No. 22-11287

IN THE UNITED STATES COURT OF APPEALS FOR THE ELEVENTH CIRCUIT

HEALTH FREEDOM DEFENSE FUND, *et al.*,

Plaintiffs-Appellees,

v.

JOSEPH R. BIDEN, JR. President of the United States, *et al.*,

Defendants-Appellants.

On Appeal from the United States District Court
for the Middle District of Florida

BRIEF OF *AMICI CURIAE* PUBLIC HEALTH AND PUBLIC HEALTH LAW EXPERTS IN SUPPORT OF DEFENDANTS-APPELLANTS AND REVERSAL

Robert A. Braun
Rebecca A. Ojserkis*
Diane Kee
COHEN MILSTEIN SELLERS & TOLL PLLC
1100 New York Ave NW, Suite 500
Washington, DC 20005
(202) 408-4600
rbraun@cohenmilstein.com
rojserkis@cohenmilstein.com
dkee@cohenmilstein.com

Counsel for Amici Curiae

**Admitted only in Md. and N.Y.; Practicing in D.C. under the supervision of Robert Braun*

CERTIFICATE OF INTERESTED PERSONS AND CORPORATE DISCLOSURE STATEMENT

Pursuant to Fed. R. App. P. 26.1 and 11th Cir. R. 26.1, *amici curiae* state that, in addition to the persons listed in the Certificates of Interested Persons and Corporate Disclosure Statements that were previously filed, the following persons and entities have an interest in the outcome of this case:

1. Abromowitz, Maren
2. Alexander, Melissa Ballengee
3. American Public Health Association (APHA)
4. Ansorg, Henning
5. Arons, Paul
6. Ashe, Marice
7. Association of American Medical Colleges (AAMC)
8. Autistic Self Advocacy Network (ASAN)
9. Auwaerter, Paul G.
10. Barbot, Oxiris
11. Bard, Jennifer S.
12. Baylor, Norman W.
13. Baz, Bronwyn
14. Beckerman, Julia Zoe
15. Beitsch, Leslie M.

16. Belknap, Robert
17. Benjamin, Robert
18. Benjamins, Maureen R.
19. Besser, Richard E.
20. Billauer, Barbara Pfeffer
21. Blackburn, Claudia
22. Bloyd, James E.
23. Borden, William B.
24. Brash, Marissa
25. Braun, Robert A.
26. Brindis, Claire D.
27. Brunnquell, Donald
28. Burroughs, Thomas E.
29. Byrnes, Maureen
30. Casadevall, Arturo
31. Catalanotti, Jillian
32. Ceminara, Kathy L.
33. Center for Public Health Law Research at Temple University James E. Beasley School of Law
34. Chaisson, Richard E.

35. Chandler, G. Thomas

36. ChangeLab Solutions

37. Chemerinsky, Erwin

38. Cohen, Alan B.

39. Convertino, Victoria L.

40. Council of State and Territorial Epidemiologists (CSTE)

41. Crockett, Landis

42. Cronin, Chrysan

43. Crooke, Elliott

44. Curran, James

45. Dart, Bruce

46. Daynard, Richard A.

47. DeBruin, Debra

48. Deitchman, Scott

49. del Rio, Carlos

50. Douglas, Jr., John M.

51. Drenkard, Karen

52. Duchin, Jeffrey

53. Dzau, Victor

54. Ebright, Richard H.

55. Eliasson, Gwyneth M.
56. El-Mohandes, Ayman
57. El-Sadr, Wafaa
58. Emanuel, Ezekiel J.
59. Engle, Kim
60. Epilepsy Foundation
61. Esvelt, Kevin
62. Evans, Dabney P.
63. Fairchild, Amy Lauren
64. Fentiman, Linda C.
65. Field, Robert I.
66. Fischl, Margaret A.
67. Fishbein, Dawn
68. Flores, George R.
69. Foege, William
70. Francis, Leslie
71. Frankford, David M.
72. Freeman, Lori Tremmel
73. Fried, Linda P.
74. Frieden, Tom

75. Gable, Lance
76. Galea, Sandro
77. Galpern, Emily
78. Gareau, Sarah
79. Gatter, Robert
80. Gebo, Kelly
81. Gerberding, Julie
82. Gerontological Society of America (GSA)
83. Glied, Sherry
84. Godwin, Hilary
85. Goldenberg, Jacqueline
86. Goldman, Lynn R.
87. Goldstein, Harold
88. Goldstein, Melissa M.
89. Goodman, Jesse
90. Gostin, Lawrence O.
91. Gould, Solange
92. Grogan, Colleen M.
93. Gusmano, Michael K.
94. Hale, Peter

95. Halfon, Neal

96. Hamburg, Margaret

97. Harrington, Mark

98. Harrison, Lisa Macon

99. Hayden, Frederick G.

100. Heinrich, Janet

101. Heise, Georgia

102. Heisler, Michele

103. Heller, Jonathan

104. Hoffman, Allison K.

105. Hoffman, Sharona

106. Hoke, Kathleen

107. Horton, Katherine

108. Hoss, Aila

109. Huberfeld, Nicole

110. Hughes, Keith E.

111. Infectious Diseases Society of America (IDSA)

112. Islas, Genoveva

113. Jackson, Richard J.

114. Jacobson, Peter D.

115. Jani, Asim

116. Jeffries, Pamela R.

117. Jirmanus, Mary

118. Johns Hopkins Center for Health Security (JHCHS)

119. Johnson, Richard O.

120. Jones, Antwan

121. Jost, Timothy Stoltzfus

122. Juliano, Chrissie

123. Kassaye, Seble G.

124. Kee, Diane

125. Kelley, Edward

126. Kershner, Stacie

127. Kertanis, Jennifer

128. Khalik, Faith

129. Kilkenny, Michael E.

130. Knight, Erin K.

131. Knudsen, Lissa

132. Koehler, Julia

133. Koplan, Jeffrey

134. Kraemer, John D.

135. Ku, Leighton

136. Kuritzkes, Daniel

137. Landers, Renée M.

138. Lantz, Paula

139. LaRocque, Regina

140. Law, Sylvia A.

141. Lederman, Michael M.

142. Levi, Jeffrey

143. Lopez, Andrea

144. Lu, Michael C.

145. Lushniak, Boris

146. Lyon, Michael

147. Mahan, Charles S.

148. Marciarille, Ann Marie

149. Mariner, Wendy K.

150. Markus, Anne R.

151. Marsom, Matthew

152. Mason, Diana J.

153. Matthews, Gene W.

154. McDonnell, Karen A.

155. McElrath, Julie

156. Merzel, Cheryl

157. Michaels, David

158. Mishori, Ranit

159. Mohapatra, Seema

160. Mokotoff, Eve

161. Moore, John P.

162. Moreno, Jonathan D.

163. Nash, Denis

164. National Association of Chronic Disease Directors (NACDD)

165. Network for Public Health Law

166. O'Neill Institute for National and Global Health Law, Georgetown University Law Center

167. Oberlander, Jonathan

168. Ojserkis, Rebecca A.

169. Okoh, Michele

170. Ompad, Danielle C.

171. Orenstein, Walter

172. Ortega, Daisy

173. Ossorio, Pilar N.

174. Parekh, Anand

175. Parker, Edith A.

176. Parmet, Wendy E.

177. Parsonnet, Julie

178. Pathak, Elizabeth

179. Perreira, Krista M.

180. Peterson, Mark A.

181. Petruzzi, Liana

182. Phelan, Alexandra L.

183. Piatt, Jennifer

184. Pollack, Harold

185. Powderly, William G.

186. Public Health Accreditation Board (PHAB)

187. Public Health Advocacy Institute (PHAI)

188. Public Health Law Center

189. Public Health Law Watch

190. Pyra, Maria

191. Raifman, Julia

192. Ratzan, Scott C.

193. Recht, Jim

194. Reeves, Philip

195. Reiss, Dorit Rubinstein

196. Relman, David A.

197. Relucio, Karen

198. Reverby, Susan M.

199. Richman, Douglas D.

200. Rimer, Barbara K.

201. Robert Wood Johnson Foundation (RWJF)

202. Roper, William L.

203. Rosenbaum, Sara

204. Rosenblatt, Rand E.

205. Rosenthal, Jill

206. Rouphael, Nadine

207. Saag, Michael S.

208. Sachs, Jeffrey

209. Satz, Ani B.

210. Sawicki, Nadia N.

211. Schuster, Mark A.

212. Seiler, Naomi

213. Sékaly, Rafick

214. Sharma, Anjali

215. Shlay, Judith C.

216. Silberman, Pam

217. Silver, Diana

218. Silverman, Ross D.

219. Siminoff, Laura A.

220. Simon-Ortiz, Sophia

221. Sinha, Michael S.

222. Skinner, Daniel

223. Slifkin, Becky

224. Smith, Karen L.

225. Solomon, Caren

226. Stave, Gregg M.

227. Stop TB USA

228. Stutz, Aaron

229. Sullivan, Patrick

230. Sumner, Kevin G.

231. Suter, Sonia

232. Swartz, Katherine

233. Task Force for Global Health

234. Terry, Nicolas P.

235. Thorpe, Jane

236. Tien, Phyllis C.

237. Tobia, Kevin

238. Tobin-Tyler, Liz

239. Ulrich, Michael R.

240. Vaishampayan, Julie

241. Vermund, Sten H.

242. Vertinsky, Liza

243. Vohra, Rais

244. Vyas, Amita N.

245. Walter-McCabe, Heather A.

246. Washington, Raynard

247. Wasserman, Alan G.

248. Waterman, Alexandra

249. Wells, Katherine

250. Westmoreland, Timothy M.

251. Wood, Betsy

252. Worsham, Dennis

253. Yang, Y. Tony

254. Youngner, Stuart J.

Amici further state that the APHA, AAMC, ASAN, Center for Public Health Law Research at Temple University James E. Beasley School of Law, ChangeLab Solutions, CSTE, Epilepsy Foundation, GSA, IDSA, JHCHS, NACDD, Network for Public Health Law, O'Neill Institute for National and Global Health Law, Georgetown University Law Center, PHAB, PHAI, Public Health Law Center, Public Health Law Watch, RWJF, Stop TB USA, and Task Force for Global Health are nonprofit organizations with no parent companies and no publicly traded stock.

TABLE OF CONTENTS

Page

CERTIFICATE OF INTERESTED PERSONS AND CORPORATE DISCLOSURE STATEMENT C-1

TABLE OF CONTENTS i

TABLE OF CITATIONS ii

INTEREST OF *AMICI CURIAE* 1

STATEMENT OF THE ISSUE 6

INTRODUCTION AND SUMMARY OF ARGUMENT 7

ARGUMENT 8

I. The CDC's Mask Mandate Is an Exercise of the Agency's Core Regulatory Function 8

II. The CDC's Mask Mandate Is Authorized Under the Public Health Service Act 17

A. The Mask Mandate Is a Sanitation Measure Under the PHSA 19

B. Catchall Language in § 264(a) Encompasses the Mask Mandate 25

CONCLUSION 26

CERTIFICATE OF COMPLIANCE WITH RULE 32(g) 28

APPENDIX OF INDIVIDUAL *AMICI CURIAE* 29

CERTIFICATE OF SERVICE 43

TABLE OF CITATIONS

Page(s)

Cases

**Alabama Association of Realtors v. U.S. Department of Health & Human Services*,
141 S. Ct. 2485 (2021) 18, 26

Granholm v. Heald,
544 U.S. 460 (2005) 10

**Health Freedom Defense Fund, Inc. v. Biden*,
_ F. Supp. 3d _, 2022 WL 1134138 (M.D. Fla. Apr. 18, 2022) .... *passim*

Oregon Waste Systems, Inc. v. Department of Environmental Quality of Oregon,
511 U.S. 93 (1994) 10

Smith v. State,
129 S.E. 542 (Ga. 1925) 23

Statutes

*42 U.S.C. § 264 .... *passim*

Regulations

Continuation of the National Emergency Concerning the Coronavirus Disease 2019 (COIVD-19) Pandemic, 86 Fed. Reg. 11,599 (Feb. 24, 2021) 12

Final Regulations for Collection, Processing, and Storage, 40 Fed. Reg. 53,532 (Nov. 18, 1975) 24

Transfer of Regulations, 40 Fed. Reg. 5,620 (Jan. 30, 1975) 24

Legislative Materials

*H.R. Rep. No. 1364 (1944) .... *passim*

Hearing on H.R. 3379: A Bill to Codify the Laws Relating to the Public Health Service, and for Other Purposes Before a Subcomm. of the H. Comm. on Interstate & Foreign Commerce, 78th Cong. 45 (1944) 8

Wen W. Shen, Cong Rsch. Serv., R46758, *Scope of CDC Authority Under Section 361 of the Public Health Service Act (PHSA)* (2021) 8, 11

The XDR Tuberculosis Incident: A Poorly Coordinated Federal Response to an Incident with Homeland Security Implications: Hearing Before the H. Comm. on Homeland Sec., 110th Cong. 56 (June 6, 2007) 13

Books, Dictionaries, and Reports

Ballentine's Law Dictionary (1st ed. 1916) 24

Ballentine's Law Dictionary (3d ed. 1968) 24

Black's Law Dictionary (3d ed. 1933) 23

Black's Law Dictionary (4th ed. 1951) 23

Black's Law Dictionary (4th rev. ed. 1968) 23

Funk & Wagnalls, *New Standard Dictionary of the English Language* (1929) 22

Funk & Wagnalls, *New Practical Standard Dictionary of the English Language* (1946) 22, 23

Lawrence O. Gostin & Lindsay F. Wiley, *Public Health Law: Power, Duty, Restraint* (3d ed. 2016) 10

Norman Howard-Jones, *The Scientific Background of the International Sanitary Conferences 1851–1938* (1975) 20, 21

Oxford English Dictionary (last visited May 31, 2022), www.oed.com/view/Entry/170706 20

John W. Ritchie, *Primer of Sanitation: Being a Simple Textbook on Disease Germs and How to Fight Them* (1920) 21

World Health Assembly, *Fourteenth Report of the Committee on International Quarantine and Special Review of the International Sanitary Regulations* (1968) 21

Journal Articles

Rachel E. Baker et al., *Infectious Disease in an Era of Global Change*, 20 Nature Revs. Microbiology 193 (2021) 13

J. Howard Beard, *The Contribution of Cholera to Public Health*, 43 Sci. Monthly 515 (1936) 19

John T. Brooks et al., *Effectiveness of Mask Wearing to Control Community Spread of SARS-CoV-2*, 325 JAMA 998 (2021) 15

Laura K. Donohue, *Biodefense and Constitutional Constraints*, 4 U. Miami Nat'l Sec. & Armed Conflict L. Rev. 82 (2014) 11

Frank Gohr, *Hospital Sanitation*, 23 Sanitarian 75 (1960) 20

Stefan Th. Gries et al., *Unmasking Textualism: Linguistic Misunderstanding in the Transit Mask Order Case and Beyond*, 123 COLUM. L. REV. F. (forthcoming 2022). 23

Brian M. Gurbaxani et al., *Evaluation of Different Types of Face Masks to Limit the Spread of SARS-CoV-2: A Modeling Study*, 12 Sci. Reps. 1 (2022). 25

Rebecca L. Haffajee et al., *Thinking Globally, Acting Locally—The U.S. Response to COVID-19*, 382 New Eng. J. Med. e75(1) (2020) 11

Home Sanitation, 55 Pub. Health Reps. 2282 (1940) 19

Jing Huang et al., *The Effectiveness of Government Masking Mandates on COVID-19 County-Level Case Incidence Across the United States, 2020*, 41 Health Affairs 445 (2022) 15

Valeska Huber, *The Unification of the Globe by Disease? The International Sanitary Conferences on Cholera, 1851–1894*, 49 Hist. J. 453 (2006) 20, 21

Influenza, 34 Pub. Health Reps. 2105 (1919) 21

Brett M. Kavanaugh, Book Review, *Fixing Statutory Interpretation*, 129 Harv. L. Rev. 2118 (2016) 25

B.O. Kendall, *Cleaning and Sanitation*, 6 Sanitarian 497 (1944). 20

Yanni Li et al., *Face Masks to Prevent Transmission of COVID-19: A Systematic Review and Meta-Analysis*, 49 Am. J. Infection Control 900 (2021) 15

Bradford Luckingham, *To Mask or Not to Mask: A Note on the 1918 Spanish Influenza Epidemic in Tucson*, 25 J. Ariz. Hist. 191 (1984) 16

L.L. Lumsden, *Influenza: Avoid It and Prevent Its Spread: Instructions Issued by the Department of Health and Sanitation, Emergency Fleet Corporation*, 33 Pub. Health Reps. 1731 (1918) 16

James J. Misrahi, *The CDC's Communicable Disease Regulations: Striking the Balance Between Public Health & Individual Rights*, 67 Emory L.J. 463 (2018) 13

Richard H. Peterson, *The Spanish Influenza Epidemic in San Diego, 1918–1919*, 71 S. Cal. Q. 89 (1989) 16

Polly J. Price, *Federalization of the Mosquito: Structural Innovation in the New Deal Administrative State*, 60 Emory L.J. 325 (2010) 11

Lauren M. Rossen et al., *Update on Excess Deaths Associated with the COVID-19 Pandemic—United States, January 26, 2020–February 27, 2021*, 70 Morbidity & Mortality Wkly. Rep. 570 (2021) 13

Other Authorities

1918 Pandemic (H1N1 Virus), Ctrs. for Disease Control & Prevention (Mar. 20, 2019), https://www.cdc.gov/flu/pandemic-resources/1918-pandemic-h1n1.html 16

Joel Achenbach et al., *Winter Coronavirus Wave Ebbs and Deaths Drop, but Experts Fear a Spring Surge*, Wash. Post (Feb. 12, 2021), https://www.washingtonpost.com/health/coronavirus-cases-deaths-dropping/2021/02/12/8e3cc38c-6c8b-11eb-9ead-673168d5b874_story.html 12

CDC Regulations, Ctrs. for Disease Control & Prevention (June 30, 2016), https://www.cdc.gov/regulations/index.html 8

Coronavirus Disease (COVID-19) Advice for the Public: When and How to Use Masks, World Health Org. (Dec. 2021), https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/when-and-how-to-use-masks 15

Face Masks and COVID-19: Protecting Yourself and Others, Nat'l Insts. of Health (Nov. 2021), https://newsinhealth.nih.gov/2021/11/face-masks-covid-19 15

HHS Organizational Chart, U.S. Dep't of Health & Hum. Servs. (Apr. 14, 2022), https://www.hhs.gov/about/agencies/orgchart/index.html 8

Laws and Regulations, Ctrs. for Disease Control & Prevention (Oct. 13, 2021), https://www.cdc.gov/ncezid/dgmq/laws-and-regulations.html 8

Legal Authorities for Isolation and Quarantine, Ctrs. for Disease Control & Prevention (Sept. 17, 2021), https://www.cdc.gov/quarantine/aboutlawsregulationsquarantineisolation.html...9

Berkeley Lovelace Jr., *Covid Is Officially America's Deadliest Pandemic as U.S. Fatalities Surpass 1918 Flu Estimates*, CNBC (Sept. 20, 2021), https://www.cnbc.com/2021/09/20/covid-is-americas-deadliest-pandemic-as-us-fatalities-near-1918-flu-estimates.html 13

Our History – Our Story, Ctrs. for Disease Control & Prevention (Dec. 4, 2018), https://www.cdc.gov/about/history/index.html 11

President Franklin D. Roosevelt, Address at the Dedication of the National Institute of Health, Bethesda, Maryland (Oct. 31, 1940), https://www.presidency.ucsb.edu/documents/address-the-dedication-the-national-institute-health-bethesda-maryland 10

Alexandra Sifferlin, *Doctors Inside Emory's Ebola Unit Speak Out*, Time (Aug. 10, 2014), https://time.com/3096724/doctors-inside-emorys-ebola-unit-speak-out...9

Travel Restrictions to Prevent the Spread of Disease, Ctrs. for Disease Control & Prevention (Jan. 28, 2022), https://www.cdc.gov/quarantine/travel-restrictions.html 13

Univ. of Mich. Ctr. for the History of Med. & Mich. Publ'g, *The American Influenza Epidemic of 1918–1919: A Digital Encyclopedia, San Francisco, California* (last visited June 3, 2022), https://www.influenzaarchive.org/cities/city-sanfrancisco.html 16

INTEREST OF *AMICI CURIAE*[1]

The appendix to this brief includes the full list of individual *amici*. They appear in their personal capacities.

The individual *amici* include **Seven Former Federal Agency Leaders** of the Centers for Disease Control (six) or the Food and Drug Administration (one). They have led the nation's response to health emergencies, ranging from XDR TB to SARS, MERS, Zika, Influenza H1N1, and Ebola. With decades of experience, they are in a unique position to understand the health challenges the nation faces, along with the tools the CDC needs to curb the international importation and interstate spread of novel infectious diseases.

The individual *amici* also include **224 Deans, Chairs, Scholars, Public Health Professionals, and COVID-19 Response Leaders** who have expertise in public health, medicine, health policy, and law. *Amici* include 24 Deans and seven Department Chairs from leading schools of public health, medicine, nursing, and law from throughout the United States. The 193 Scholars and Public Health Practitioners include current and retired health agency leadership from federal, state, local, territorial, and tribal government agencies on the frontlines of our nation's

[1] No party's counsel authored this brief in whole or in part. No party or party's counsel contributed money that was intended to fund preparing or submitting this brief. No person beyond *amici curiae* or their counsel contributed money intended to fund preparing and submitting this brief.

COVID-19 response. They also reflect scholars who have spent decades studying public health law, as well as governmental and non-governmental leaders who helped create the backbone of public health prevention and protection during the COVID-19 pandemic. Moreover, many are medical professionals working directly with individuals and communities who are at high-risk for death or long-term disability from COVID-19.

The **American Public Health Association (APHA)** is a 150-year-old organization of nearly 22,000 public health professionals. APHA champions the health of all people and all communities, strengthens the profession of public health, shares research and information, promotes best practices, and advocates for public health issues and policies grounded in scientific research.

The **Association of American Medical Colleges (AAMC)** is a nonprofit dedicated to improving health through medical education, health care, medical research, and community collaborations. Its members comprise: all 155 accredited U.S. and 16 accredited Canadian medical schools; approximately 400 teaching hospitals and health systems; and more than 70 academic societies.

The **Autistic Self Advocacy Network (ASAN)** is a nonprofit organization run by and for autistic individuals that provides public education and promotes public policies that benefit autistic individuals and individuals with developmental or other disabilities.

The **Center for Public Health Law Research at Temple University James E. Beasley School of Law** supports the effective use of law for public health through research and training.

ChangeLab Solutions is a nonpartisan nonprofit that uses the tools of law and policy to advance health equity. It partners with communities across the nation to improve health and opportunity by changing harmful laws, policies, and systems.

The **Council of State and Territorial Epidemiologists (CSTE)** is a nonprofit membership organization of states and territories. CSTE uses the power of epidemiology to fight the spread of diseases and conditions of public health significance. CSTE works to advance public health policy and increase epidemiologic capacity.

The **Epilepsy Foundation** is an advocacy organization leading the fight to overcome the challenges of living with epilepsy and accelerating therapies to stop seizures, find cures, and save lives. In collaboration with community and network partners, the Foundation facilitates connections and promotes education, policy, research, and systemic change.

The **Gerontological Society of America (GSA)** is the oldest and largest interdisciplinary organization devoted to research, education, and practice in the field of aging. The mission of GSA is to advance innovation in aging by fostering

scientific collaboration between researchers, clinicians, educators, and policymakers.

The **Infectious Diseases Society of America (IDSA)** is a nonprofit membership organization with over 12,000 physicians, scientists, and public health experts who specialize in infectious diseases with a purpose to improve the health of individuals, communities, and society by promoting excellence in patient care, education, research, public health, and prevention related to infectious diseases.

The **Johns Hopkins Center for Health Security (JHCHS)** has a mission to protect people's health from epidemics and disasters and to ensure that communities are resilient to major challenges. JHCHS focuses on global health security, emerging infectious diseases and epidemics, medical and public health preparedness and response, deliberate biological threats, and opportunities and risks in the life sciences.

The **National Association of Chronic Disease Directors (NACDD)** improves the health of the public by strengthening state- and territorial-based leadership and expertise for chronic disease prevention and management. NACDD's members protect the health of the public through primary and secondary prevention efforts and work "upstream" on root causes of chronic conditions.

The **Network for Public Health Law** provides nonpartisan legal technical assistance and resources, collaborating with a broad set of partners across sectors to

expand and enhance the use of practical legal and policy solutions to make our communities safer, healthier, stronger, and more equitable. The views expressed in this brief are solely those of Network staff and may not represent those of any affiliated individuals or institutions, including funders and constituents.

The **O'Neill Institute for National and Global Health Law, Georgetown University Law Center** contributes to solving critical health challenges in the United States and across the globe by engaging with policymakers, academics, and journalists on research and advocacy to end pandemics, ensure human rights, and build the right to health around the world.

The **Public Health Accreditation Board (PHAB)** is a nonprofit organization dedicated to advancing the continuous quality improvement of Tribal, state, local, and territorial public health departments.

The **Public Health Advocacy Institute (PHAI) at Northeastern University School of Law** is a nonprofit legal research and advocacy center focused on public health issues. PHAI is committed to research in public health law and policy development, legal technical assistance, and collaborative work at the intersection of law and public health.

The **Public Health Law Center**, a nonprofit public interest legal center at the Mitchell Hamline School of Law, helps community leaders nationwide reduce

chronic disease and advance healthy equity by strengthening the law in dozens of policy areas.

Public Health Law Watch is a project of the George Consortium, a nationwide network of over 80 public health law scholars, academics, experts, and practitioners who are dedicated to advancing public health through law.

The **Robert Wood Johnson Foundation (RWJF)** is the nation's largest philanthropy dedicated solely to health. It supports efforts to build a national Culture of Health rooted in equity that provides every individual with a fair and just opportunity for health and well-being.

Stop TB USA is an independent nonprofit organization that is dedicated to sharing resources, news, reports, and peer-reviewed publications on TB and other respiratory diseases like COVID-19.

The **Task Force for Global Health** is an international, nonprofit organization that partners to eliminate diseases that have plagued humanity for centuries and to protect the health of populations by helping countries build strong health systems so that all people can realize their right to living a healthy life.

STATEMENT OF THE ISSUE

Whether the District Court incorrectly vacated the Centers for Disease Control and Prevention's (CDC) masking requirement for public transportation ("Mask Mandate"), which was intended to minimize the spread of COVID-19.

INTRODUCTION AND SUMMARY OF ARGUMENT

The CDC's masking requirement for transportation was an exercise of its core regulatory powers to stop the spread of communicable diseases through international and interstate transportation. Among Congress's primary motivations in delegating authority to federal public health agencies (which came to include the CDC) was to enable them to act where states alone could not—including to limit infectious disease spread due to travel between jurisdictions. To accomplish this purpose, Congress granted the CDC flexibility to design measures to combat new contagious diseases. The CDC's Mask Mandate is not only a proper exercise of that authority; it is precisely the type of federal action for which the CDC was established.

As such, the Mask Mandate fits comfortably within the plain text of Section 361 of the Public Health Services Act (PHSA), codified at 42 U.S.C. § 264. First, the Mask Mandate is a "sanitation" measure, as that term was historically understood—both popularly and especially in the public health context. Second, the masking requirement falls squarely within the statute's catchall clause, which sweeps in "other measures" that the CDC deems necessary to prevent the spread of disease.

The Mask Mandate is a proper exercise of the CDC's delegated authority. Accordingly, *amici* ask the Court to reverse the District Court's decision below.

ARGUMENT

I. The CDC's Mask Mandate Is an Exercise of the Agency's Core Regulatory Function

The CDC's core powers include undertaking measures "to prevent the spread of infectious diseases into and throughout the United States." *Laws and Regulations*, Ctrs. for Disease Control & Prevention (Oct. 13, 2021), https://www.cdc.gov/ncezid/dgmq/laws-and-regulations.html; *see also CDC Regulations*, Ctrs. for Disease Control & Prevention (June 30, 2016), https://www.cdc.gov/regulations/index.html.

Infectious diseases do not recognize jurisdictional boundaries. For this reason, the CDC and its predecessors[2] have long exercised regulatory authority at national and state borders. This history, along with the rise of air travel and the growth of interstate transit, informed Congress's approach in passing the PHSA. *See, e.g.*, *Hearing on H.R. 3379: A Bill to Codify the Laws Relating to the Public Health*

[2] The CDC is a part of the Department of Health and Human Services (HHS) that with other agencies, like the Food and Drug Administration (FDA), form the nation's present-day federal public health apparatus. *See HHS Organizational Chart*, U.S. Dep't of Health & Hum. Servs. (Apr. 14, 2022), https://www.hhs.gov/about/agencies/orgchart/index.html. This brief references the CDC's currently delegated authority, which other agencies have held previously. *See* Wen W. Shen, Cong. Rsch. Serv., R46758, *Scope of CDC Authority Under Section 361 of the Public Health Service Act (PHSA)* 11–12 (2021) (discussing the delegation of § 264 authority to, *inter alia*, the Public Health Service, the FDA, and the CDC).

Service, and for Other Purposes Before a Subcomm. of the H. Comm. on Interstate & Foreign Commerce, 78th Cong. 45 (1944) (in which the Surgeon General testified, in advocating for certain regulatory powers, that "the revolution in travel brought about by the airplane has necessitated the revolution of our methods of control and our defense against disease"); *see also* H.R. Rep. No. 1364, at 24–25 (1944) (in enacting § 264 of the PHSA, identifying "the speed of air travel" and "the present-day mobility of our population" as causes for contagion spread, which can occur "before the disease has become detectable").[3]

Since no state acting alone can prevent the spread of communicable diseases across state lines, the CDC has filled gaps in the nation's disease control network, including with respect to interstate and mass transportation. *See, e.g.*, *Legal Authorities for Isolation and Quarantine*, Ctrs. for Disease Control & Prevention (Sept. 17, 2021), https://www.cdc.gov/quarantine/aboutlawsregulationsquarantineisolation.html (highlighting the CDC's authority "to take measures to prevent the spread of communicable diseases between states"); H.R. Rep. No. 1364, at 24 (noting in the

[3] *See also* Alexandra Sifferlin, *Doctors Inside Emory's Ebola Unit Speak Out*, Time (Aug. 10, 2014), https://time.com/3096724/doctors-inside-emorys-ebola-unit-speak-out (reciting a former CDC Director's comment that "[w]e live in a world where we are all connected by the air we breathe, the water we drink, the food we eat, and by airplanes that can bring disease from anywhere to anywhere in a day").

PHSA's legislative history that, "for half a century[,] the Public Health Service has been charged with the responsibility of preventing the interstate spread of disease").[4]

While states and municipalities can use their police powers to mitigate the spread of diseases within their borders, they lack the authority to act across jurisdictional lines—for example, by limiting or setting conditions on interstate travel. *See, e.g.*, *Granholm v. Heald*, 544 U.S. 460 (2005); *Or. Waste Sys., Inc v. Dep't of Env't Quality of Or.*, 511 U.S. 93 (1994); *see also* Lawrence O. Gostin & Lindsay F. Wiley, *Public Health Law: Power, Duty, Restraint* 96–97 (3d ed. 2016). Further, actions that states can take within their own borders may be inadequate in stopping the spread of disease across state lines. *See, e.g.*, H.R. Rep. No. 1364, at 24 (in which Congress noted, in enacting the PHSA, that "[i]n some situations[,] State and local quarantine measures afford inadequate protection to other States"). Sometimes, only federal action can limit a disease's spread across the country. Thus, the CDC acts at the height of its authority when it implements, where states alone

[4] *See also* President Franklin D. Roosevelt, Address at the Dedication of the National Institute of Health, Bethesda, Maryland (Oct. 31, 1940), https://www.presidency.ucsb.edu/documents/address-the-dedication-the-national-institute-health-bethesda-maryland ("Disease disregards State as well as national lines and among the States there is, as we know, an inequality of opportunity for health. In such cases the Public Health Service is helping and must continue even more greatly to help.").

cannot, evidence-based public health measures to prevent the spread of infectious diseases into the country or across state lines.

The need for federal action to limit interstate disease movement substantially motivated the creation of the U.S. public health apparatus. *See, e.g.*, Shen, *supra* note 2, at 8–9 (describing the expansion of federal authority to prevent infectious disease spread through interstate and international travel); Laura K. Donohue, *Biodefense and Constitutional Constraints*, 4 U. Miami Nat'l Sec. & Armed Conflict L. Rev. 82, 131–32, 135, 137–39 (2014) (noting that preventing disease through trade and travel drove federal public health interventions). For instance, the Communicable Disease Center, a CDC forerunner, opened in 1946 with a central mission to "prevent malaria from spreading across the nation." *Our History – Our Story*, Ctrs. for Disease Control & Prevention (Dec. 4, 2018), https://www.cdc.gov/about/history/index.html. Other predecessor agencies received "interstate and quarantine powers"—which were further expanded during national emergencies—"to prevent the introduction and spread of cholera, yellow fever, smallpox, and plague." Polly J. Price, *Federalization of the Mosquito: Structural Innovation in the New Deal Administrative State*, 60 Emory L.J. 325, 343 (2010). In promulgating the Mask Mandate, the CDC acted well within the scope of its traditional authority to limit the interstate transmission of a highly contagious, deadly pathogen. *See, e.g.*, Rebecca L. Haffajee et al., *Thinking Globally, Acting*

Locally—The U.S. Response to COVID-19, 382 New Eng. J. Med. e75(1), e75(1) (2020) ("SARS-CoV-2 is exactly the type of infectious disease for which federal public health powers and emergencies were conceived: it is highly transmissible, crosses borders efficiently, and threatens our national infrastructure and economy. . . . The federal government's ordinary public health legal authority . . . focuses on measures necessary to prevent the interstate or international spread of disease.").

The circumstances surrounding the directive further demonstrate that the Mask Mandate was a proper exercise of the CDC's core regulatory powers. The CDC introduced the Mask Mandate while a massive and sustained public health emergency—one that was recognized by the federal government and every state—raged. *See, e.g.*, Continuation of the National Emergency Concerning the Coronavirus Disease 2019 (COVID-19) Pandemic, 86 Fed. Reg. 11,599 (Feb. 24, 2021) (continuing the national emergency declaration); *see also* Joel Achenbach et al., *Winter Coronavirus Wave Ebbs and Deaths Drop, but Experts Fear a Spring Surge*, Wash. Post (Feb. 12, 2021), https://www.washingtonpost.com/health/coronavirus-cases-deaths-dropping/2021/02/12/8e3cc38c-6c8b-11eb-9ead-673168d5b874_story.html (reporting on fear of imminent surges in light of new variants and then-current high infection and hospitalization rates).

It is of no moment that the CDC had not previously issued the precise masking directive at issue here.[5] Before the COVID-19 pandemic, the CDC had never faced a communicable respiratory disease outbreak of equivalent magnitude and duration. *See, e.g.*, Berkeley Lovelace Jr., *Covid Is Officially America's Deadliest Pandemic as U.S. Fatalities Surpass 1918 Flu Estimates*, CNBC (Sept. 20, 2021), https://www.cnbc.com/2021/09/20/covid-is-americas-deadliest-pandemic-as-us-fatalities-near-1918-flu-estimates.html (reporting on unprecedented mortality rates caused by COVID); Lauren M. Rossen et al., *Update on Excess Deaths Associated with the COVID-19 Pandemic—United States, January 26, 2020–February 27, 2021*, 70 Morbidity & Mortality Wkly. Rep. 570 (2021).

Nor, in prior pandemics, was the CDC required to contend with levels of domestic and global air travel comparable to those that exist today. *See, e.g.*, Rachel E. Baker et al., *Infectious Disease in an Era of Global Change*, 20 Nature Revs. Microbiology 193, 198 (2021) (because the "number of airline passengers doubled" to four billion between 2000–2019, hypothesizing that "rapid global air travel is expected to have played a key role in the global spread of SARS-CoV-2"); *The XDR*

---

[5] The CDC has, however, imposed limits on travel for the purpose of preventing contagious disease spread. *See, e.g.*, *Travel Restrictions to Prevent the Spread of Disease*, Ctrs. for Disease Control & Prevention (Jan. 28, 2022), https://www.cdc.gov/quarantine/travel-restrictions.html; James J. Misrahi, *The CDC's Communicable Disease Regulations: Striking the Balance Between Public Health & Individual Rights*, 67 Emory L.J. 463, 470, 474 (2018).

Tuberculosis Incident: A Poorly Coordinated Federal Response to an Incident with Homeland Security Implications: Hearing Before the H. Comm. on Homeland Sec., 110th Cong. 56 (June 6, 2007) (in which the then-CDC Director emphasized, in the context of an investigation of a traveler with drug resistant tuberculosis, "that infectious diseases are not a thing of the past, and that we need to continually adapt our prevention and response capabilities in an era of increasing threat and globalization").

In enacting the PHSA in 1944, Congress recognized that new types of threats might arise, and expressly contemplated the need for a decisive national response in such situations. Because Congress could not anticipate with perfect precision all the tools that the CDC would need to stem every future pandemic, Congress delegated to the CDC the authority to take all measures that, in its "judgment[,] may be necessary" to prevent the international or interstate transmission of novel infectious diseases. 42 U.S.C. § 264(a). Through the PHSA's capacious language, Congress sought to equip the CDC with the flexibility necessary to manage previously unforeseen threats that might arise. *See, e.g.*, H.R. Rep. No. 1364, at 25 (acknowledging that § 264 was "written broadly enough to apply to any disease," considering the potential impact of contagion exposure through interstate commerce, and "the impossibility of foreseeing what preventive measure may become necessary").

As an evidence-based mechanism tailored to reduce disease transmission across state lines, the Mask Mandate is a quintessential use of the CDC's regulatory authority. Masking involves only a minimal intrusion on civil liberties and no significant logistical or financial burdens. At the same time, the epidemiologic support for masking's efficacy in minimizing COVID-19 infections in crowded spaces is extensive. *See, e.g.*, Yanni Li et al., *Face Masks to Prevent Transmission of COVID-19: A Systematic Review and Meta-Analysis*, 49 Am. J. Infection Control 900 (2021); John T. Brooks et al., *Effectiveness of Mask Wearing to Control Community Spread of SARS-CoV-2*, 325 JAMA 998 (2021). For this reason, nearly every major public health agency, from the CDC to the World Health Organization, has touted the benefits of masking. *See, e.g.*, *Coronavirus Disease (COVID-19) Advice for the Public: When and How to Use Masks*, World Health Org. (Dec. 2021), https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/when-and-how-to-use-masks; *Face Masks and COVID-19: Protecting Yourself and Others*, Nat'l Insts. of Health (Nov. 2021), https://newsinhealth.nih.gov/2021/11/face-masks-covid-19. Further, during the COVID-19 pandemic, many U.S. jurisdictions imposed their own internal mask mandates, which helped to limit community transmission of SARS-CoV-2. *See, e.g.*, Jing Huang et al., *The Effectiveness of Government Masking Mandates on COVID-*

19 County-Level Case Incidence Across the United States, 2020, 41 Health Affairs 445 (2022).

Masking was similarly invoked as an important public health measure during the 1918 Spanish Influenza pandemic—the prior century's most severe public health crisis. *See 1918 Pandemic (H1N1 Virus)*, Ctrs. for Disease Control & Prevention (Mar. 20, 2019), https://www.cdc.gov/flu/pandemic-resources/1918-pandemic-h1n1.html. To combat that virus's spread, several jurisdictions implemented masking ordinances. *See, e.g.*, Bradford Luckingham, *To Mask or Not to Mask: A Note on the 1918 Spanish Influenza Epidemic in Tucson*, 25 J. Ariz. Hist. 191, 194, 196 (1984); Richard H. Peterson, *The Spanish Influenza Epidemic in San Diego, 1918–1919*, 71 S. Cal. Q. 89, 94, 96, 98 (1989); Univ. of Mich. Ctr. for the History of Med. & Mich. Publ'g, *The American Influenza Epidemic of 1918–1919: A Digital Encyclopedia, San Francisco, California* (last visited June 3, 2022), https://www.influenzaarchive.org/cities/city-sanfrancisco.html. U.S. health guidance during that outbreak, including from the Department of Health and Sanitation, Emergency Fleet Corporation, recommended mask-wearing when attending to the sick. *See, e.g.*, L.L. Lumsden, *Influenza: Avoid It and Prevent Its Spread: Instructions Issued by the Department of Health and Sanitation, Emergency Fleet Corporation*, 33 Pub. Health Reps. 1731, 1731 (1918) ("If necessarily attending the sick, wear a gauze mask over the nose and mouth.").

Congress enacted the PHSA to ensure that federal public health agencies would have the flexibility needed to limit communicable diseases' entry into the country and across state lines. That flexibility is vital to the nation's capability to respond to future public health threats—which may involve additional COVID-19 variants and other even more transmissible and deadly diseases. By undercutting CDC's core powers, the decision below, if allowed to stand, would hamstring the CDC's ability to fulfill its central purpose and hinder the federal government's capacity to respond to threats that the states alone cannot meet. This would leave the United States highly vulnerable to the inevitable deadly contagions to come.

II. The CDC's Mask Mandate Is Authorized Under the Public Health Service Act

The Mask Mandate is authorized by the PHSA's plain text, as informed by the historical record and the contemporary meaning of its language. The first sentence of § 264(a) of the PHSA provides in broad terms:

> The Surgeon General, with approval of the Secretary, is authorized to make and enforce such regulations as in his judgment are necessary to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the States or possessions, or from one State or possession into any other State or possession.

The sentence that follows "informs" this broad grant of authority[6] "by illustrating the kinds of measures that could be necessary: inspection, fumigation, disinfection, sanitation, pest extermination, and destruction of contaminated animals and articles." *See Ala. Ass'n of Realtors v. U.S. Dep't of Health & Hum. Servs.*, 141 S. Ct. 2485, 2488 (2021). As the Supreme Court has explained, the measures reflected in § 264(a)'s second sentence "directly relate to preventing the interstate spread of disease by identifying, isolating, and destroying the disease itself." *Id*.

"Reading both sentences together"—as the Supreme Court requires, *id.*—it is clear that the Mask Mandate falls within the CDC's authority to take action directly "necessary to prevent the introduction, transmission, or spread" of COVID-19, including through the adoption of "sanitation" or "other measures."

---

[6] By their plain language, § 264(b)–(d) do not provide for additional authority beyond § 264(a) (as the District Court incorrectly suggested). *Health Freedom Defense Fund, Inc. v. Biden*, _ F. Supp. 3d _, 2022 WL 1134138, at *8 (M.D. Fla. Apr. 18, 2022). Instead, they limit the broad authority already delegated under § 264(a) in the case of regulations involving, for instance, the isolation and quarantine of individuals. *See, e.g.*, 42 U.S.C. § 264(b) ("Regulations prescribed *under this* ***section*** *shall* ***not*** provide for the apprehension, detention, or conditional release of individuals except for the purpose of preventing the introduction, transmission, or spread of such communicable diseases as may be specified from time to time in Executive orders of the President upon the recommendation of the Secretary, in consultation with the Surgeon General[.]" (emphases added)); *see also Ala. Ass'n of Realtors v. U.S. Dep't of Health & Hum. Servs.*, 141 S. Ct. 2485, 2487 (2021) (observing that regulations under Subsection (a) have previously involved "quarantining infected individuals").

A. The Mask Mandate Is a Sanitation Measure Under the PHSA

In the opinion below, the District Court considered two possible meanings of "sanitation" as used in the PHSA: (1) active cleaning, or (2) preservation of cleanliness. *Health Freedom Def. Fund, Inc. v. Biden*, _ F. Supp. 3d _, 2022 WL 1134138, at *5–*7 (M.D. Fla. Apr. 18, 2022). The latter definition, the District Court found, would cover the Mask Mandate, while the former definition would not. *Id.* The District Court then concluded that the PHSA used only the former, narrower definition, because it was the more common usage in the period leading up to 1944, according to the Court's research. *Id.*

The District Court's narrow reading of "sanitation" to include only active cleaning measures runs contrary to the historical record and divorces the statute's language from its context in a law Congress enacted in order to address public health threats. Scientific literature around the date of the PHSA's enactment describe "sanitation" to include preventative measures. *See, e.g.*, J. Howard Beard, *The Contribution of Cholera to Public Health*, 43 Sci. Monthly 515, 521 (1936) (noting that cholera "gave terrible emphasis to the urgent need of sanitation—the necessity of," *inter alia*, "better housing, cleanliness and an efficient organization to prevent and to control contagion"); *see also Home Sanitation*, 55 Pub. Health Reps. 2282, 2282–2284 (1940) (describing that "[h]ealth departments are also realizing that home sanitation is important in the control of many diseases," where sanitation

includes, *inter alia*, fresh air, ventilation (windows), and avoidance of overcrowding). At the time, hospitals and businesses employed "air sanitation" measures, to prevent risks of infection. *See, e.g.*, B.O. Kendall, *Cleaning and Sanitation*, 6 Sanitarian 497, 500 (1944). "[B]asic principles of hospital sanitation" included "good ventilation with clean, pure air." Frank Gohr, *Hospital Sanitation*, 23 Sanitarian 75, 76 (1960). Such measures were not limited to active cleaning.

Reading "sanitation" to encompass numerous measures that preserve health is also consistent with the historical use of the term[7] in international regulations for public health. In 1851, countries convened the first International Sanitary Conference to develop standardized procedures to stop the spread of cholera across Europe. Norman Howard-Jones, *The Scientific Background of the International Sanitary Conferences 1851–1938*, at 12–16 (1975). These early discussions were focused on the evidentiary basis of quarantine to stop the spread of cholera, yellow fever, and plague and the developing understanding of the germ theory. *See, e.g.*, Valeska Huber, *The Unification of the Globe by Disease? The International Sanitary Conferences on Cholera, 1851–1894*, 49 Hist. J. 453 (2006). The use of "sanitary" to describe these efforts demonstrates that the term was used to refer to a range of public health measures aimed at stopping the spread of disease. Following these

[7] The etymology of sanitation comes from the Latin "sanitas," meaning "health." Sanitas, *Oxford English Dictionary* (last visited May 31, 2022), www.oed.com/view/Entry/170706.

conferences, countries adopted several International Sanitary Conventions over the later 19th and early 20th centuries. *Id.*

In 1919, the Public Health Service described the importance of "enforcement of rigid rules of sanitation and the avoidance of personal contact" in combatting influenza's spread. *Influenza*, 34 Pub. Health Reps. 2105, 2106 (1919). As influenza can spread through the air, the sanitation guidance noted that "[t]o guard against this mode of spread[,] the use of face masks has been advocated." *Id.* at 2108. A 1920 textbook titled *Primer of Sanitation* similarly described mask-wearing as having proved helpful in some hospitals in protecting against influenza. John W. Ritchie, *Primer of Sanitation: Being a Simple Textbook on Disease Germs and How to Fight Them* 48 (1920).

The terms "sanitary" and "sanitation" continued to be used to refer to a range of public health measures into the middle of the 20th century. For example, in 1951, countries adopted the International Sanitary Regulations under the WHO Constitution, consolidating all prior international sanitary conventions. *See* Howard-Jones, *supra*, at 15. In 1969, the International Sanitary Regulations were renamed as the International Health Regulations partly because the term "sanitary" was no longer "in line with health definitions now in use." World Health Assembly, *Fourteenth Report of the Committee on International Quarantine and Special Review of the International Sanitary Regulations* 14 (1968). This change

demonstrates the increased use of the broad term "health" to capture measures that were historically (including through the 1940s) termed "sanitary" measures.

Despite this history, the District Court found that the narrower use of "sanitation" as active cleaning was more common around the time of the PHSA's enactment and therefore was the meaning used in the statute. That conclusion ignores that in enacting the PHSA—a statute designed to protect public health—Congress most likely used the term "sanitation" in its public health sense.

Further, the District Court relied on historical dictionaries to justify its conclusion that "sanitation" had a more common but narrow meaning related to active cleaning. *Health Freedom Defense Fund*, 2022 WL 1134138, at *5, *10. However, historical dictionaries undermine, rather than support, that determination. A 1929 edition of Funk & Wagnalls defined "sanitation" as "the devising and applying of measures for preserving and promoting public health." Sanitation, *New Standard Dictionary of the English Language* 2172 (1929). Although the dictionary secondarily defined the term as "the removal or neutralization of elements injurious to health," *id.*, that was sanitation's less common meaning, *see id.* at xii ("If a word has two or more meanings, the most common meaning has been given first.").

A later edition of Funk & Wagnalls explained that "if the term has two or more different meanings, each definition is set off unmistakably by a bold-faced figure, as **1 … 2 … 3**." Funk & Wagnalls, *New Practical Standard Dictionary of the*

English Language vii (1946). In that dictionary, the word "sanitation" is again defined without such numbered formatting, indicating only one sense: "The practical application of sanitary science; the removal or neutralization of elements injurious to health." Sanitation, *id*. at 1160. Thus, rather than providing two distinct definitions, dictionaries from around the time of the PHSA's enactment indicate a single broad definition of "sanitation" related to sanitary science broadly understood, including but not limited to the neutralization of elements injurious to health. *See generally* Stefan Th. Gries et al., *Unmasking Textualism: Linguistic Misunderstanding in the Transit Mask Order Case and Beyond*, 123 COLUM. L. REV. F. (forthcoming 2022).

This broader, health-related meaning of "sanitation" is also supported by the editions of Black's Law Dictionaries published around the time of the PHSA's enactment. Between 1933 and 1968, Black's defined sanitation as: "Devising and applying of measures for preserving and promoting public health; removal or neutralization of elements injurious to health; practical application of sanitary science."[8] Sanitation, *Black's Law Dictionary* 1581 (3d ed. 1933); Sanitation,

[8] These dictionaries cite *Smith v. State*, 129 S.E. 542 (Ga. 1925), which quotes the definition from an earlier Funk & Wagnalls dictionary and describes "recognized methods of sanitation, such as vaccination to prevent smallpox, serums to prevent typhoid fever, diphtheria, scarlet fever, and the like, the purification of water, the destruction of the mosquito which produces yellow fever and malaria, and other well-known methods of sanitation." *Id.* at 545.

Black's Law Dictionary 1508 (4th ed. 1951); Sanitation, *Black's Law Dictionary* 1508 (4th rev. ed. 1968). Ballentine's Law Dictionaries support the same conclusion. *E.g.*, Sanitary, *Ballentine's Law Dictionary* 455 (1st ed. 1916) (defining "sanitary" as "Pertaining to the public health"); Sanitary Regulations, *Ballentine's Law Dictionary* 1138 (3d ed. 1968) (defining "sanitary regulations" as "Building regulations imposed in the interest of health" or "Regulations intended to prevent the spread of communicable diseases").

The District Court's reasoning is also in tension with many sanitary measures historically undertaken pursuant to § 264(a) by the Food and Drug Administration (which also exercises authority under the PHSA). These measures do not fall within the precise parameters of any of the other enumerated terms in § 264(a) and, like the Mask Mandate, are preventative in nature. *See, e.g.*, Final Regulations for Collection, Processing and Storage, 40 Fed. Reg. 53,532, 53,541, 53,542 (Nov. 18, 1975) (codified at 21 C.F.R. pts. 606 and 640) (describing procedures to "prevent contamination" of blood and noting that blood should be "stored in a safe, sanitary and orderly manner"); Transfer of Regulations, 40 Fed. Reg. 5,620, 5,625 (Feb. 6, 1975) (codified at 21 C.F.R. pts. 1240 and 1250) (regulating the temperature for storage of perishable food and drink). Imposing the District Court's narrow reading of "sanitation," as limited to active cleaning, would not only invalidate the Mask

Mandate; it would jeopardize other longstanding federal measures to protect public health.

Yet even under the District Court's artificially narrow definition, in which sanitation is limited to "the removal or neutralization of elements injurious to health," *Health Freedom Def. Fund*, 2022 WL 1134138, at *5, the CDC has the authority to impose the Mask Mandate. Mask wearing does, in fact, neutralize and remove injurious airborne particles and droplets, preventing inhalation and infection. *See, e.g.*, Brian M. Gurbaxani et al., *Evaluation of Different Types of Face Masks to Limit the Spread of SARS-CoV-2: A Modeling Study*, 12 Sci. Reps. 1, 1–3 (2022).

In sum, mask wearing in the service of health has long been understood as a paradigmatic form of sanitation, and comfortably fits within the term "sanitation" as used in the PHSA.

B. Catchall Language in § 264(a) Encompasses the Mask Mandate

In addition to "sanitation" measures, the PHSA authorizes the CDC to adopt "other measures" that the CDC deems "necessary." 42 U.S.C. § 264(a). The Mask Mandate is authorized under this term.

The District Court read "other measures" to be restricted to only measures virtually identical to those previously enumerated—that is, sanitation and the like. *Cf.* Brett M. Kavanaugh, Book Review, *Fixing Statutory Interpretation*, 129 Harv. L. Rev. 2118, 2160 (2016) (describing the *ejusdem generis* canon). However, many

scholars and judges reject such a narrow interpretive approach. *See, e.g.*, *id.* (in which Justice Kavanaugh advises "to be wary of adding implicit limitations to statutes that the statutes' drafters did not see fit to add"). Given the legislative history of the PHSA, in which Congress sought to empower the CDC to respond to unforeseen health threats, "other measures" should not be understood so restrictively but rather as a signal that the list is non-exhaustive, albeit one limited to measures that directly combat the spread and transmission of disease. *See Ala. Ass'n of Realtors*, 141 S. Ct. at 2488 (noting that the measures reflected in § 264(a)'s second sentence "directly relate to preventing the interstate spread of disease by identifying, isolating, and destroying the disease itself").

Even if the PHSA's "other measures" reference is restricted to measures that are similar to the previously enumerated measures, the Mask Mandate would be authorized. Every explicitly named measure aims to prevent the direct transmission of infectious diseases. So does the Mask Mandate. As such, it falls within even the narrowest interpretation of "other measures."

CONCLUSION

For the foregoing reasons, *amici* respectfully request that this Court reverse the District Court's decision.

June 7, 2022

Respectfully submitted,

/s/ Robert A. Braun

Robert A. Braun
Rebecca A. Ojserkis*
Diane Kee
COHEN MILSTEIN SELLERS & TOLL PLLC
1100 New York Ave. NW, Suite 500
Washington, DC 20005
(202) 408-4600
rbraun@cohenmilstein.com
rojserkis@cohenmilstein.com
dkee@cohenmilstein.com

Counsel for Amici Curiae

** Admitted only in Md. and N.Y.; Practicing in D.C. under the supervision of Robert Braun*

CERTIFICATE OF COMPLIANCE WITH RULE 32(g)

I hereby certify that the foregoing brief complies with Fed. R. App. P. 32(a)(7)(B) and Fed. R. App. P. 29(a)(5) because it contains 5,187 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(f) and 11th Cir. R. 32-4.

I further certify that this brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in a proportionally spaced font in Microsoft Word using 14-point Times New Roman.

Date: June 7, 2022

Respectfully submitted,

/s/ Robert A. Braun

APPENDIX OF INDIVIDUAL *AMICI CURIAE*[9]

Former Federal Agency Leaders

1. Richard E. Besser, MD, CDC Director, 2009 (Acting)
2. William Foege, MD, MPH, CDC Director, 1977–1983
3. Tom Frieden, MD, MPH, CDC Director, 2009–2017
4. Julie Gerberding, MD, MPH, CDC Director, 2002–2009
5. Margaret Hamburg, MD, FDA Commissioner, 2009–2015
6. Jeffrey Koplan, MD, MPH, CDC Director, 1998–2002
7. William L. Roper, MD, MPH, CDC Director, 1990–1993

Deans

8. Thomas E. Burroughs, PhD, MS, MA, Dean and Professor, SLU College for Public Health and Social Justice, Saint Louis University
9. G. Thomas Chandler, MS, PhD, Dean and Professor of Environmental Health Sciences, Arnold School of Public Health, University of South Carolina
10. Erwin Chemerinsky, Dean and Distinguished Professor of Law, Berkeley Law
11. James Curran, Dean, School of Public Health, Emory University
12. Carlos del Rio, Executive Associate Dean, Emory School of Medicine & Grady Health System, Distinguished Professor, Department of Medicine, Division of Infectious Diseases, Emory University School of Medicine, Professor, Hubert Department of Global Health, Rollins School of Public Health, Co-Director, Emory Center for AIDS Research
13. Karen Drenkard, PhD, RN, NEA-BC, FAAN, Associate Dean of Clinical Practice and Community Engagement, School of Nursing Center for Health Policy and Medical Engagement, The George Washington University
14. Ayman El-Mohandes, MBBCh, MD, MPH, Dean, CUNY Graduate School of Public Health & Health Policy
15. Amy Lauren Fairchild, Dean and Professor, The Ohio State University College of Public Health
16. Linda P. Fried, MD, MPH, Dean and DeLamar Professor of Public Health, Mailman School of Public Health, Director, Robert N. Butler Columbia

[9] Individual *amici*'s affiliations are included for reference purposes only. *Amici* appear in their individual capacities.

Aging Center, Senior Vice President, Columbia University Medical Center, Professor of Epidemiology and Medicine, Columbia University

17. Sandro Galea, MD, DrPH, Dean, Robert A. Knox Professor, Boston University
18. Sherry Glied, PhD, MA, Dean, Robert F. Wagner Graduate School of Public Service, New York University
19. Hilary Godwin, PhD, Dean, University of Washington School of Public Health
20. Lynn R. Goldman, MD, MPH, MS, Michael and Lori Milken Dean of Public Health, Milken Institute School of Public Health, The George Washington University
21. Michael K. Gusmano, PhD, Professor and Associate Dean of Academic Programs, College of Health, Director, Center for Ethics, Lehigh University
22. Pamela R. Jeffries, PhD, RN, FAAN, ANEF, FSSH, Dean, Vanderbilt School of Nursing, Valere Potter Distinguished Professor of Nursing, RWJF Nurse Executive Fellow Alumna
23. Michael C. Lu, MD, MS, MPH, Dean, UC Berkeley School of Public Health
24. Boris Lushniak, MD, MPH, Professor and Dean, University of Maryland School of Public Health
25. Charles S. Mahan, MD, Retired Dean and Professor Emeritus, University of South Florida College of Public Health
26. Edith A. Parker, MPH, DrPH, Dean and Professor of Community and Behavioral Health, University of Iowa College of Public Health
27. Barbara K. Rimer, DrPH, MPH, Dean and Alumni Distinguished Professor, UNC Gillings School of Global Public Health
28. Mark A. Schuster, MD, PhD, Founding Dean and CEO, Kaiser Permanente Bernard J. Tyson School of Medicine
29. Laura A. Siminoff, PhD, Dean, College of Public Health, Laura H. Carnell Professor of Public Health, Department of Social and Behavioral Sciences, Temple University
30. Jane Thorpe, JD, Sr. Associate Dean for Academic, Student & Faculty Affairs, Professor and of Health and Management, Milken Institute School of Public Health, The George Washington University
31. Sten H. Vermund, MD, PhD, Dean and Anna M.R. Lauder Professor of Public Health, Yale School of Public Health; and Professor of Pediatrics, Yale School of Medicine

Department Chairs

32. Julia Zoe Beckerman, JD, MPH, Teaching Associate Professor & Vice Chair, Department of Health Policy and Management, Milken Institute School of Public Health, The George Washington University
33. William B. Borden, MD, Interim Chair of Medicine, Chief Quality and Population Health Officer, Professor of Medicine and of Health Policy and Management, The George Washington University Medical Faculty Associates
34. Arturo Casadevall, Chair, Molecular Microbiology & Immunology, Bloomberg Distinguished Professor, Alfred & Jill Sommer Professor and Chair Professor, Johns Hopkins University
35. Anne R. Markus, PhD, JD, Professor and Chair, Department of Health Policy and Management, Milken Institute School of Public Health, The George Washington University
36. Karen A. McDonnell, PhD, Associate Professor and Interim Chair, Department of Prevention and Community Health, Milken Institute School of Public Health, The George Washington University
37. Jonathan Oberlander, PhD, Professor and Chair, Department of Social Medicine, Professor, Department of Health Policy & Management, University of North Carolina at Chapel Hill
38. Michael S. Saag, MD, Jim Straley Chair in AIDS Research, Director, UAB Center for AIDS Research, Professor of Medicine, University of Alabama at Birmingham

Scholars and Practitioners

39. Maren Abromowitz, MSN, FNP-BC, Family Nurse Practitioner
40. Henning Ansorg, MD FACP, Public Health Officer, Santa Barbara County, California
41. Paul Arons, MD, Medical Director (Retired), Florida DOH HIV/AIDS Program
42. Marice Ashe, JD, MPH, Lecturer, Berkeley Law, University of California
43. Paul G. Auwaerter, MD, Sherrilyn and Ken Fisher Professor of Medicine, Clinical Director, Division of Infectious Diseases, Johns Hopkins University School of Medicine
44. Melissa Ballengee Alexander, Professor of Law, University of Wyoming College of Law
45. Oxiris Barbot, MD, Former Health Commissioner for New York City and Baltimore

46. Jennifer S. Bard, JD, MPH, PhD, Professor of Law, Professor of Medicine, University of Cincinnati Medical School, Department of Internal Medicine
47. Norman W. Baylor, Former Director of FDA's Office of Vaccines Research and Review/CBER
48. Bronwyn Baz, MD, FAAP, Clinical Asst. Professor, Pediatric Hospital Medicine, Oregon Health and Science University
49. Leslie M. Beitsch, MD, JD, Professor (Courtesy), Dept. of Behavioral Sciences and Social Medicine, Center for Medicine and Public Health, Florida State University College of Medicine
50. Robert Belknap, MD, Interim Executive Director, Public Health Institute at Denver Health
51. Robert Benjamin, MD, MPH, Consultant, Global and Domestic Public Health, former County Health Officer, California
52. Maureen R. Benjamins, PhD, Senior Research Fellow, Sinai Urban Health Institute
53. Barbara Pfeffer Billauer, JD, MA PhD, Research Professor of Scientific Statecraft, The Institute of World Politics
54. Claudia Blackburn, RN, MPH, Retired Florida Public Health Officer
55. James E. Bloyd, DrPH, MPH, Faculty, University of Illinois at Chicago School of Public Health
56. Marissa Brash, DrPH, EdD, MPH, CPH; Chair, Department of Public Health, Department of Public Health, School of Nursing, Azusa Pacific University
57. Claire D. Brindis, DrPH, Distinguished Professor and Emerita Director, Philip R. Lee Institute for Health Policy Studies, University of California, San Francisco
58. Donald Brunnquell, PhD, MA, University of Minnesota Center for Bioethics
59. Maureen Byrnes, MPA, Teaching Instructor, Department of Health Policy and Management, Milken Institute School of Public Health, The George Washington University
60. Jillian Catalanotti, MD, MPH, FACP, Associate Professor of Medicine, Associate Professor of Health Policy and Management, Director, Internal Medicine Residency Programs, The George Washington University
61. Kathy L. Ceminara, Professor of Law, Shepard Broad College of Law
62. Richard E. Chaisson, MD, Professor of Medicine, Epidemiology, and International Health, Johns Hopkins University School of Medicine and Bloomberg School of Public Health
63. Alan B. Cohen, ScD, Research Professor, Markets, Public Policy and Law, Boston University Questrom School of Business

64. Victoria L. Convertino, JD, Lecturer, University of Michigan School of Public Health
65. Landis Crockett, MD, MPH, Director, Division of Disease Control, Florida Department of Health (ret.)
66. Chrysan Cronin, DrPH, MPH, MS, Director and Associate Professor of Public Health, Muhlenberg College
67. Elliott Crooke, Professor and Chair of the Department of Biochemistry and Molecular & Cellular Biology, Georgetown University
68. Bruce Dart, PhD, Executive Director, Tulsa Health Department, Tulsa, OK
69. Richard A. Daynard, University Distinguished Professor of Law, Northeastern University School of Law
70. Debra DeBruin, PhD, Associate Professor, Center for Bioethics, University of Minnesota
71. Scott Deitchman, MD, MPH, RADM, USPHS (ret.), Senior Visiting Scholar and Adjunct Associate Professor, National Center for Disaster Medicine and Public Health, Uniformed Services University of the Health Sciences
72. John M. Douglas, Jr., MD, Executive Director, Tri-County Health Department, Colorado
73. Jeffrey Duchin, MD, Health Officer, Public Health - Seattle and King County and Professor in Medicine, Division of Allergy & Infectious Diseases, University of Washington
74. Victor Dzau, MD, President, National Academy of Medicine
75. Richard H. Ebright, Board of Governors Professor, Rutgers University
76. Gwyneth M. Eliasson, JD, MPH, Assistant Professor, Rutgers School of Public Health
77. Wafaa El-Sadr, MD, MPH, MPA, Professor, Columbia University
78. Ezekiel J. Emanuel, MD, PhD, Vice Provost for Global Initiatives, Co-Director, Healthcare Transformation Institute, Levy University Professor, Perelman School of Medicine and The Wharton School, University of Pennsylvania
79. Kim Engle, MBA, At Large Director, Board of Directors, National Association of County and City Health Officials (NACCHO), Washington, DC
80. Kevin Esvelt, Assistant Professor of Media Arts and Sciences, MIT Media Lab
81. Dabney P. Evans, PhD, MPH, Associate Professor, Rollins School of Public Health, Emory University
82. Linda C. Fentiman, Professor of Law Emerita, Elisabeth Haub School of Law, Pace University

83. Robert I. Field, JD, MPH, PhD, Professor, Drexel Kline School of Law and Dornsife School of Public Health
84. Margaret A. Fischl, MD, Professor of Medicine, Department of Medicine, Division of Infectious Diseases, University Miami Miller School Medicine
85. Dawn Fishbein, MD, MS, Infectious Diseases Physician
86. George R. Flores, MD, MPH, Trustee, Shoreline Unified School District, Former County Health Officer, California
87. Leslie Francis, Distinguished Alfred C. Emery Professor of Law, University of Utah
88. David M. Frankford, JD, Professor of Law, Rutgers University School of Law
89. Lori Tremmel Freeman, BS, MBA, Chief Executive Officer, National Association of County and City Health Officials (NACCHO), Washington, DC
90. Lance Gable, JD, MPH, Professor of Law, Wayne State University Law School
91. Emily Galpern, MPH, Public Health Social Justice Advocate, Emily Galpern Consulting
92. Sarah Gareau, DrPH, MEd, MCHES, Senior Research Associate, MCH & Equity Evaluation Projects Team Lead, Institute for Families in Society, University of South Carolina
93. Robert Gatter, Professor of Law, Center for Health Law Studies, Saint Louis University School of Law
94. Kelly Gebo, MD, MPH, Professor of Medicine, Epidemiology, Division of Infectious Diseases, Johns Hopkins University
95. Jacqueline Goldenberg, Healthcare Activist, Rise and Resist
96. Harold Goldstein, DrPH, Executive Director, Public Health Advocates
97. Melissa M. Goldstein, JD, Associate Professor, Department of Health Policy and Management, Milken Institute School of Public Health, The George Washington University
98. Jesse Goodman, Professor of Medicine and Attending Physician, Infectious Diseases, Georgetown University and directs the Georgetown University Center on Medical Product Access, Safety and Stewardship (COMPASS)
99. Lawrence O. Gostin, JD, LLD, Professor of Law, Georgetown Law; Founding Linda D. & Timothy J. O'Neill Professor of Global Health Law, Faculty Director, O'Neill Institute for National & Global Health Law, Director, World Health Organization Collaborating Center on Public Health Law & Human Rights
100. Solange Gould, DrPH, MPH, Co-Director, Human Impact Partners

101. Colleen M. Grogan, PhD, Professor, School of Social Service Administration, University of Chicago
102. Peter Hale, Executive Director, The Foundation for Vaccine Research
103. Neal Halfon, MD, MPH, Professor of Pediatrics, Public Health and Public Policy, Director, UCLA Center for Healthier Children, Families & Communities, UCLA
104. Mark Harrington, Executive Director, Treatment Action Group
105. Lisa Macon Harrison, MPH, President, National Association of County and City Health Officials (NACCHO), Washington, DC
106. Frederick G. Hayden, MD, Stuart S Richardson Professor Emeritus of Clinical Virology, Professor Emeritus of Medicine, Division of Infectious Diseases and International Health, University of Virginia
107. Janet Heinrich, DrPH, RN, FAAN, Research Professor, Department of Health Policy and Management, Milken Institute School of Public Health, The George Washington University
108. Georgia Heise, DrPH, Past President, National Association of County and City Health Officials (NACCHO), Washington, DC
109. Michele Heisler, MD, MPA, Professor of Internal Medicine and Public Health, University of Michigan, and Medical Director, Physicians for Human Rights
110. Jonathan Heller, PhD, Senior Health Equity Fellow, University of Wisconsin Population Health Institute
111. Allison K. Hoffman, JD, Professor of Law, University of Pennsylvania Carey Law School
112. Sharona Hoffman, JD, LLM, SJD, Professor of Law & Bioethics, Edgar A. Hahn Professor of Jurisprudence, Co-Director, Law-Medicine Center, Case Western Reserve University School of Law
113. Kathleen Hoke, JD, Law School Professor and Director, Legal Resource Center for Public Health Policy, University of Maryland Carey School of Law
114. Katherine Horton, RN, MPH, JD, Research Professor in the Department of Health Policy and Management, Milken Institute School of Public Health, The George Washington University
115. Aila Hoss, JD, Associate Professor of Law, Indiana University McKinney School of Law
116. Nicole Huberfeld, JD, Edward R. Utley Professor of Health Law, Boston University School of Public Health, Professor of Law, Boston University School of Law

117. Keith E. Hughes, Operations and Management Consultant III (retired), Florida Department of Health, Division of Disease Control and Health Protection
118. Genoveva Islas, MPH, Executive Director, Cultiva La Salud
119. Richard J. Jackson, MD, MPH, Professor Emeritus, UCLA Fielding School of Public Health; Former California State Public Health Officer; and Former Director of the National Center for Environmental Health at CDC
120. Peter D. Jacobson, JD, MPH, Professor Emeritus of Health Law and Policy, University of Michigan School of Public Health
121. Asim Jani, MD, MPH, FACP, Infectious Disease Consultant, Medical Epidemiologist, Community Public Health Physician
122. Mary Jirmanus, PhD Candidate, Department of Geography, UC Berkeley
123. Richard O. Johnson, MD, MPH, Public Health Officer, Alpine County, California
124. Antwan Jones, PhD, Professor of Sociology, Epidemiology, and Africana Studies, The George Washington University
125. Timothy Stoltzfus Jost, JD, Emeritus Professor, Washington and Lee University School of Law
126. Chrissie Juliano, MPP, Executive Director, Big Cities Health Coalition
127. Seble G. Kassaye, Associate Professor, Georgetown School of Medicine
128. Edward Kelley, PhD, Chief Global Health Officer, ApiJect, Former Director, US National Healthcare Reports, Department of Health and Human Services
129. Stacie Kershner, JD, Associate Director, Center for Law, Health & Society, Georgia State University College of Law
130. Jennifer Kertanis, MPH, Immediate Past President, National Association of County and City Health Officials (NACCHO), Washington, DC
131. Faith Khalik, JD, Senior Researcher, Center for Health Policy and Law, Northeastern University School of Law
132. Michael E. Kilkenny, MD, MS, Region 3 Director, Board of Directors, Board of Directors, National Association of County and City Health Officials (NACCHO), Washington, DC
133. Erin K. Knight, PhD, MPH, Assistant Professor of Health, West Chester University
134. Lissa Knudsen, PhD, Candidate, University of New Mexico, New Mexico Public Health Association
135. Julia Koehler, MD, Associate Professor of Pediatrics, Harvard Medical School
136. John D. Kraemer, JD, MPH, Associate Professor, Department of Health Systems Administration, Georgetown University

137. Leighton Ku, PhD, MPH, Professor and Director of the Center for Health Policy Research, Department of Health Policy and Management, The George Washington University
138. Daniel Kuritzkes, MD, Chief, Division of Infectious Diseases, Brigham and Women's Hospital, Harriet Ryan Albee Professor of Medicine, Harvard Medical School
139. Renée M. Landers, Professor of Law and Faculty Director, Health and Biomedical Law Concentration, Suffolk University Law School
140. Paula Lantz, PhD, James B. Hudak Professor of Health Policy, Professor of Public Policy, Gerald R. Ford School of Public Policy, Professor of Health Management and Policy, School of Public Health, University of Michigan
141. Regina LaRocque, MD, MPH, Associate Professor of Medicine, Harvard Medical School
142. Sylvia A. Law, JD, Elizabeth K. Dollard Professor of Law, Medicine and Psychiatry, Emerita Co-Director, Arthur Garfield Hays Civil Liberties Program, NYU Law School
143. Michael M. Lederman MD, LSMFT, Professor of Medicine, Professor of Pathology, Microbiology/Molecular Biology and Biomedical Ethics, Case Western Reserve University
144. Jeffrey Levi, PhD, Professor of Health Policy and Management, Milken Institute School of Public Health, The George Washington University
145. Andrea Lopez, PhD, MPH, Assistant Professor, California State University, Bakersfield
146. Michael Lyon, MS, retired biomedical technician, Gray Panthers of San Francisco
147. Ann Marie Marciarille, JD, Professor of Law, University of Missouri Kansas City School of Law
148. Wendy K. Mariner, JD, LLM, MPH, Professor Emerita, Health Law, Ethics and Human Rights, Boston University School of Public Health, Professor of Law, Boston University School of Law, Professor of Medicine, Boston University School of Medicine
149. Matthew Marsom, Senior Vice President for Programs and Public Policy, Public Health Institute
150. Diana J. Mason, RN, PhD, FAAN, Senior Policy Service Professor, Center for Health Policy and Media Engagement, School of Nursing, The George Washington University
151. Gene W. Matthews, JD, Chief Legal Advisor to CDC (retired), Chapel Hill, North Carolina

152. Julie McElrath, MD, PhD, Director, Vaccine and Infectious Disease Division, Senior Vice President, Joel D. Meyers Endowed Chair, Fred Hutchinson Cancer Center
153. Cheryl Merzel, DrPH, MPH, Clinical Associate Professor, New York University School of Global Public Health
154. David Michaels, PhD, MPH, Professor, Department of Environmental and Occupational Health, Milken Institute School of Public Health, The George Washington University
155. Ranit Mishori, MD, MHS, FAAFP, Senior Medical Advisor, Physicians for Human Rights
156. Seema Mohapatra, JD, MPH, MD Anderson Foundation Endowed Professor in Health Law, SMU Dedman School of Law
157. Eve Mokotoff, MPH, Director, HIV Counts, Ann Arbor, MI
158. John P. Moore PhD, Professor of Microbiology and Immunology, Weill Cornell Medicine
159. Jonathan D. Moreno, PhD, David and Lyn Silfen University Professor, Department of Medical Ethics and Health Policy, Department of History and Sociology of Science, University of Pennsylvania
160. Denis Nash, PhD, MPH, City University of New York (CUNY), Executive Director, CUNY Institute for Implementation Science in Population Health (ISPH), Distinguished Professor of Epidemiology, CUNY School of Public Health
161. Michele Okoh, JD, MPH, Assistant Professor of Law, Lewis & Clark Law School
162. Danielle C. Ompad, PhD, Associate Dean for Education, Professor, NYU School of Global Public Health
163. Walter Orenstein, Professor and Associate Director, Emory Vaccine Center, Professor, Department of Medicine, Division of Infectious Diseases, Emory University School of Medicine, Director, Emory-UGA Center of Excellence for Influenza Research and Surveillance (CEIRS)
164. Daisy Ortega, Managing Director, Training and Capacity Building, Health Resources in Action
165. Pilar N. Ossorio, PhD, JD, Professor of Law and Bioethics, University of Wisconsin Law School, Ethics Scholar-in-Residence, Morgridge Institute for Research
166. Anand Parekh, MD MPH FACP, Chief Medical Advisor, Bipartisan Policy Center
167. Wendy E. Parmet, Matthews University Distinguished Professor of Law and Professor of Public Policy and Urban Affairs, Northeastern University

168. Julie Parsonnet, MD, George DeForest Barnett Professor of Medicine (Infectious Diseases) and Professor of Epidemiology and Population Health, Stanford University School of Medicine
169. Elizabeth Pathak, PhD, Director, The COVKid Project
170. Krista M. Perreira, PhD, Department of Social Medicine, UNC School of Medicine
171. Mark A. Peterson, PhD, Professor of Public Policy, Political Science, and Law, Department of Public Policy, UCLA Meyer and Renee Luskin School of Public Affairs
172. Liana Petruzzi, Doctoral Candidate, Steve Hicks School of Social Work, University of Texas at Austin
173. Alexandra L. Phelan, SJD, LLM, LLB, Adjunct Professor of Law, Georgetown Law
174. Jennifer Piatt, JD, Research Scholar, Center for Public Health Law & Policy, Sandra Day O'Connor College of Law, Arizona State University
175. Harold Pollack, PhD, Helen Ross Professor of Social Services Administration, University of Chicago School of Social Service Administration
176. William G. Powderly, MD, J. William Campbell Professor of Medicine, Larry J. Shapiro Director, Institute for Public Health, Director, Institute of Clinical and Translational Sciences, Chief, Division of Infectious Diseases, Washington University in St. Louis
177. Maria Pyra, PhD, Research Assistant Professor, University of Chicago
178. Julia Raifman, ScD, Assistant Professor, Health Law, Policy & Management, Boston University School of Public Health
179. Scott C. Ratzan MD, MPA, MA, Editor-in-Chief, *Journal of Health Communication: International Perspectives*, Distinguished Lecturer, CUNY Graduate School of Public Health and Health Policy
180. Jim Recht, MD, Asst. Prof. Psychiatry Part-Time, Harvard Medical School
181. Philip Reeves, MPH, Retired Bureau Chief, Assistant Division Director and Executive Staff Director, Florida Department of Health
182. Dorit Rubinstein Reiss, Professor of Law, University of California, Hastings College of the Law
183. David A. Relman, MD, Thomas C. and Joan M. Merigan Professor, Departments of Medicine, and Microbiology & Immunology, Stanford University School of Medicine, Senior Fellow, Center for International Security and Cooperation, Stanford University
184. Karen Relucio, MD, President, Health Officers Association of California
185. Susan M. Reverby, McLean Professor Emerita of the History of Ideas and Professor Emerita of Women's and Gender Studies, Wellesley College

186. Douglas D. Richman, MD, University of California San Diego, Distinguished Professor of Pathology and Medicine (Active Emeritus), Director, The HIV Institute, Co-Director, San Diego Center for AIDS Research, Florence Seeley Riford Emeritus Chair in AIDS Research
187. Sara Rosenbaum, JD, Harold and Jane Hirsh Professor of Health Law and Policy, Department of Health Policy and Management, Milken Institute School of Public Health, The George Washington University
188. Rand E. Rosenblatt, JD, Professor Emeritus of Law, Rutgers University School of Law
189. Jill Rosenthal, MPH, Director of Public Health Policy, Center for American Progress
190. Nadine Rouphael, MD, Professor, Department of Medicine, Division of Infectious Diseases, Emory University School of Medicine
191. Jeffrey Sachs, University Professor at Columbia University, Chairman of the Lancet Covid-19 Commission
192. Ani B. Satz, JD, PhD, Professor of Law & Public Health, Project Leader, Health Law, Policy & Ethics Project, Affiliated Professor of Business, Senior Faculty Fellow, Center for Ethics, Faculty Fellow, Emory Global Health Initiative, Emory University School of Law
193. Nadia N. Sawicki, JD, MBioeth, Georgia Reithal Professor of Law, Co-Director, Beazley Institute for Health Law and Policy, Loyola University Chicago School of Law
194. Naomi Seiler, JD, Associate Research Professor, Department of Health Policy and Management, Milken Institute School of Public Health, The George Washington University
195. Rafick Sékaly, PhD, Professor and Vice-Chair of Translational Medicine, Department of Pathology, Emory University School of Medicine
196. Anjali Sharma, MD, MS, Professor of Medicine, Divisions of General Internal Medicine and Infectious Diseases, Albert Einstein College of Medicine
197. Judith C. Shlay, MD, MSPH, Associate Director, Public Health Institute at Denver Health
198. Pam Silberman, JD, DrPH, Professor, Director, Executive Doctoral Program in Health Leadership, Department of Health Policy and Management, UNC Gillings School of Global Public Health
199. Diana Silver, PhD MPH, Associate Professor of Public Health Policy, NYU School of Global Public Health
200. Ross D. Silverman, JD, MPH, Professor of Health Policy & Management, Indiana University Richard M. Fairbanks School of Public Health, Professor

of Public Health & Law, Indiana University Robert H. McKinney School of Law

201. Sophia Simon-Ortiz, MPH, Senior Public Health Organizer, Human Impact Partners
202. Michael S. Sinha, MD, JD, MPH, Assistant Professor of Law, Center for Health Law Studies, Saint Louis University School of Law
203. Daniel Skinner, PhD, Associate Professor of Health Policy, Ohio University
204. Becky Slifkin, PhD, Professor, Department of Health Policy and Management, UNC Gillings School of Global Health
205. Karen L. Smith, MD, MPH, Principle, Healthy Community Ventures
206. Caren Solomon, MD, MPH, Associate Professor of Medicine, Harvard Medical School
207. Gregg M. Stave, MD, JD, MPH, Consulting Professor, Division of Occupational and Environmental Medicine Department of Family Medicine & Community Health, Duke University School of Medicine
208. Aaron Stutz, MD, FAAEM, Public Health Officer, Siskiyou County Health & Human Services
209. Patrick Sullivan, Charles Howard Candler Professor of Epidemiology, Rollins School of Public Health, Emory University
210. Kevin G. Sumner, MPH, Past President, National Association of County and City Health Officials (NACCHO), Washington, DC
211. Sonia Suter, The Kahan Family Research Professor of Law, Founding Director, Health Law Initiative, The George Washington University
212. Katherine Swartz, PhD, Professor of Health Economics and Policy, Harvard T.H. Chan School of Public Health
213. Nicolas P. Terry, Hall Render Professor of Law & Executive Director, Hall Center for Law and Health, Indiana University Robert H. McKinney School of Law
214. Phyllis C. Tien, MD, Professor of Medicine and Clinical Pharmacy, UCSF
215. Kevin Tobia, JD, PhD, Associate Professor of Law, Georgetown Law
216. Liz Tobin-Tyler, JD, MA, Associate Professor, Dept. of Health Services, Policy and Practice, Brown University School of Public Health
217. Michael R. Ulrich, JD, MPH, Assistant Professor, Center for Health Law, Ethics, & Human Rights, Boston University School of Public Health, Distinguished Visiting Scholar, Solomon Center for Health Law & Policy, Yale Law School
218. Julie Vaishampayan, MD, MPH, Health Officer, Stanislaus County, California
219. Liza Vertinsky, Professor, Maryland Carey School of Law

220. Rais Vohra, MD, Interim Health Officer, Fresno County, California
221. Amita N. Vyas, PhD, MHS, Associate Professor, Director, Maternal & Child Health Program, Milken Institute School of Public Health, The George Washington University
222. Heather A. Walter-McCabe, JD, MSW, Associate Professor, Wayne State University School of Social Work & Wayne State University Law School
223. Raynard Washington, PhD, MPH, Health Director, Mecklenburg County, North Carolina
224. Alan G. Wasserman, MD, MACP, Eugene Meyer Professor and Senior Academic Advisor, Department of Medicine, The George Washington School of Medicine and Health Sciences
225. Alexandra Waterman, MPH, BSN, RN, MNCEM, Planning Director, Medical Surge Coordinator, Minnesota Department of Health
226. Katherine Wells, Region 6 Director, Board of Directors, National Association of County and City Health Officials (NACCHO), Washington, DC
227. Timothy M. Westmoreland, JD, Professor from Practice, Georgetown University School of Law
228. Dennis Worsham, Interim Department Director, Seattle and King County Public Health
229. Betsy Wood, BSN, MPH, Director (Retired), Division of Community Health Promotion, Florida Department of Health
230. Y. Tony Yang, Professor of Health Policy, George Washington University
231. Stuart J. Youngner, Professor Emeritus of Bioethics, Department of Bioethics, Case Western Reserve University

CERTIFICATE OF SERVICE

I hereby certify that on June 7, 2022, I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Eleventh Circuit by using the appellate CM/ECF system.

I certify that all counsel in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

Date: June 7, 2022

Respectfully submitted,

/s/ Robert A. Braun