

# A future for population health after COVID-19

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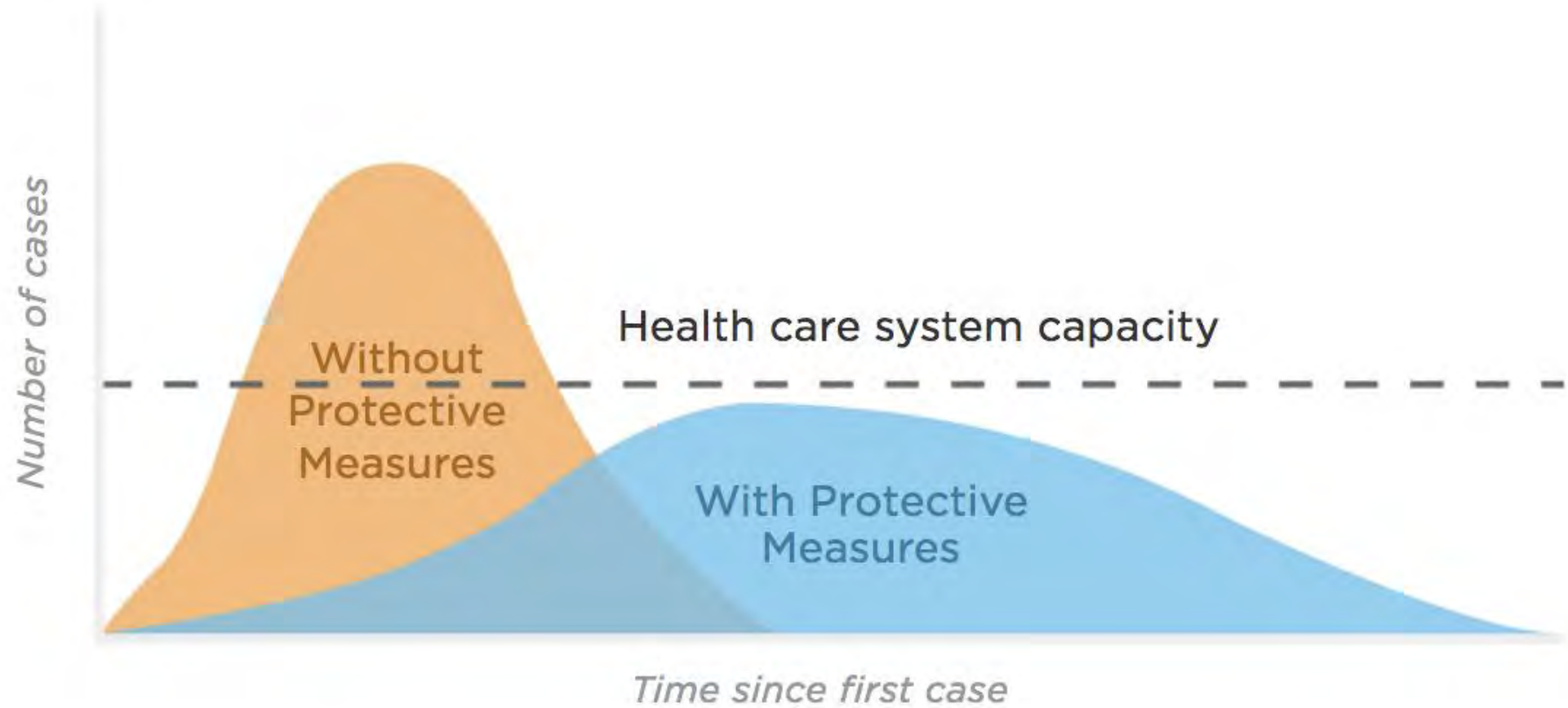
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UNIVERSITY OF  
TORONTO



BOUNDLESS

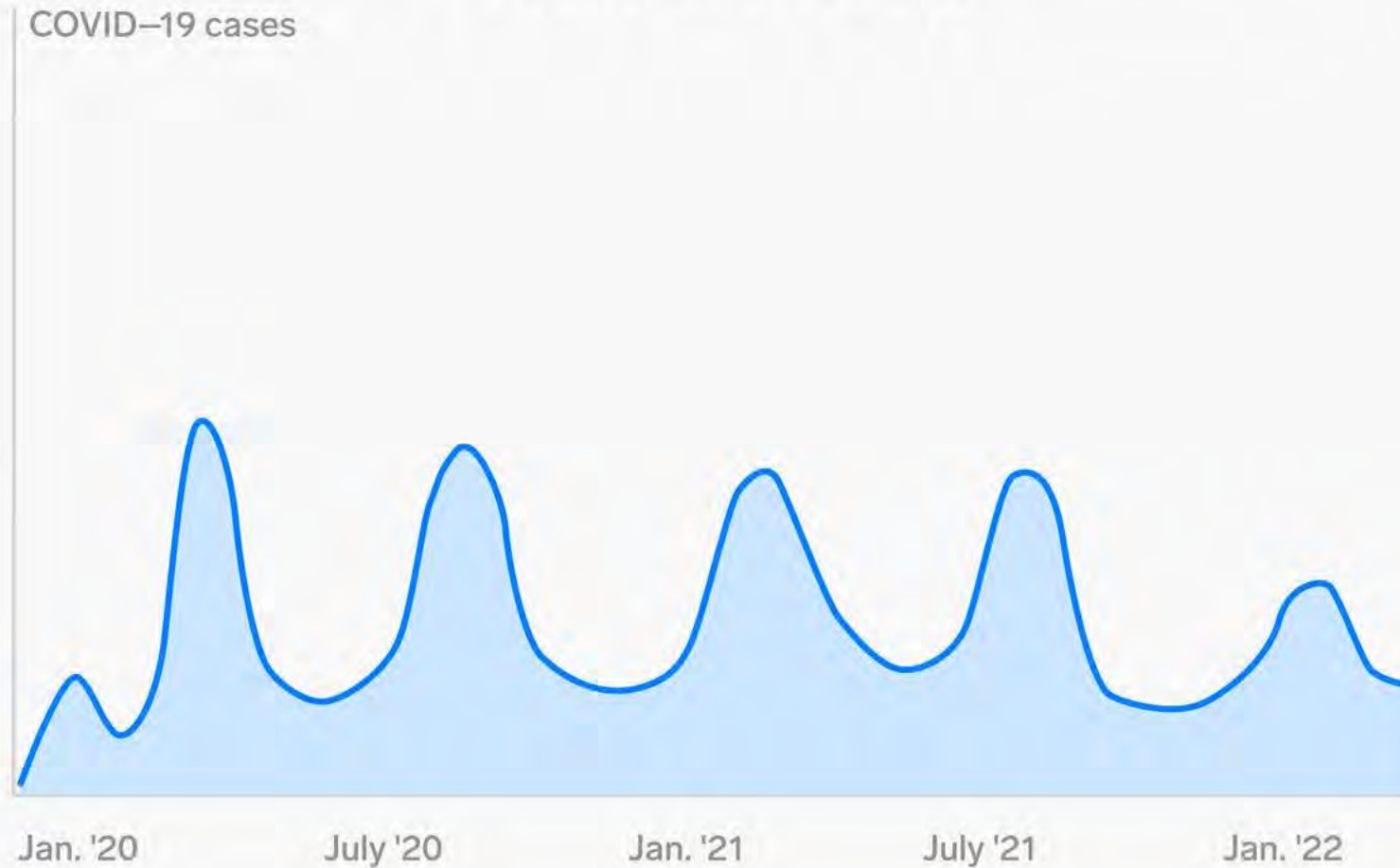


Source: *CDC, Drew Harris*

Credit: *Connie Hanzhang Jin/NPR*



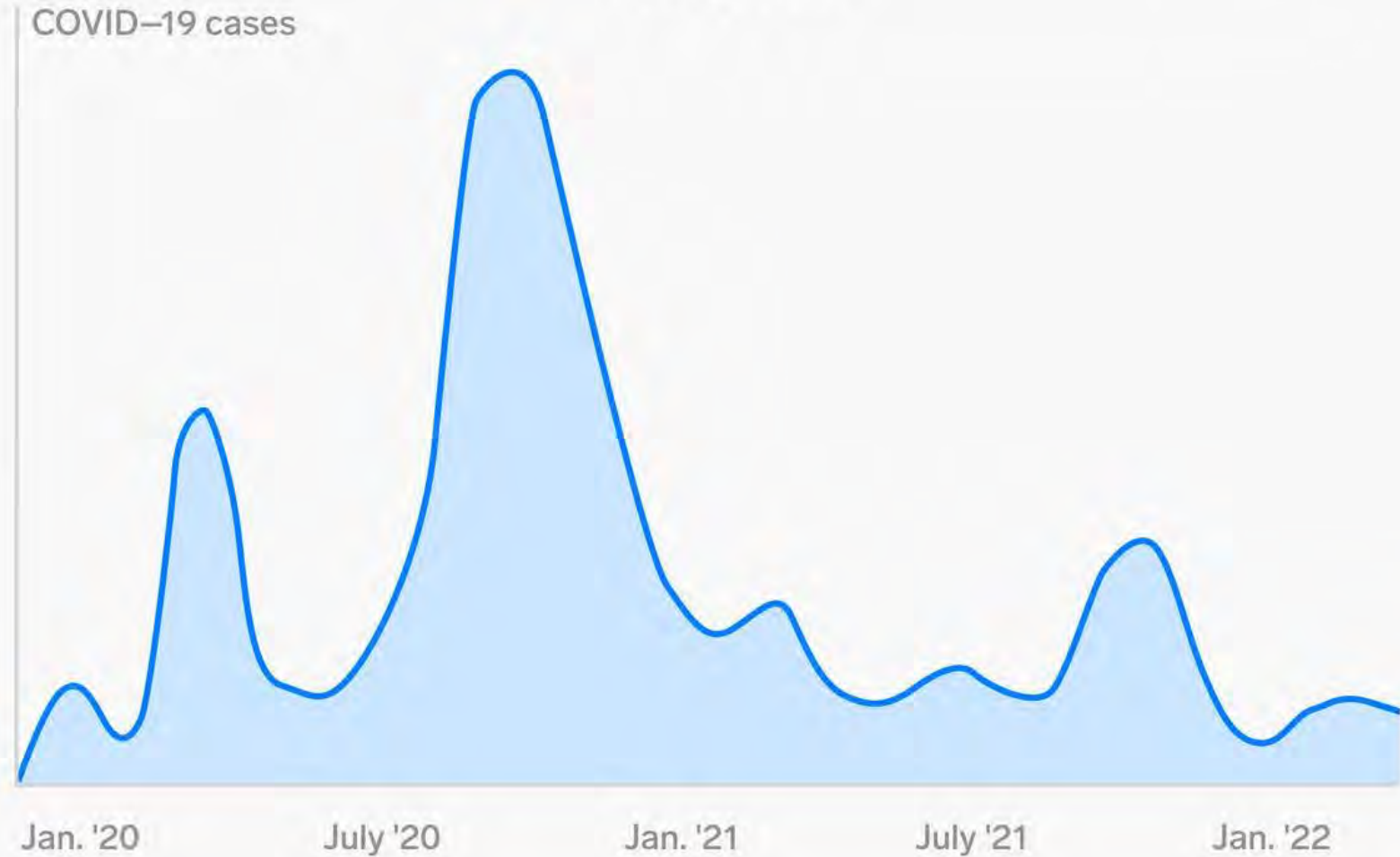
## Possible coronavirus waves scenario 1: Peaks and valleys



Source: Center for Infectious Disease Research and Policy at University of Minnesota

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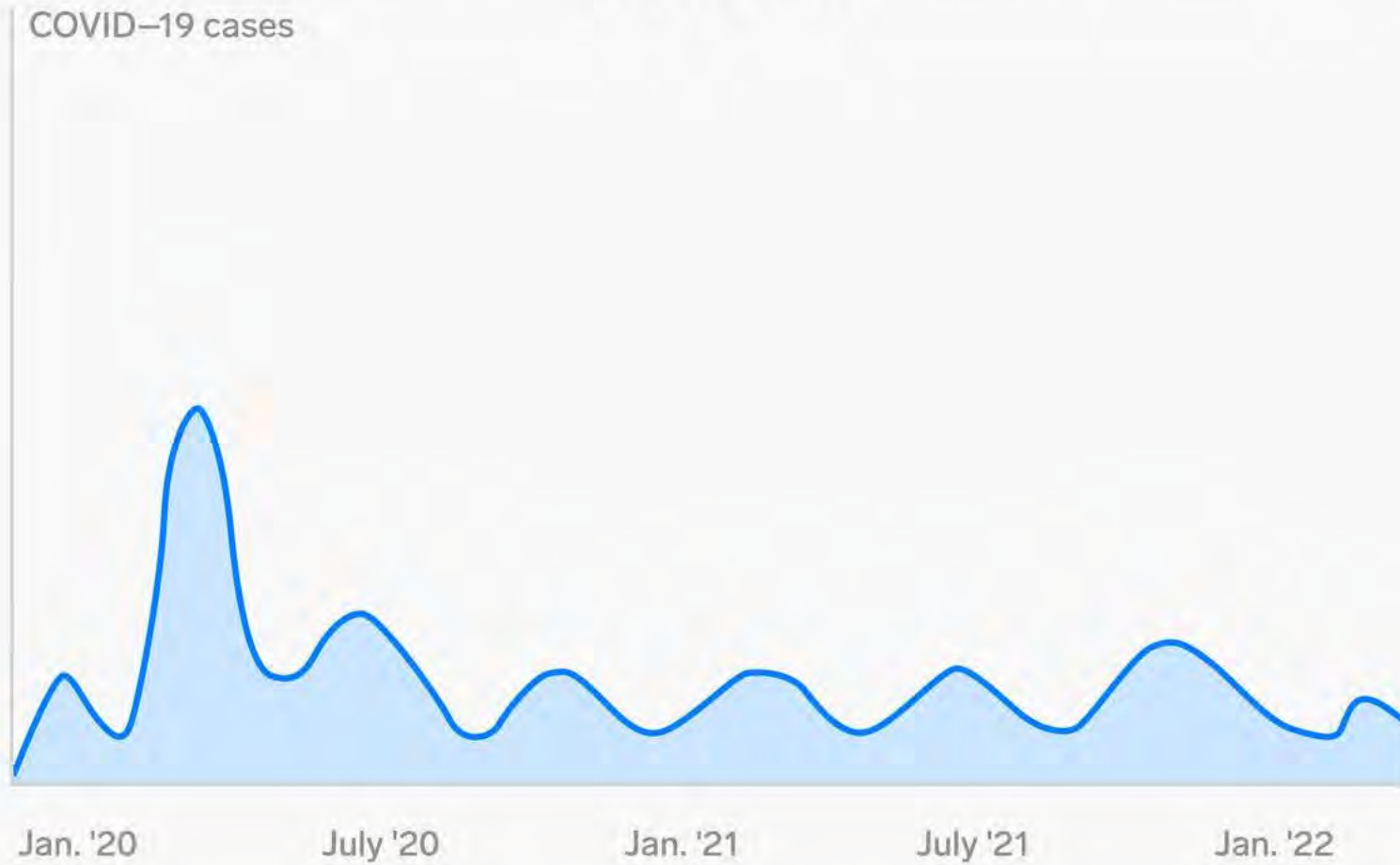
## Possible coronavirus waves scenario 2: Fall peak



Source: Center for Infectious Disease Research and Policy at University of Minnesota

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## Possible coronavirus waves scenario 3: Slow burn



Source: Center for Infectious Disease Research and Policy at University of Minnesota

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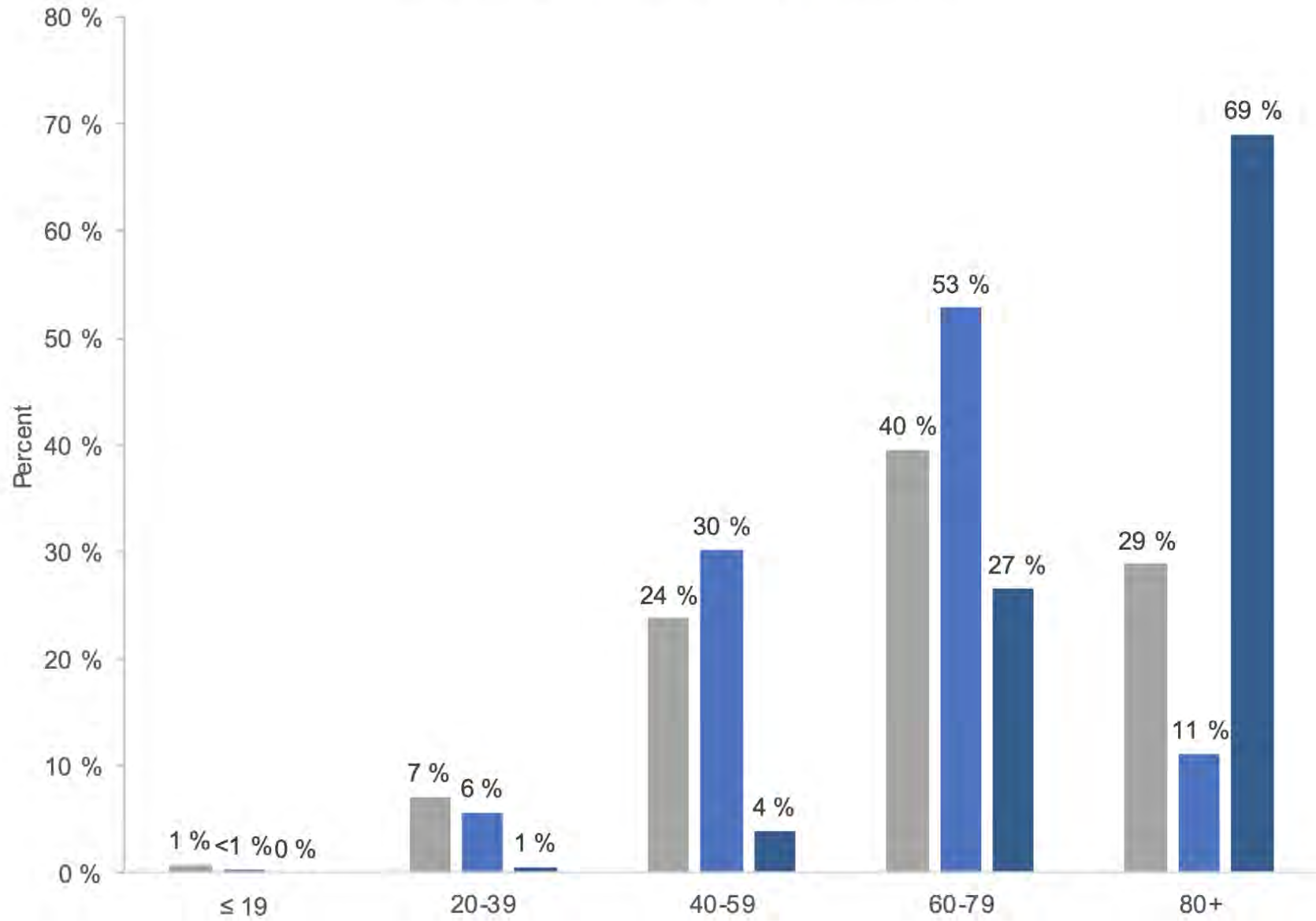
Will a vaccine save us?



# Demographic characteristics as of May 24

<b>Age (in years)</b>			
Median		50	
Range		0-111	
<b>Age groups</b>		<b>n=41 025</b>	
≤ 19		2 333	(6%)
20-39		11 148	(27%)
40-59		13 210	(32%)
60-79		7 946	(19%)
80+		6 388	(16%)
<b>Gender</b>		<b>n=41 268</b>	
Female		22 536	(55%)
Male		18 715	(45%)
Other		17	(<1%)

■ Cases in hospital ■ Cases in ICU ■ Deceased





# Who is at greatest risk for COVID-19

- Older adults
- Those with pre-existing health conditions
- Health care workers
- Essential workers
- Lower income
- Housing density
- Immigrants
- Indigenous

Figure 1

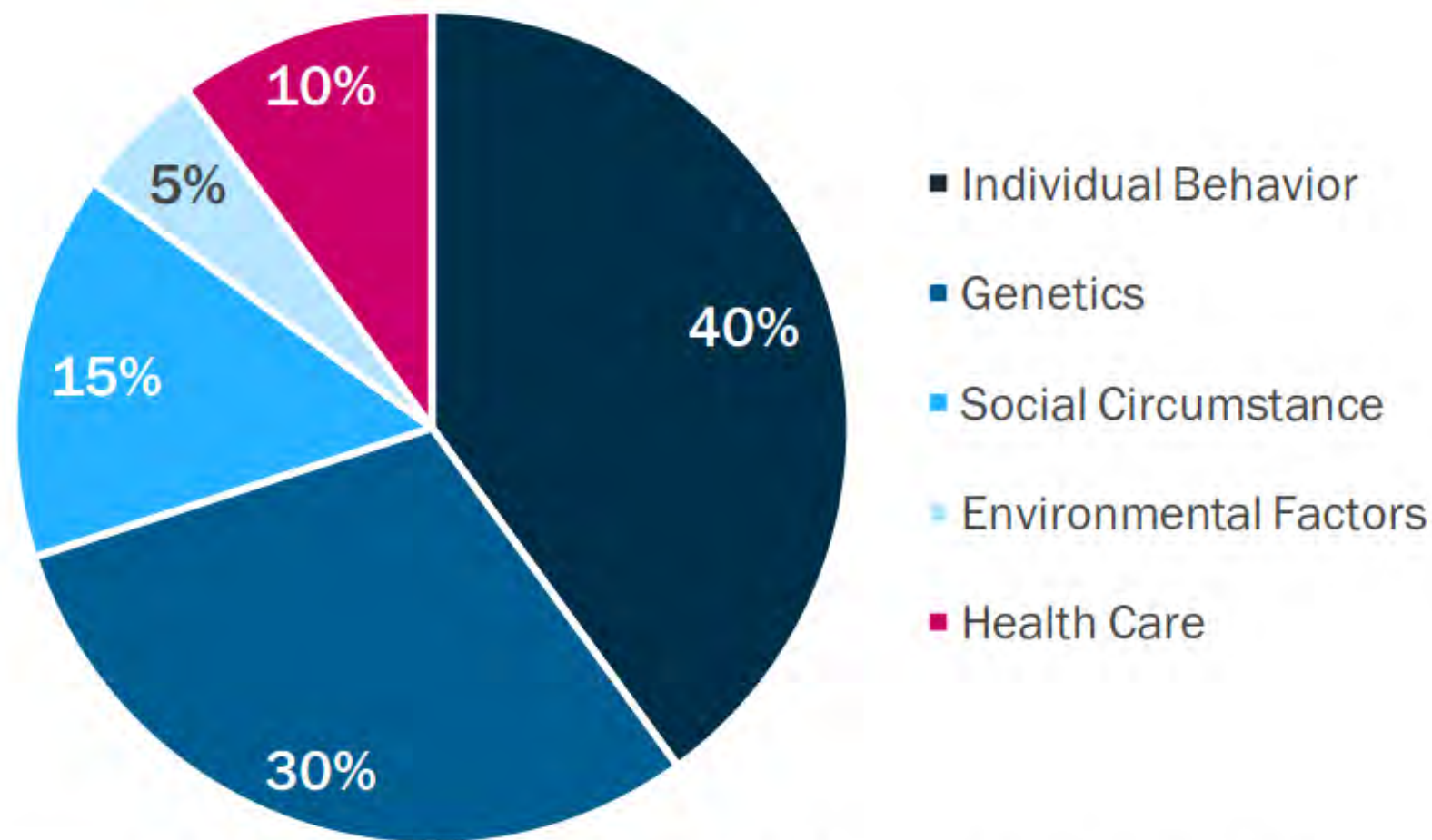
# Social Determinants of Health

<b>Economic Stability</b>	<b>Neighborhood and Physical Environment</b>	<b>Education</b>	<b>Food</b>	<b>Community and Social Context</b>	<b>Health Care System</b>
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education		Stress	
Support	Walkability				
	Zip code / geography				

## Health Outcomes

Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

# Determinants of Overall Health

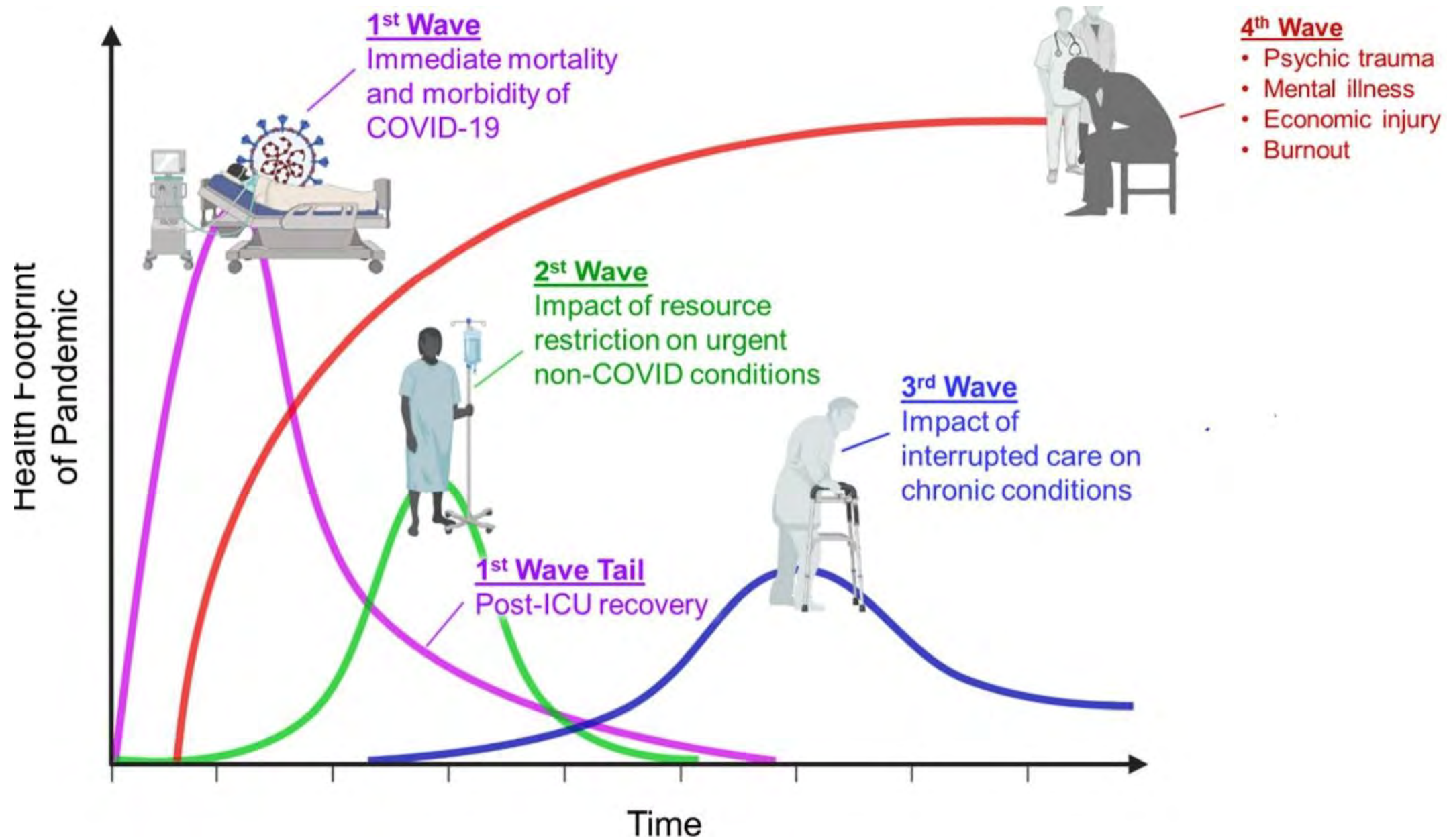


Source: *We Can Do Better – Improving the Health of the American People*, The New England Journal of Medicine, September 2007

# Population health consequences of the public health measures

- Delayed medical visits and surgical procedures
- Delayed immunization programs
- Domestic violence and child abuse
- Mental health effects of isolation
- Delayed early childhood development
- Physical inactivity, food insecurity, increased alcohol consumption
- Decreased motor vehicle accidents, pollution
- Increased mortality due to unemployment





# How do we get out of this

- Need to convince population we can live with COVID-19
- Stop scaring people
- Protect those at highest risk
- Test and trace smartly and efficiently
- Create conditions for workplaces, schools, stores, restaurants, travel sector and entertainment to function
  - Reconsider 2M separation
  - Look at legal immunity

# Looking to the future

- Strengthen population and public health services
- We need a national model that integrates Federal-Provincial-Territorial services
  - The Constitution Act is the biggest threat to the health of Canadians
- Let's get real about health information
  - Deal with the privacy bogeyman
- Health systems and providers should be held to account for health outcomes, not outputs

