## Residential Air Purifiers: Product Performance and Safety (RAPPPS)

## Methodology

To produce the materials for this project we collected information from a variety of sources, including interviews with experts, focus group discussions with community health workers, peer-reviewed articles, trusted product review websites, and publications from agencies such as the United States Environmental Protection Agency (US EPA) and the California Air Resources Board (CARB).

First, we gathered background information from existing resources. Then we interviewed indoor air quality experts and experts in air cleaner technologies. Following this, we held two focus groups discussions with community health workers (CHWs) with asthma programs, who are our target audience. The first meeting focused on what information CHWs needed to know about air cleaners, what aspects concerned them and their clients, and how best to present the information.

From these meetings we decided to recommend that asthma programs select air cleaners that meet the following criteria:

- Mechanical air cleaners with High Efficiency Particulate Air (HEPA) Filters or filters MERV
  13 and higher
- A maximum noise level of 55 decibels (dB) or lower
- Initial unit costs under \$250
- CARB certified

Our first list of products came from expert recommendations and asthma programs. We cross-checked our list against the <u>Clean Air Stars dataset</u>, <u>Wirecutter</u>, and Consumer Reports—adding and removing products accordingly.

Once a full draft of the factsheet and spreadsheet was developed, a second CHW focus group reviewed it. In these discussions we wanted to ensure user-friendliness, clarity, and usefulness.

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