

**Chapter 6—Inhalation Rates**

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the end of the simulation, the results for all 10,000 iterations were summarized into frequency histograms. The mean, standard deviation, and percentiles were calculated based on the frequency counts.

Inhalation rates for male construction workers were represented by a log normal distribution, with a mean rate of  $1.40 \pm 0.51$  m<sup>3</sup>/hour. Hourly inhalation rates for female construction workers were scaled down from those of their male counterparts, based on relative awake-time inhalation rates for men and women in the general public. Inhalation rates for female construction workers were also represented by a log normal distribution, with a mean rate of  $1.25 \pm 0.66$  m<sup>3</sup>/hour. Construction trade-specific scaling factors were developed and ranged from 0.78 for electricians to 1.11 for ironworkers.

An advantage of this study is that it provides estimated inhalation rates for a population of construction workers. A limitation of this study is that the construction workers in this study were solely male construction workers; no females were among the cohorts monitored.

**6.5. REFERENCES FOR CHAPTER 6**

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