
Section 4

Recommendations for Future Studies

Recommendations for Future Studies

As noted in the *Limitations* section of this report, the results in this report are subject to various constraints on their interpretation. The following are recommendations for future study that would help fill gaps and improve data quality.

- **For the mortality analysis, increase the number of states having reliable industry and occupation data.** The PMR analysis in this report relies on information from only 24 states. These were the states that coded both industry and occupation on death certificates and supplied sufficiently reliable data for analysis. Collectively, these states account for 32% of the U.S. agricultural worker population. That fraction could be doubled, to about 60% of the national agricultural worker population, if three additional states—California, Texas, and Florida—were to supply reliable industry and occupation information. Inclusion of further states would progressively increase the representativeness of the findings. Furthermore, the inclusion of additional states would enable more reliable estimation of the PMRs for diseases that are rare.
- **Expand temporal coverage of mortality analyses.** Another approach to increasing the reliability of the findings for rare mortality outcomes would be to expand the temporal coverage beyond the range 1988–1998. However, including data for the years 1998 to the present would require

reconciling respiratory disease codes across the 9th and 10th ICD revisions. Because of the transition from the 9th to the 10th revision of the ICD in 1999, a comparability study on the respiratory diseases would be necessary to evaluate any apparent changes in disease frequency causes as a result of the ICD revision.

- **For the morbidity analysis, add further years or cycles of the NHIS or NHANES survey data.** Addition of further years from the NHIS and NHANES would enable more reliable estimation of results, particularly when the data are disaggregated by worker group, sex, and race.
- **Undertake comprehensive industrial hygiene surveys of worker exposures.** Although no exposure databases were identified for application to this report, good exposure data are needed for assessment of work-related respiratory disease for agricultural workers. The best means of filling the gap would be through special-purpose surveys targeting agricultural workers. For the results of such surveys to be meaningful, in terms of the ability to generalize results, they would need to be reasonably broad in coverage—at least statewide, preferably for states with a significant agricultural worker population such as California, Texas or Florida. Regional studies would also be useful.

