David Sterling, PhD
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Biostatistics & Epidemiology
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Area of Expertise

My research focuses on methods for determining exposures for use in epidemiology research and risk assessment. Current research activities include developing tools and methods for near-real time crowd sourcing of neighborhood level environmental measurements, associated physiological and demographic data, and utilizing Community Participatory methods (CBPR) to assess personal and community exposure and health outcomes. I developed an initiative to improve the management of asthma through school-based identification called Asthma 411, which is being disseminated in the DFW area.
Over the past 30+ years, I have been involved with public health research focused on environmental and occupational issues which include: investigating lead exposure of children and adults to lead paint and mining waste in settings ranging from the St. Louis metropolitan area, to Herculaneum, Joplin and St. Francis rural Counties of Missouri, and internationally in La Oroya and the Mantaro River Valley of Peru (CDC, HUD, EPA, USAID); and evaluating environmental causes of early onset dementia at a monastery in Greece.
Other research includes air pollution and asthma in children utilizing EPA Supersite monitoring and hospital ED discharge data (EPRI); investigating air quality and impacts using satellite remote sensing methods (Fogerty Internat'l); and evaluating asbestos exposure and disease progression outcomes of workers (Selikoff Foundation). I have also performed research and assessment on topics such as perceptions of physicians' knowledge for handling terrorism incidents (CDC/ATSDR); several projects for NIOSH; exposure of infants in hospital NICU's to isocyanates (CCH); radiological preparedness in Texas (TDSHS); and the Epidemiology of Parkinsonism in Welders (NIH/NIEHS and Michael J fox foundation).

Qualifications

PhD in Environmental Science, University Of Texas At Houston

MS in Environmental Health, University of Cincinnati

BS in Biology, University of Oregon

Recent Publications

Using machine learning to examine the relationship between asthma and absenteeism
Lary, M. A., Allsopp, L., Lary, D. J. & Sterling, D., 1 Jun 2019, In : Environmental Monitoring and Assessment. 191, 332.

The "Warm Zone" Cases: Environmental Monitoring Immediately Outside the Fire Incident Response Arena by Firefighters
Caban-Martinez, A. J., Kropa, B., Niemczyk, N., Moore, K. J., Baum, J., Solle, N. S., Sterling, D. & Kobetz, E. N., 1 Sep 2018, In : Safety and Health at Work. 9, 3, p. 352-355 4 p.

Impact of air quality guidelines on COPD sufferers
Liu, Y., Yan, S., Poh, K., Liu, S., Iyioriobhe, E. & Sterling, D., 21 Apr 2016, In : International Journal of COPD. 11, 1, p. 839-872 34 p.

Breathe your best for school success: Evaluation of an initiative to enhance asthma action plans in the school setting
Richmond, C. M., Hobson, A., Pike, E., Kleiss, J., Wottowa, J. & Sterling, D., 1 Feb 2011, In : Journal of Urban Health. 88, SUPPL. 1

Development and evaluation of an integrated asthma awareness curriculum for the elementary school classroom
Pike, E. V., Richmond, C. M., Hobson, A., Kleiss, J., Wottowa, J. & Sterling, D., 1 Feb 2011, In : Journal of Urban Health. 88, SUPPL. 1

Estimation of particulate mass and manganese exposure levels among welders
Hobson, A., Seixas, N., Sterling, D. & Racette, B. A., 1 Jan 2011, In : Annals of Occupational Hygiene. 55, 1, p. 113-125 13 p.

COPD is associated with a macrophage scavenger receptor-1 gene sequence variation
Ohar, J. A., Hamilton, R. F., Zheng, S., Sadeghnejad, A., Sterling, D., Xu, J., Meyers, D. A., Bleecker, E. R. & Holian, A., 1 May 2010, In : Chest. 137, 5, p. 1098-1107 10 p.

Validity and reliability of an occupational exposure questionnaire for parkinsonism in welders
Hobson, A. J., Sterling, D., Emo, B., Evanoff, B. A., Sterling, C. S., Good, L., Seixas, N., Checkoway, H. & Racette, B. A., 1 Jun 2009, In : Journal of Occupational and Environmental Hygiene. 6, 6, p. 324-331 8 p.

Adam33 polymorphisms are associated with COPD and lung function in long-term tobacco smokers
Sadeghnejad, A., Ohar, J. A., Zheng, S. L., Sterling, D., Hawkins, G. A., Meyers, D. A. & Bleecker, E. R., 12 Mar 2009, In : Respiratory Research. 10, 21.

Examining the consulting physician model to enhance the school nurse role for children with asthma
Wilson, K. D., Moonie, S., Sterling, D., Gillespie, K. N. & Kurz, R. S., 1 Jan 2009, In : Journal of School Health. 79, 1, p. 1-7 7 p.

Sponsored Projects

A Novel Approach for Providing Neighborhood Level and Personalized Air Quality Data
Sterling, D.
Intramural Research(UNTHSC)
1/03/15 → 31/08/16

Assessment of the Current Radiological Monitoring Capacity
Sterling, D. & Lee, J.
TX Department of State Health Services
1/06/10 → 31/07/11

Asthma 411: A Collaborative Asthma Initiative to Improve Community Health
Sterling, D.
UNTHSC(PACE)
1/08/13 → 31/01/15

Development of a Model Asthma Coalition
Sterling, D.
Texas Dept of State Health Services
1/10/12 → 31/08/13

HVAC System Control Evaluation
Sterling, D.
NTS Corporation
5/05/16 → 30/06/16

Prevalence Estimates of Asthma in Texas: Children Living Near Superfund Sites Compared to Other Parts of Texas
Sterling, D.
University of North Texas - Denton
30/08/10 → 31/08/11

Texas Asthma Control Evaluation
Spence-Almaquer, E. & Sterling, D.
Texas Dept of State Health Services
1/11/12 → 31/08/13

Texas Asthma Control Plan Evaluation
Spence-Almaquer, E. & Sterling, D.
TX Department of State Health Services
1/09/13 → 31/08/14

Texas Environmental Health Institute (Tehi) - Health Surveillance Survey

Sterling, D.
University of North Texas - Denton

1/03/11 → 31/08/11