

## Air contaminants databases ease healthy homes planning

## February 16 2007

Air pollution sources are everywhere in the home, from the bacon and eggs frying in the kitchen, to the woodburning stove in the family room, the newly painted hallway, and even the carpet in the living room. To help estimate the seriousness of these and other indoor pollutant sources as well as to devise ways to reduce possible health impacts, the National Institute of Standards and Technology has developed searchable databases of relevant product emission studies.

NIST researchers also have created a software tool called ContamLink that can transfer selected information from the databases into CONTAM, an indoor air quality modeling software program that predicts airflows and contaminant concentrations in multizone building systems. Together—the electronic databases, ContamLink, and the CONTAM program—should significantly accelerate our understanding of indoor air pollution.

The new databases allow investigators to access immediately information that previously was available in scientific literature, but required significant time to locate. The databases include emission rates for consumer products, cooking and combustion appliances (such as gas stoves); and data on contaminant transport mechanisms, including particle deposition, contaminant sorption and different ventilation systems filters. Two of the five databases are from the U.S. Environmental Protection Agency (EPA) and the National Research Council of Canada. Researchers can download the databases, and with ContamLink, selectively obtain relevant information for inclusion in



CONTAM or other indoor air quality models. Database entries are not intended to be all-inclusive, but rather representative of the literature. Researchers and other practitioners are encouraged to expand the databases with their own data using the data entry format provided.

Source: National Institute of Standards and Technology

Citation: Air contaminants databases ease healthy homes planning (2007, February 16) retrieved 10 April 2024 from <a href="https://phys.org/news/2007-02-air-contaminants-databases-ease-healthy.html">https://phys.org/news/2007-02-air-contaminants-databases-ease-healthy.html</a>

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.