Figure 3. The complexity of studying PM effects shown using studies from HEI’s PM research program. The figure illustrates some types of particles, a range of study subjects, and several health endpoints of interest. Each symbol indicates one type of subject that was included in an HEI-funded epidemiologic or experimental study.

A single study may be represented with more than one symbol; for example, the epidemiologic study by Lippmann and colleagues (17) investigated the potential associations among levels of different-sized particles, acidity, and sulfate with daily mortality in the general population and with hospital admissions among older people. For this study and other epidemiologic studies, the general population is represented by the symbol for healthy subjects; the general population, however, also contains susceptible groups.