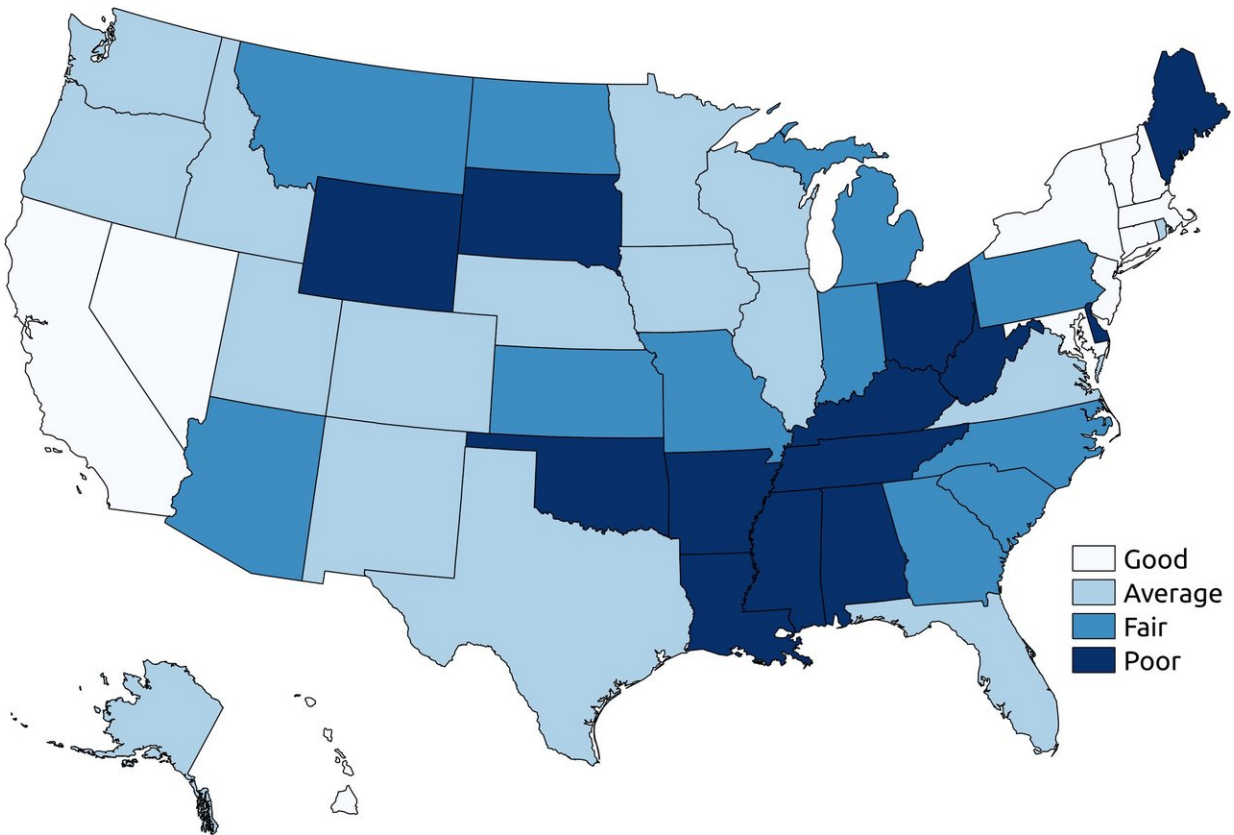


State-by-state causes of infant mortality in the US

March 20 2018



State-by-state analysis links sudden unexpected deaths of infants (SUDI) to high proportion of full-term infant mortality in the US. Credit: Bairoliya et al., 2018

Sudden unexpected death of infants (SUDI) was the most common cause of infant mortality among children born full term in the U.S. according

to estimates from a state-by-state study published this week in *PLOS Medicine*. The study, conducted by Neha Bairoliya of Harvard University and Gunther Fink of the Swiss Tropical and Public Health Institute, found that very low rates of SUDI—which includes sudden infant death syndrome (SIDS), accidental or abuse-related death, and sudden death from ill-defined causes—have been achieved in a few states while rates remain high in most others. The results suggest potential for a major reduction in infant mortality through interventions to reduce SUDI risk.

In their study, Bairoliya and Fink used linked birth and death records to identify the state- and cause-specific burden of [infant mortality](#) among full-term [infants](#) (born at 37-42 weeks of gestation). A total of 10,175,481 infants born full-term in the US between January 1, 2010, and December 31, 2012, were analyzed. Full-term [infant mortality rate](#) (FTIMR) was 2.2 per 1,000 live births overall, and ranged between 1.29 (Connecticut, 95% confidence interval 1.08, 1.53) and 3.77 (Mississippi, 95% CI 3.39, 4.19) at the state level. SUDI accounted for 43% of FTIMR; congenital malformations and perinatal conditions accounted for 31% and 11.3% of FTIMR, respectively. The largest mortality differentials between states with good and states with poor FTIMR were found for SUDI, with particularly large risk differentials for deaths due to sudden infant death syndrome (SIDS) (odds ratio [OR] 2.52, 95% CI 1.86, 3.42) and suffocation (OR 4.40, 95% CI 3.71, 5.21).

The extent to which these state differentials are due to antenatal care standards, access to health services, or postnatal practices could not be determined. However, after adjustment for differences in maternal education, race, and maternal health, substantial state-level variation in SUDI remained (OR 1.70, 95% CI 1.48, 1.94). Bairoliya and Fink project a reduction in full-term infant mortality of 4,003 deaths (95% CI 2,284, 5,587) annually in the U.S. if all states were to achieve the mortality levels of the best-performing state in each cause-of-[death](#) category. The authors state, "[g]iven the high mortality burden due to

SIDS and suffocation, policy efforts to promote compliance with recommended sleeping arrangements could be an effective first step in this direction."

More information: Bairoliya N, Fink G (2018) Causes of death and infant mortality rates among full-term births in the United States between 2010 and 2012: An observational study. *PLoS Med* 15(3): e1002531. doi.org/10.1371/journal.pmed.1002531

Provided by Public Library of Science

Citation: State-by-state causes of infant mortality in the US (2018, March 20) retrieved 24 April 2024 from <https://medicalxpress.com/news/2018-03-state-by-state-infant-mortality.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.