

# PESTICIDE DRIFT – PROBLEMS & SOLUTIONS COMMISSION ON CLIMATE & ENVIRONMENT

MELINDA HEMMELGARN, MS, RD FOODSLEUTH@GMAIL.COM 573-449-3720

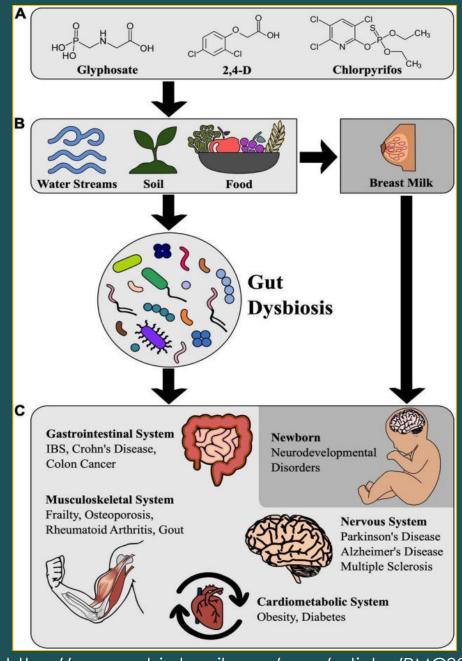


# Pesticide-environment-health connections: Gut dysbiosis

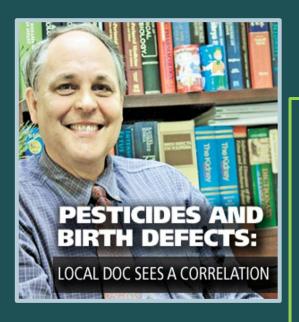
Pesticide residues in soil, water, and food can cause gut dysbiosis in humans.

Pesticide residues in breast milk can also impair infant neurodevelopment.

"Due to extensive reciprocal association between the gut microbiome and ... nervous, endocrine, and immune systems,... should stimulate new guidelines limiting human exposure to pesticides. "

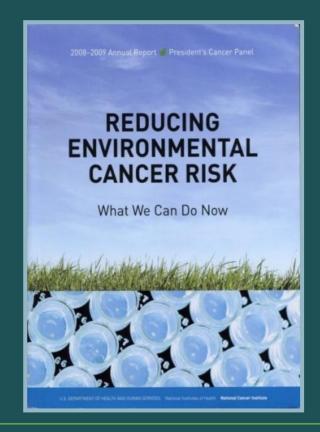


https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9279132/



"Counties with the highest pesticides rates have the highest birth defects rates."

Paul Winchester, M.D.



"Safer alternatives...
urgently needed."

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2667895/

https://deainfo.nci.nih.gov/advisory/pcp/annualreports/pcp08-09rpt/pcp\_report\_08-09\_508.pdf









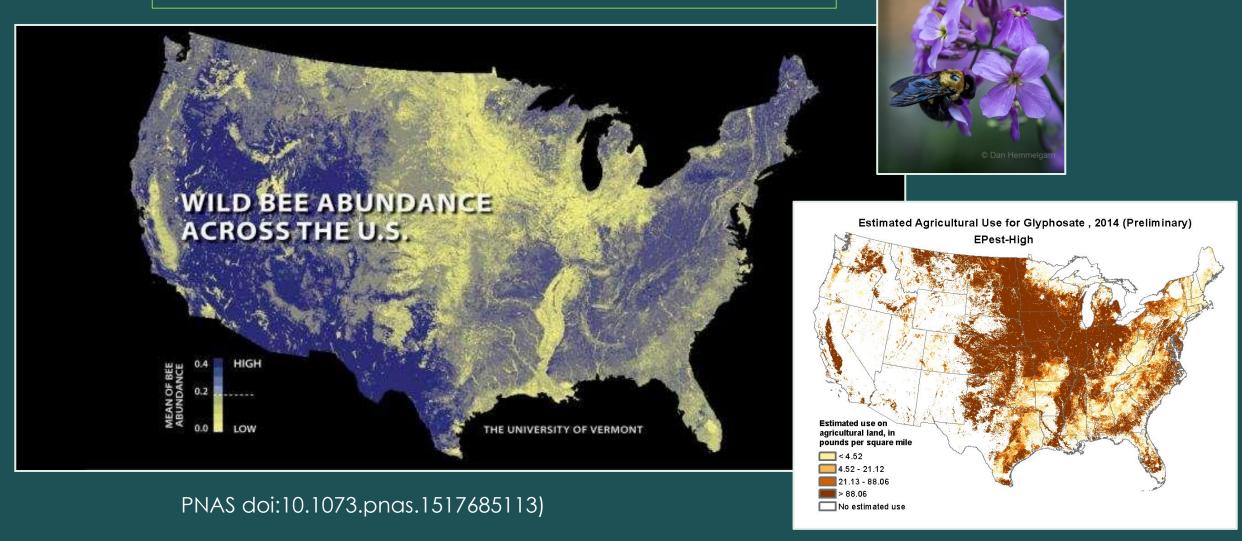








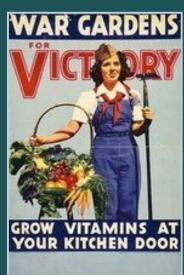
#### Pesticides Impact Pollinators



https://water.usgs.gov/nawqa/pnsp/usage/maps/compound\_listing.php







#### "Farm your Yard" vs. Pesticide drift damage:

dicamba & 2,4-D











https://lipm-drift.cfaes.ohio-state.edu/sites/hdrm/files/imce/Responding%

20to%20Drift%20FINAL.pdf

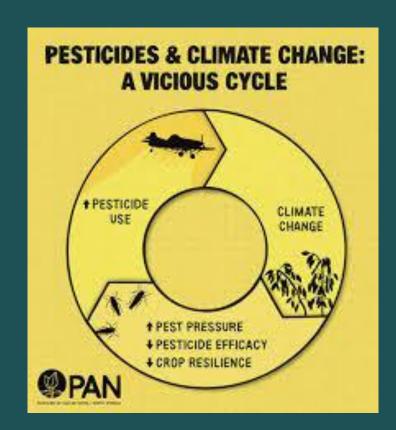
### Pesticides & Climate Change?



## The New York Times

Climate Change Is Speeding
Toward Catastrophe. The Next
Decade Is Crucial, U.N. Panel

**Says.** ... it is still possible to hold global warming to relatively safe levels, but doing so will require global cooperation, billions of dollars and big changes. 3-21-23



# Solution: Beyond Pesticides Pilot Project \*Free





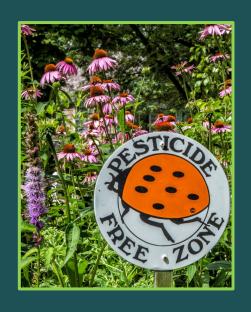
- ► **Staff training** to transition *two public green spaces* to organic landscape management.
- Assessments: soil tests, management practices.
- Technical assistance: throughout the duration of the project.
- ► **Help local landscape businesses:** Private landscapers/local landscape companies are invited to classroom training.
- https://www.beyondpesticides.org/resources/power-organic-parks-program/overview

#### Benefits of Organic Land Management

- \*On par w/ less expensive than "conventional" chemical-based management;
- \*Reduces risks and externalized costs associated with pesticide use:
  - exposure to carcinogens/ endocrine disruptors
  - ground and surface water contamination
  - poisoning of wildlife (pollinators, fish, frogs, birds)
  - harm to children, staff, pets
  - \* Enhances "ecosystem" services.



### Let's protect our environment, climate, and health:



- \* Share benefits / resources.
- \* Support organic land management.
- \* Recommend City Council / Mayor sign up for free pilot project.





