Health Effects Institute
75 Federal Street, Suite 1400
Boston MA 02110 USA
+1-617-488-2300
FAX +1-617-488-2335
www.healtheffects.org

EMBARGOED FOR RELEASE UNTIL 10:30 AM IST October 21, 2020

Media Contacts: Dan Greenbaum, President dgreenbaum@healtheffects.org +1 617-488-2331
Pallavi Pant, ppant@healtheffects.org, +1 413-404-1101
Bob O'Keefe, Vice President rokeefe@healtheffects.org +1 617-488-2334

State of Global Air 2020 Report

Air Pollution Contributes to more than 116,000 *Infant Deaths in India*

1.67 Million Deaths Linked to Air Pollution: Now the Highest Health Risk in India

Study Finds Progress in Reducing Household Air Pollution Exposures but Levels Stagnant for outdoor $PM_{2.5}$

The first-ever comprehensive analysis of air pollution's global impact on newborns finds that outdoor and household particulate matter pollution contributed to the deaths of more than 116,000 Indian infants in their first month of life in 2019, according to a new global study, *State of Global Air 2020 (SoGA 2020)*. More than half of these deaths were associated with outdoor $PM_{2.5}$ and others were linked to use of solid fuels such as charcoal, wood, and animal dung for cooking.

Long-term exposure to outdoor and household air pollution contributed to over 1.67 million annual deaths from stroke, heart attack, diabetes, lung cancer, chronic lung diseases, and neonatal diseases, in India in 2019. For the youngest infants, most deaths were related to complications from low birth weight and preterm birth. Overall, air pollution is now the largest risk factor for death among all health risks, according to the annual SoGA 2020 report and interactive website published today at www.stateofglobalair.org by the Health Effects Institute (HEI[1]).

The report highlights the ongoing challenge of high outdoor air pollution — South Asian countries including India, Bangladesh, Pakistan and Nepal feature among the top ten countries with the highest $PM_{2.5}$ exposures in 2019; all of these countries experienced increases in outdoor $PM_{2.5}$ levels between 2010 and 2019. Use of solid fuels for cooking, however, presents a pattern of moderate success. Since 2010, more than 50 million fewer people have been exposed to household air pollution. The Pradhan Mantri Ujjwala Yojana Household LPG program and other schemes have helped to dramatically expand access to clean energy, especially for rural households. More recently, the National Clean Air Programme has spurred action on major air pollution sources

[1] The Health Effects Institute is an independent, nonprofit research institute funded jointly by the U.S. Environmental Protection Agency, industry, foundations, and development banks to provide credible, high-quality science on air pollution and health for air quality decisions.

in cities and states around the country.

This report comes as COVID-19 — a disease for which people with heart and lung disease are particularly at risk of infection and death — has claimed more than 110,000 lives in India. Although the full links between air pollution and COVID-19 are not yet known, there is clear evidence linking air pollution and increased heart and lung disease creating a growing concern that exposures to high levels of air pollution, during winter months in South Asian countries and East Asia, could exacerbate the effects of COVID-19.

"An infant's health is critical to the future of every society, and this newest evidence suggests an especially high risk for infants born in South Asia and sub-Saharan Africa," said Dan Greenbaum, President of HEI. "Although there has been slow and steady reduction in household reliance on poor-quality fuels, the air pollution from these fuels continues to be a key factor in the deaths of these youngest infants," he added.

Infants in the first month of life are already at a vulnerable stage. But a growing body of scientific evidence from multiple countries, including recent ICMR-supported studies in India, indicates that particulate air pollution exposure during pregnancy is linked to low birth weight and pre-term birth. These latter conditions, both of which are associated with serious complications, already account for the vast majority of deaths in the neonatal period (455,000 in 2019). The new analysis reported in the State of Global Air this year estimates that nearly 21% of neonatal deaths from all causes are attributable to ambient and household air pollution. "Addressing impacts of air pollution on adverse pregnancy outcomes and newborn health is really important for low- and middle-income countries, not only because of the high prevalence of low birth weight, preterm birth, and child growth deficits but because it allows the design of strategic interventions that can be directed at these vulnerable groups," said Dr. Kalpana Balakrishnan, an air pollution and health expert who was not involved with the study.

The *State of Global Air 2020* annual report and accompanying interactive website are designed and implemented by the Health Effects Institute in cooperation with the Institute for Health Metrics and Evaluation (IHME[2]) at the University of Washington, and the University of British Columbia; its findings are based on the most recent Global Burden of Disease (GBD[3]) Study published in the international medical journal, *The Lancet* on October 15, 2020. HEI provides leadership for the air pollution portion of the GBD; HEI's www.stateofglobalair.org is the only report and website where all of the estimates of exposure to air pollution and their burden of disease included in the GBD air pollution analyses are made available for full public access.

For more information on SoGA 2020, contact: Dr. Pallavi Pant, Staff Scientist (ppant@healtheffects.org, +1 413-404-1101) or Dr. Katherine Walker, Principal Scientist (kwalker@healtheffects.org; +1-617-281-4890)

---

[2] IHME is an independent population health research center that coordinates the annual Global Burden of Diseases, Injuries, and Risk Factors (GBD) Comparative Risk Assessment study. Its results are published each year.

[3] The GBD study is an international effort to estimate the number of deaths and lost years of healthy life due to 286 causes of death and 369 diseases in 204 countries, and how much of this burden is caused by 87 different risk factors, including diet, high blood pressure, tobacco smoking and air pollution. IHME leads an international team of nearly 3700 scientists from 146 countries in conducting the analysis. The latest GBD results have been published in: GBD 2019 Risk Factors Collaborators. Global burden of 87 risk factors in 204 countries and territories, 1990–2019: A systematic analysis for the Global Burden of Disease Study 2019. Lancet 396:1223-1249.

--- END ---