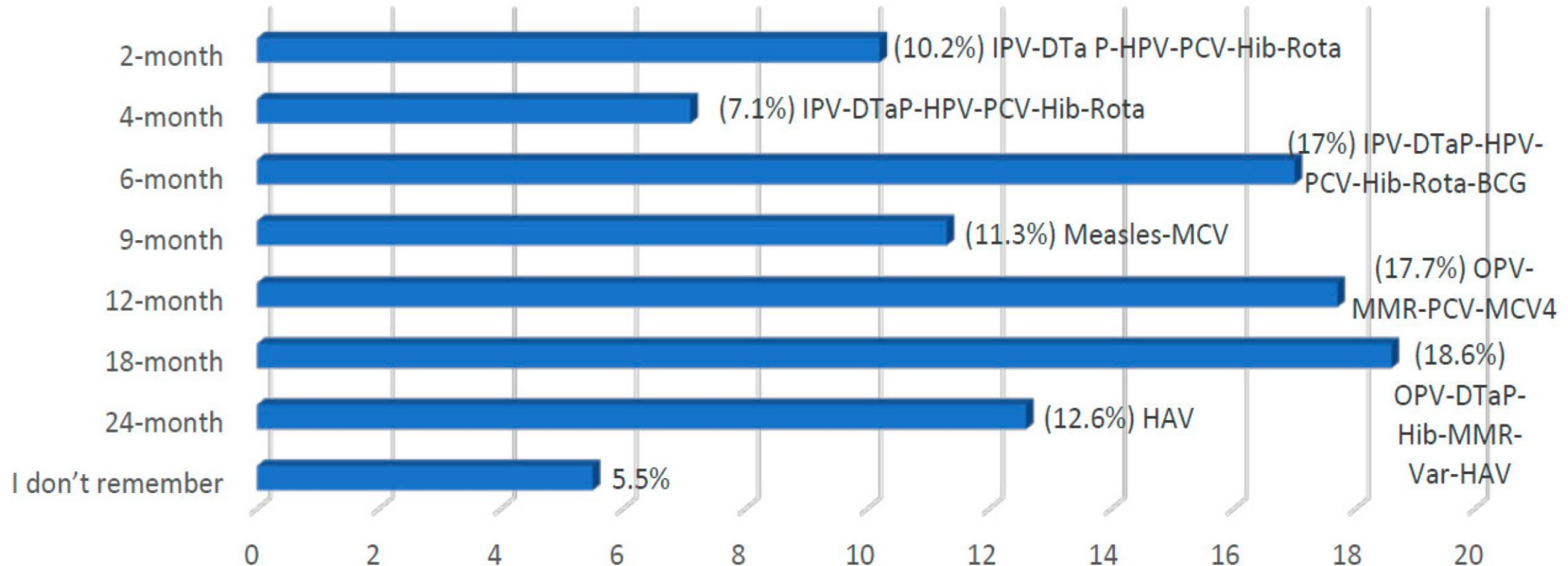
Elam-Evans, L. D., Yankey, D., Singleton, J. A., Sterrett, N., Markowitz, L. E., Williams, C. L., . . . Stokley, S. (2020). **National, Regional, State, and Selected Local Area Vaccination Coverage Among Adolescents Aged 13-17 Years - United States, 2019.** *MMWR Morb Mortal Wkly Rep*, 69(33), 1109-1116. doi:10.15585/mmwr.mm6933a1 <https://stacks.cdc.gov/view/cdc/91795>

IMPACT ON ROUTINE CHILDHOOD VACCINATION - UK



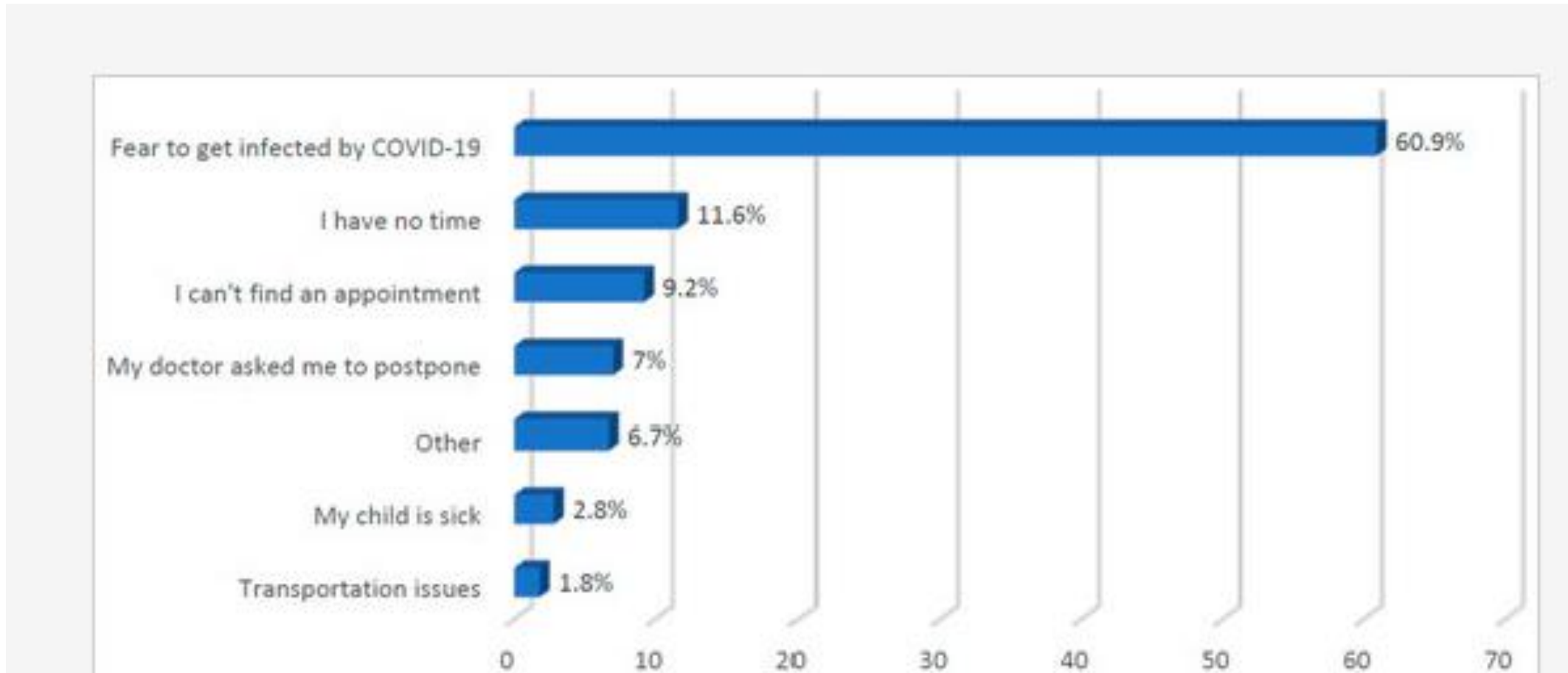
Hexavalent vaccination counts followed a similar pattern in 2020 as in 2019, varying week by week; particularly low counts in week 1 of both years are probably explained by holidays. The MMR vaccination counts also followed a similar pattern in 2020 until week 11, when they fell, and remained low for several weeks before rising again in weeks 16 and 17

Frequency of vaccine delay by age, routine childhood immunization, Saudi Arabia



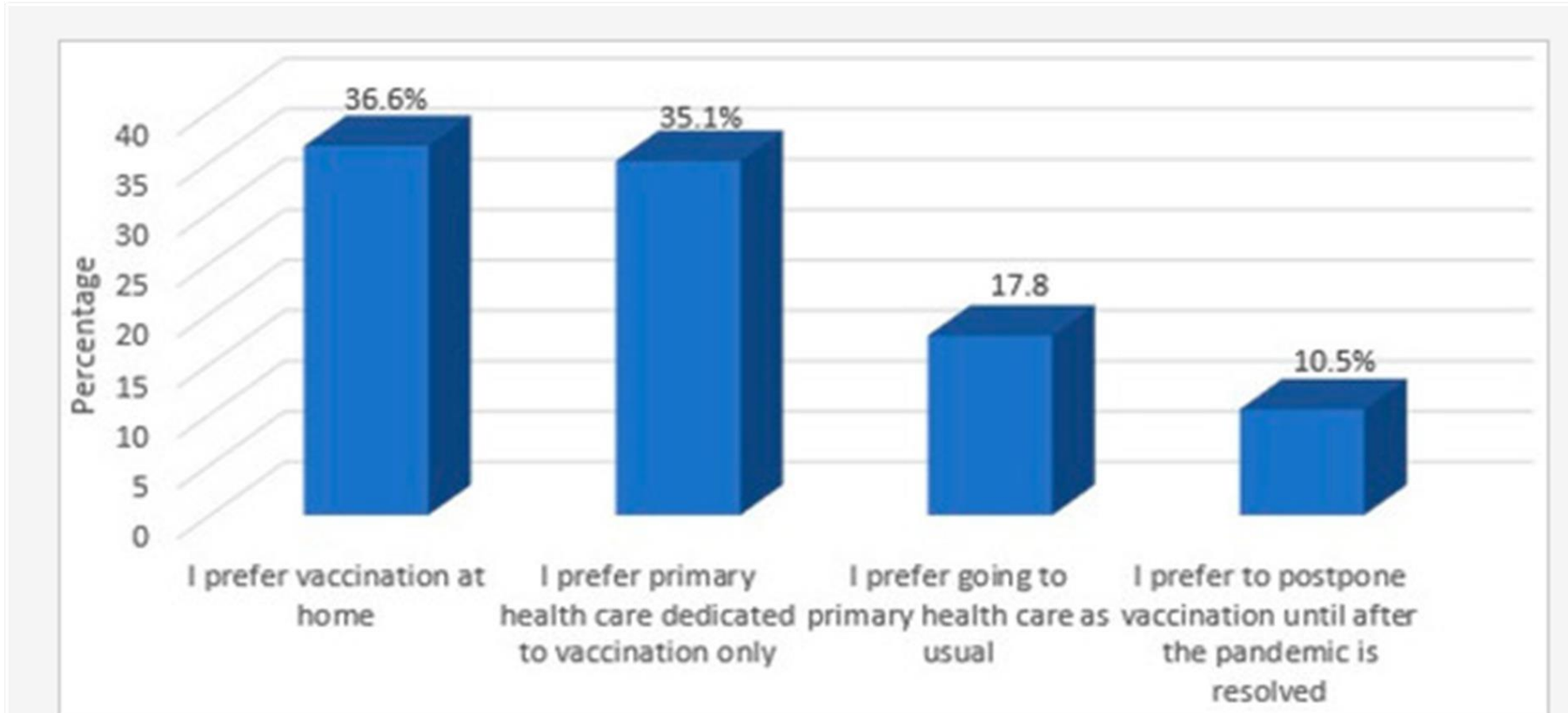
Alsuhaibani M, Alaqeel A. Impact of the COVID-19 Pandemic on Routine Childhood Immunization in Saudi Arabia. *Vaccines* (Basel). 2020 Oct 3;8(4):E581. doi: 10.3390/vaccines8040581. PMID: 33022916. <https://www.mdpi.com/2076-393X/8/4/581>

Reason for delay vaccine delay by age, routine childhood immunization, Saudi Arabia



Alsuhaibani M, Alaqeel A. Impact of the COVID-19 Pandemic on Routine Childhood Immunization in Saudi Arabia. *Vaccines* (Basel). 2020 Oct 3;8(4):E581. doi: 10.3390/vaccines8040581. PMID: 33022916. <https://www.mdpi.com/2076-393X/8/4/581>

Preferences, routine childhood immunization, Saudi Arabia

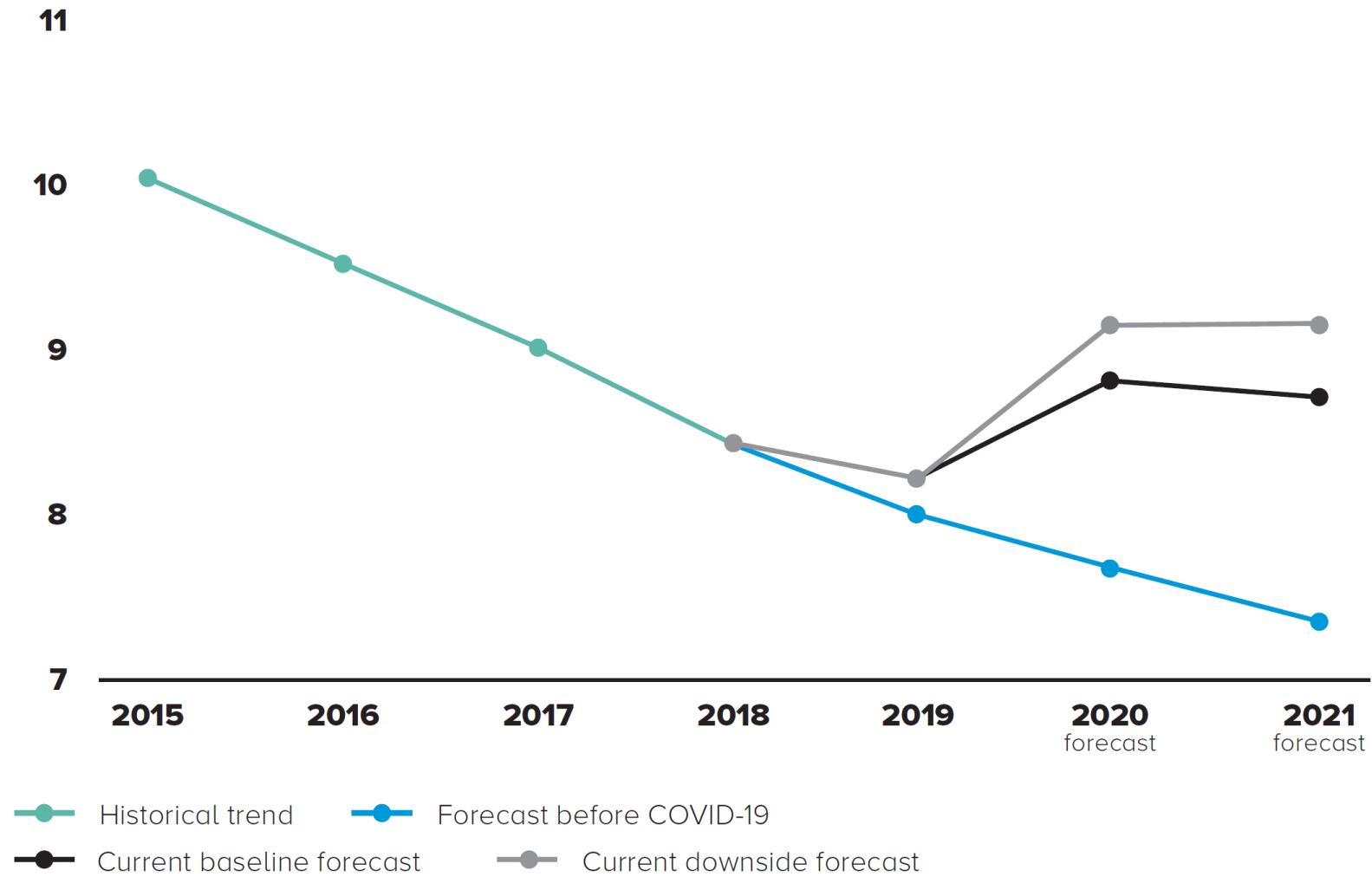


Alsuhaibani M, Alaqeel A. Impact of the COVID-19 Pandemic on Routine Childhood Immunization in Saudi Arabia. *Vaccines* (Basel). 2020 Oct 3;8(4):E581. doi: 10.3390/vaccines8040581. PMID: 33022916. <https://www.mdpi.com/2076-393X/8/4/581>

Direct impact of COVID19 on universal immunization programmes

- Health budget/personnel re-oriented to non-vaccine activities
 - Shift from prevention to treatment/care
- Increase in poverty with impact on health and prevention
- Parents expect extreme flexibility of the health care system
 - Safety and sanitary measures, adapted waiting room, ...
- Need for catch-up programs, information, flexibility, ...
- Competition for vaccine budgets at country level – donor level?

FIGURE 1 The Impact of COVID-19 on Global Poverty



Proportion of people living below \$1.90 a day, 2015-2019 nowcast, and forecast before and after COVID-19 (percentage) – Source: United Nations Statistics Division⁴

Vaccine Access and Creating Demand

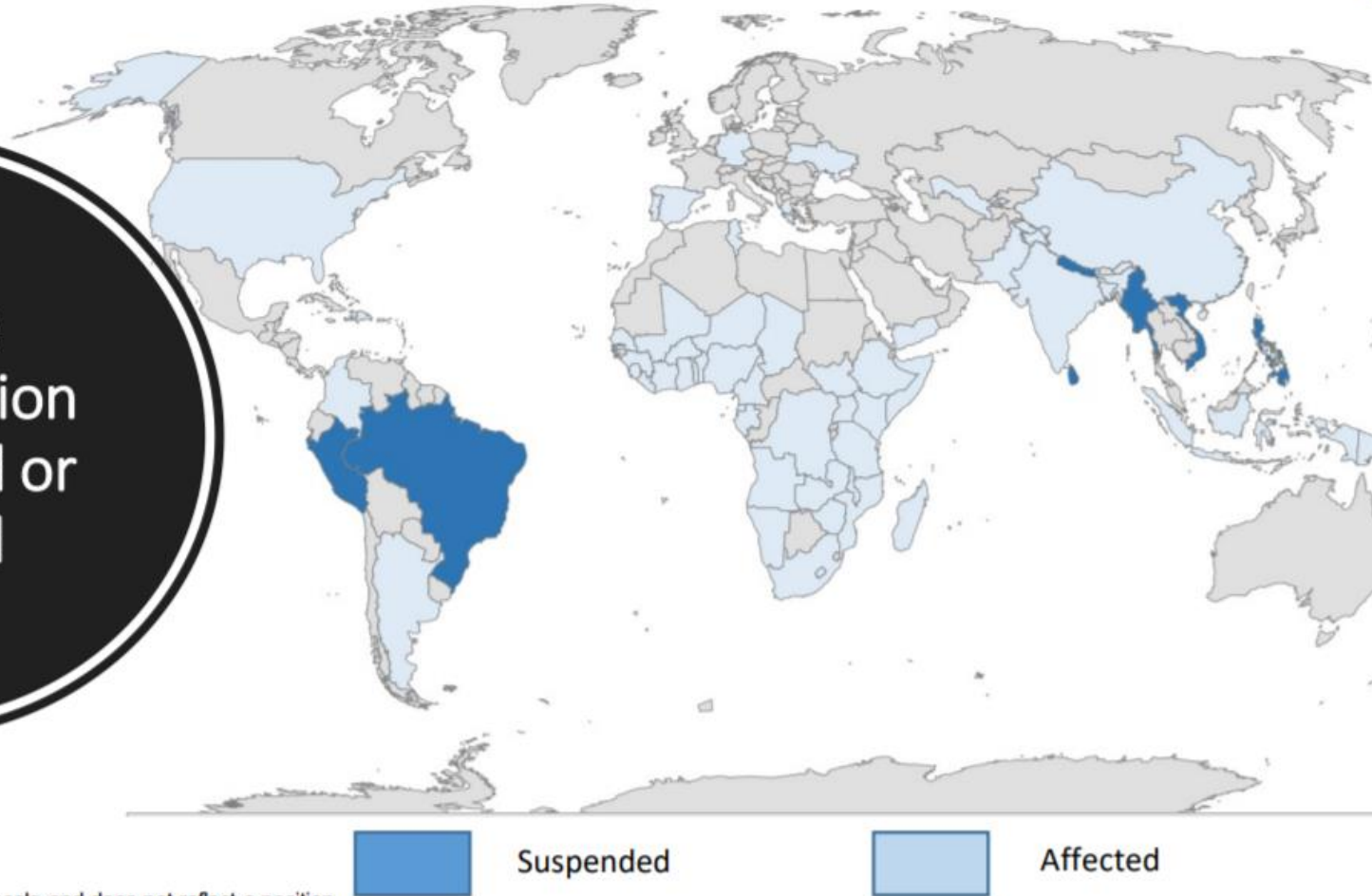
unicef 
for every child

Dr. Robin Nandy
Principal Advisor & Chief of Immunizations
28 May 2020

PULSE SURVEY FINDINGS

74 countries
so far

Routine
Immunization
suspended or
affected

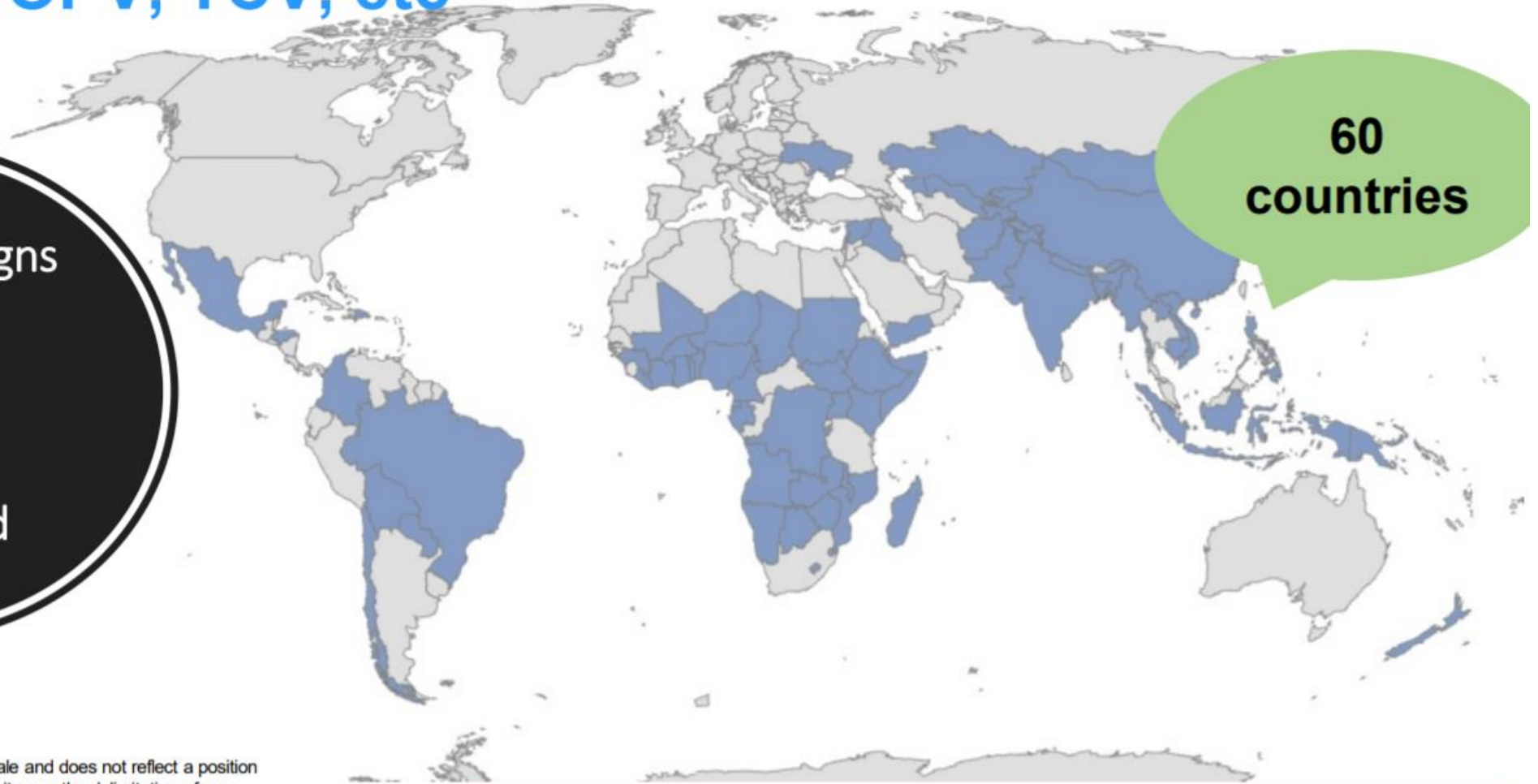


- Some countries have not yet have reported interruptions
- In others, the actual impact is unknown (even if they reported that services are ongoing (demand))
- Next round of data collection mid-May

Map disclaimer: This map is stylized and not to scale and does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

SIA INTERRUPTIONS: Measles, Measles/Rubella, Meningitis, Yellow Fever, OPV, TCV, etc

VPD Campaigns
and/or
Outbreak
Response
activities
postponed



Map disclaimer: This map is stylized and not to scale and does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

More than 173 million children at-risk of missing out on measles vaccines in 40 countries

Guiding principles for immunization activities during the COVID-19 pandemic

Interim guidance
26 March 2020



*****As the COVID-19 pandemic evolves, this document and accompanying FAQ will be revised as necessary. *****

Due to the global circulation of the virus causing COVID-19 and the current pandemic, there is risk of disruption to routine immunization activities due to both COVID-19 related burden on the health system and decreased demand for vaccination because of physical distancing requirements or community reluctance. Disruption of immunization services, even for brief periods, will result in increased numbers of susceptible individuals and raise the likelihood of outbreak-prone vaccine preventable diseases (VPDs) such as measles.¹ Such VPD outbreaks may result in increased morbidity and mortality predominantly in young infants and other vulnerable groups, which can cause greater burden on health systems already strained by the COVID-19 response. The high potential for VPD outbreaks makes it imperative for countries to maintain continuity of immunization services wherever services can be conducted under safe conditions. Prior disease outbreaks and humanitarian emergencies have underscored the importance of maintaining essential health services such as immunization, and effectively engaging communities in planning and service delivery.^{2,3} Yet the complexity and global reach of the COVID-19 response with respect to mandatory physical distancing (also referred to as social distancing) and economic impact on households is unprecedented for public health.

This document provides guiding principles and considerations to support countries in their decision-making regarding provision of immunization services during the COVID-19 pandemic and is endorsed by the WHO's Strategic Advisory Group of Experts on Immunization. It is complemented by a range of WHO technical materials on response and mitigation measures for COVID-19.⁴ Each country will need to make individual risk assessments based on the local dynamics of COVID-19 transmission, immunization and health system characteristics, and current VPD epidemiology in their setting.

file:///C:/Users/grhendri/Downloads/WHO-2019-nCoV-immunization_services-2020.1-eng.pdf

COVID19 vaccine candidates

- Trust in vaccines versus trust in government
- Fear of potential side effects
- Fear that vaccines are developed too quickly – prioritization versus speed!
- Anti-COVID19 measures movement similar as anti-vax
 - Rumors
 - Complot theory
 - ...
- Hesitancy can spill over to other vaccines
- Health budget/personnel re-oriented to non-vaccine activities

Direct impact of COVID19 on universal immunization programmes: how to remediate?

- Well document delay or missed vaccines
- System to catch up
- Flexibility required from the system and HCP
- Investment in communication
- Train HCP in catch programs and co-administration possibilities
- Reach out programs
- Competition with COVID19 vaccination programs/budgets to be expected

How will 2021 look like?

- Similar as in 2021?
 - The jojo-effect of measures – lock downs followed by relaxation of measures followed by ...
 - Prioritization of COVID19 vaccination programs – consequences!
 - Increase in background immunity
 - Start of immunization programmes
 - Consequence of the epidemic (temporary)
 - Reduction in social contacts
 - Management of societal disruption?

BACK UP



At least 80 million children under one at risk of diseases such as diphtheria, measles and polio as COVID-19 disrupts routine vaccination efforts, warn Gavi, WHO and UNICEF

Agencies call for joint effort to safely deliver routine immunization and proceed with vaccination campaigns against deadly vaccine-preventable diseases.

22 May 2020 | News release | Reading time: 5 min (1455 words)

<https://www.who.int/news/item/22-05-2020-at-least-80-million-children-under-one-at-risk-of-diseases-such-as-diphtheria-measles-and-polio-as-covid-19-disrupts-routine-vaccination-efforts-warn-gavi-who-and-unicef>

About the Analysis

Vaccination campaigns	Total # of countries with postponed campaigns as of 15 May*
Measles/ Measles Rubella/ Measles Mumps Rubella (M/MR/MMR)	27
Polio (IPV)	7
Bivalent oral poliovirus vaccine (bOPV)	26
Monovalent Oral Poliovirus Type 2 (mOPV2)	13
Meningitis A (MenA)	2
Yellow Fever (YF)	4
Typhoid (TCV)	2
Cholera (OCV)	5
Tetanus (Td)	7

The online immunization pulse survey was conducted with over 800 immunization experts, including representatives of Ministries of Health and global health organizations across 107 countries. 53 of these were lower-income countries supported by Gavi, the Vaccine Alliance. The data on campaigns is based on data reported to WHO by member states as of 15 May 2020. Data on reasons for the disrupted services also came from regions and a survey on the training platform *Scholar* with 1600 respondents.

Global disruption of vaccine outreach activities due to COVID-19

Based on single calculated status per country
National respondents only

Outreach Disruption: Global

Reported level of disruption to outreach vaccination activities in May 2020 as a result of COVID-19

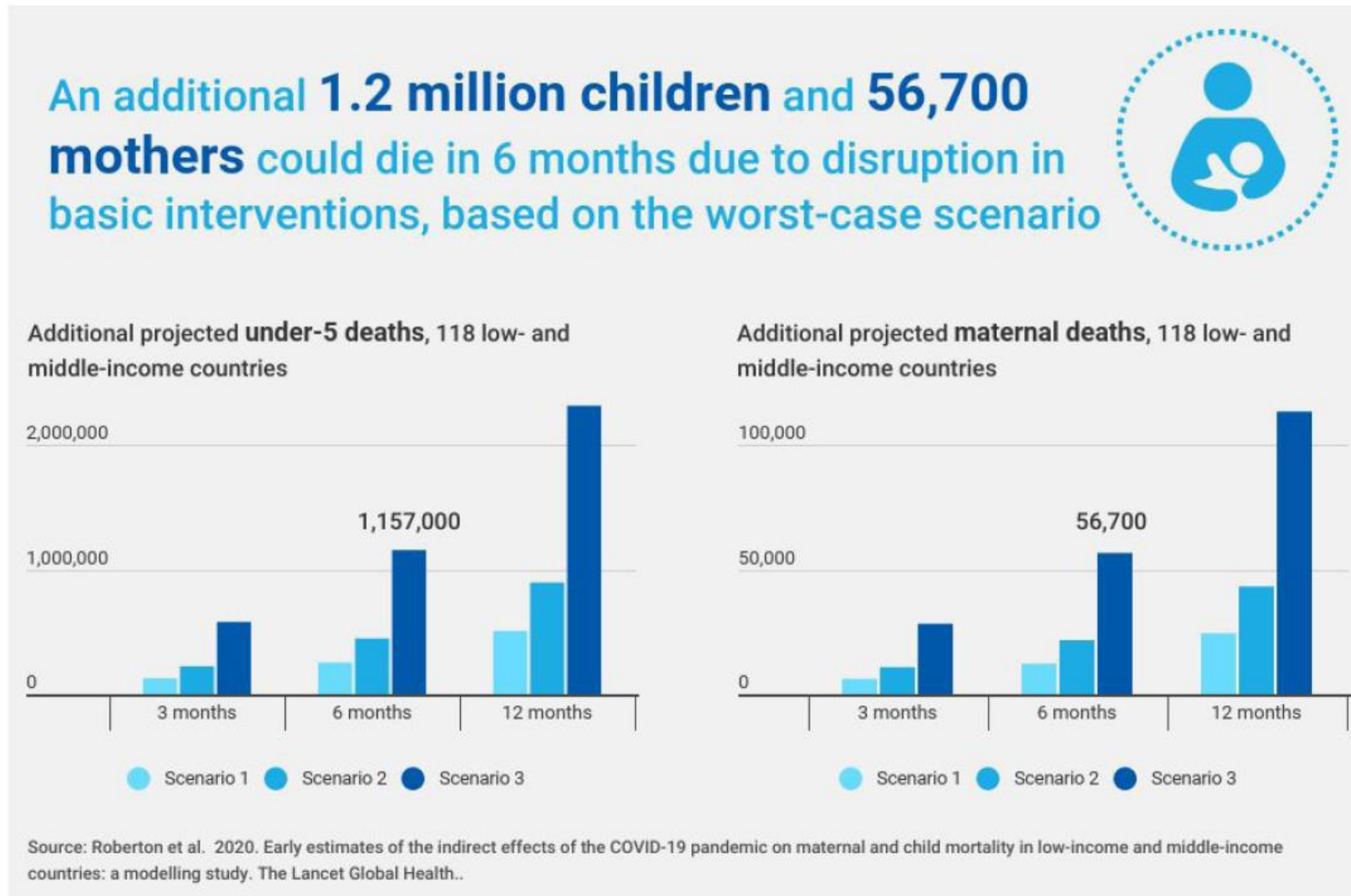
Percentage of countries reporting a given level of disruption. Includes national level respondents only, once 'Other' and 'Do not know' responses have been excluded.



Source: Immunization Pulse Poll 2, Question 5. Displayed percentages are of the calculated single status for disruption level in a country based on the majority response from that country. The data collected are subject to limitations inherent to voluntary self-reporting, self-selection bias, not all countries responded, countries with only one response vis-à-vis countries with many, possibility of fraudulent responses and not having a sampling frame to make inferences. Furthermore, the information about each country does not represent official reporting from Member States to WHO or UNICEF. Thus, the results presented here need to be interpreted with caution and do not represent in any way a WHO or UNICEF position regarding any country or territory for which one or more replies were received.

Reported level of disruption to outreach vaccination activities in May 2020 as a result of COVID-19. Source: UNICEF and WHO.

FIGURE 3 Potential impact of COVID-19 on under-5 and maternal deaths globally



The three scenarios represent different levels of potential disruption in service coverage and proportion of children with wasting. *The Lancet Global Health*. Source: UNICEF & Robertson *et al.*¹²

Top 3 critical challenges



“With the lock-down, **residents do not believe that health facilities would be opened for services.**”

“Some health facilities were identified as **isolation centers**. Even those that are not isolation centers, there are **rumors** around suspects coming to these facilities.”

“People are refusing to bring their children for vaccination because of the **myths that the BCG, Measles and other vaccines are products of the COVID-19**

“The community **did not trust our vaccine** due to the fear of COVID-19 vaccine trial that have rumor in the country.”

“The health workers are scared to participate in immunization and other medical services because they **don't have PPEs.**”