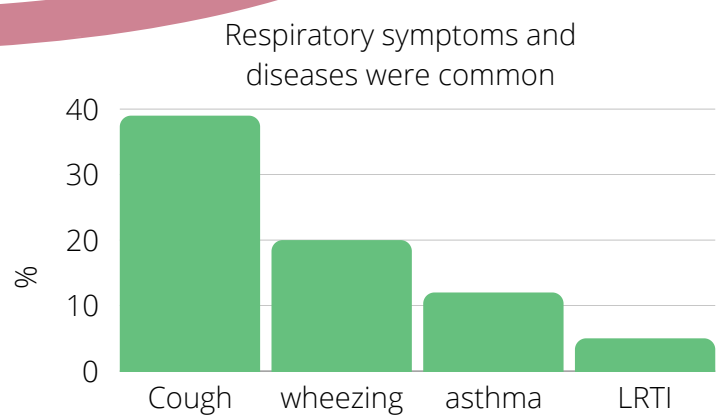
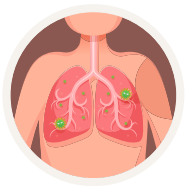
Did you know that pesticides could influence respiratory health and allergies in children??

Exposure to pesticides used in the home and/or for vector control may contribute to the development of respiratory symptoms and allergies in children; others used in agriculture may contribute to lower respiratory tract infections (LRTI).

Results from the Infants' Environmental Health (ISA) birth cohort situated in Matina County, Costa Rica, showed respiratory symptoms and disease were common (Figure 1). Furthermore, current, but not prenatal, urinary biomarkers of pesticide exposures were consistently associated with respiratory and allergic outcomes among 5-year-old children, particularly biomarkers of pyrethroid exposures. Exposure to mancozeb was somewhat associated with LRTI.





Lower respiratory tract infections (LRTI)

Asthma

Allergies

Wheezing

Mancozeb pesticide

Pyrethroids pesticides

Current pyrethroid exposure may affect children's respiratory and allergic health at 5 years of age. Current mancozeb exposure might contribute to LRTI. These findings are important as pyrethroids are broadly used in home environments and agriculture and mancozeb in agriculture.

Reference:
Islam, J. Y., Hoppin, J., Mora, A. M., Soto-, M. E., Gamboa, L. C., Ernesto, J., Castañeda, P., Reich, B., Lindh, C., Joode, B. V. W. De, Rica, D. C., & Rica, C. (2022). Respiratory and allergic outcomes among 5- year- old children exposed to pesticides. 1–9. https://doi.org/10.1136/thoraxjnl-2021-218068