

## The Path to Zero: Researchers and Public Health Experts unite to bring clarity to key metrics guiding coronavirus response

Harvard Global Health Institute, Harvard’s Edmond J. Safra Center for Ethics, Rockefeller Foundation, CovidActNow, Covid-Local, CIDRAP and many others join forces, launch new COVID Risk Level map and COVID suppression guidance for policy makers and the public.

Cambridge, July 1, 2020 -- Uncertainty is the currency of pandemics. As evidence on the new coronavirus, how it spreads and who falls ill from it emerges slowly, policy makers and the public have to base their decisions on the best information available. Experts help interpret the evidence, but they may differ on details that can be confusing for non-experts -- and filtering out what matters from a rising sea of misinformation has become a daunting task.

To help cut through the noise and sometimes conflicting advice, a network of research, policy and public health experts convened by Harvard’s Global Health Institute and Edmond J. Safra Center for Ethics today launches a Key Metrics For COVID Suppression framework that provides clear, accessible guidance to policy makers and the public on how to target and suppress COVID-19 more effectively across the nation.

“The public needs clear and consistent information about COVID risk levels in different jurisdictions for personal decision-making, and policy-makers need clear and consistent visibility that permits differentiating policy across jurisdictions”, explains Danielle Allen, director of the Edmond J. Safra Center for Ethics at Harvard University. “We also collectively need to keep focused on what should be our main target: a path to near zero case incidence.”

The new framework brings clarity to metrics that help communities determine the severity of the outbreak they are responding to. A new COVID Risk Level map shows if a county or state is on the green, yellow, orange or red risk level, based on the number of new daily cases. The framework then delivers broad guidance on the intensity of control efforts needed based on these COVID risk levels. It offers key performance indicators for testing and contact tracing across all risk levels, as a backbone for suppression efforts.

The framework also allows for a breadth of options for what to do beyond TTSI (testing, tracing and supported isolation) when jurisdictions are at yellow and orange levels. Public officials need to make strategic decisions suitable to their context. Once a community reaches the red risk level, stay-at-home orders become necessary again. The framework also draws attention to the need to focus on suppression at every risk level.

Covid Risk Level	Case Incidence	
<b>Red</b>	<b>&gt;25</b>	daily new cases per 100,000 people
<b>Orange</b>	<b>10&lt;25</b>	daily new cases per 100,000 people
<b>Yellow</b>	<b>1&lt;10</b>	daily new cases per 100,000 people
<b>Green</b>	<b>&lt;1</b>	daily new case per 100,000 people

“Local leaders need and deserve a unified approach for suppressing COVID-19, with common metrics so that they can begin to anticipate and get ahead of the virus, rather than reacting to uncontrolled community spread”, says Beth Cameron, Vice President for Global Biological Policy and Programs at the Nuclear Threat Initiative and a member of the COVID-Local.org team. “Unless and until there is a whole of government response, with measurable progress communicated similarly and regularly across every state and locality, U.S. leaders will be left to react to the chaos of the virus - rather than being able to more effectively target interventions to suppress it.”

“Robust TTSI programs are key on the pathway to suppression. We need to consistently apply data-driven testing of hotspots, combined with contact tracing based testing, especially in states where case numbers are rising rapidly,” says Ashish K. Jha, director of the Harvard Global Health Institute. “It is what we need to get the virus level so low that we don’t have large numbers of people getting sick and dying and that we can open up our economy.”

“The metrics are now clear: we can reopen and keep open our workplaces and our communities,” observed Jonathan D. Quick, managing director for Pandemic Response, Preparedness, and Prevention, The Rockefeller Foundation. “But achieving this will require a dramatic expansion of testing and tracing to again flatten the curve and eventually suppress the pandemic to near zero new cases.”

## Links and Resources

### Key Metrics for Suppression

### TTSI Policy Briefing

## About the Convergence Group

These institutions and individuals have signed on to the Key Metrics for COVID Suppression Framework:

### Institutional

Edmond J. Safra Center for Ethics at Harvard University -- Danielle Allen - Director

CovidActNow -- Max Henderson - Founder/CEO

COVID-local -- Beth Cameron and Jessica Bell (NTI), Rebecca Katz (Georgetown GHSS), Jeremy Konyndyk (CGD), Ellie Graeden (Talus Analytics)

Nuclear Threat Initiative -- Beth Cameron - VP for Global Biological Policy and Programs, Jessica Bell - Senior Program Officer, Global Biological Policy and Program

Talus Analytics -- Ellie Graeden - Founder/CEO

The Rockefeller Foundation -- Jonathan D. Quick - Managing Director, Pandemic Response and Prevention

Georgetown GHSS - Rebecca Katz, Professor and Director

The Center for Infectious Disease Research and Policy (CIDRAP) -- Michael T. Osterholm, Director, CIDRAP, University of Minnesota

### Personal

Divya Siddarth - Research Fellow, Microsoft Research

Sham Kakade - Washington Research Foundation Data Science Chair, University of Washington

Dean Foster - Marie and Joseph Melone Professor Emeritus of Statistics, University of Pennsylvania

Joshua Cohen - Faculty, Apple University; Distinguished Senior Fellow, UC Berkeley

Beth Cameron - Vice President for Global Biological Policy and Programs, NTI

Jessica Bell - Senior Program Officer, Global Biological Policy and Programs, NTI

Ofir Reich - Google Research

John Langford - Partner Research Manager, Microsoft Research

Ellie Graeden - Founder, CEO, Talus Analytics

Rebecca Katz - Professor and Director, Georgetown GHSS

Ben Linville-Engler - MA M-ERT and Director, MIT System Design and Management

Tod Woolf, Ph.D - Executive Director, Technology Ventures Office, Beth Israel Deaconess Medical Center

Crystal Watson, DrPH - Senior Scholar, Johns Hopkins Center for Health Security, Assistant Professor, JHSPH

## ABOUT the COVID Risk Levels Map

The COVID Risk level map is an interactive dashboard based on the Metrics For COVID Suppression Framework. The dashboard was developed by Microsoft AI for Health, with maps provided by Mapbox.

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