

LATINX COMMUNITIES AND PESTICIDE EXPOSURE: REDUCING RISK BY INCREASING HEALTHCARE PROVIDER AWARENESS

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Physicians, physician assistants (PA), and nurse practitioners (NP) need additional education in the recognition and management of pesticide poisonings and the inordinate risk borne by Latinx communities. Advanced Practice Providers (APP) who are experts in the pesticide field can work closely with community health workers (CHW), public health professionals, and social workers to educate them on how to help prevent, minimize pesticide-related health effects, and report these events as required by each state.

Community Health Workers, Public Health Providers, and Social Workers

- Well-positioned to partner with APPs as they function as patient advocates, resource coordinators, and patient educators.
- Typically share ethnicity, language, socioeconomic status, and life experiences with the community members they serve (2).

Exposure

- Vulnerable populations may be exposed to pesticides due to their occupation and/or socioeconomic factors.
- Occupations historically and predominantly filled by the Latinx workforce include groups such as migrant/seasonal farm workers, leisure and hospitality workers, laborers, landscapers, and those in the fishing industry.
- Secondary exposures for household members of these workers, such as spouses and children.
- Exposures to children and women from organochlorine pesticides, lindane-based products for lice control, disinfectants, and DEET.



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Agricultural Workers

- Pesticide usage in the agricultural sector accounts for nearly 90% of total pesticide usage in the U.S. and the National Agricultural Workers Survey found that 83% of all agricultural workers in 2015-2016 were Hispanic (1).
- While workplace safety measures exist, Latinx workers in these occupations are:
 - likely to experience chronic pesticide exposures
 - less likely to report pesticide exposure to healthcare personnel in fear of risking their livelihoods by reporting
 - may not be aware of the risks they face due to language barriers and being unable to read pesticide labels in English
- A study found that children were more likely to be exposed to chlorpyrifos in an agricultural setting (3).

Urban Exposures

- Latinx children and their families are found to be at a higher risk of exposure to organochlorines and pyrethroids than other pesticides (3).

PERC-med aims to help medical professionals prevent, recognize, and treat pesticide-related illnesses. We collaborate with clinicians working with vulnerable populations in order to prevent pesticide-related illnesses.

References

1. U.S. Department of Labor's National Agricultural Workers Survey (NAWS). 2018. <https://bit.ly/NAWS2018>
2. National Institutes of Health. National Heart, Lung, and Blood Institute. Role of Community Health Workers. 2014. <https://bit.ly/NIHCHW14>
3. Arcury TA, Chen H, Quandt SA, Talton JW, Anderson KA, Scott RP, Jensen A, Laurienti PJ. Pesticide exposure among Latinx children: Comparison of children in rural, farmworker and urban, non-farmworker communities. *Sci Total Environ.* 2021; 763:144233. 10.1016/j.scitotenv.2020.144233. <https://bit.ly/ARCSCI21>

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