🌿 Sisters of Safety: Protecting Our Families from Pesticide Sprays 🌿

What's Happening

Counties across Florida spray pesticides to control mosquitoes. While the goal is disease prevention, these sprays can harm people, pets, pollinators, and wildlife.

🚨 How Sprays Can Affect Health

- **Children & Babies**: more vulnerable to pesticides because of smaller size and developing bodies.
- **Adults**: may experience headaches, dizziness, breathing trouble, rashes, or fatigue.
- **Pregnant People**: exposure can pose risks for fetal development.
- **Bees & Frogs**: sprays also kill pollinators and amphibians, upsetting our environment.

✅ How to Protect Yourself & Your Family

- Stay indoors and close windows/doors during spraying.
- Bring in pets, toys, laundry, and food crops.
- Wash skin, clothes, and homegrown produce after spray nights.
- Use air filters indoors if possible.
- Keep a **symptom journal** if you notice health changes.

🗣️ Advocacy: What You Can Do

- **Get Informed**: Call your local *Mosquito Control District* for spray schedules & chemicals used.
- **Ask for Notification**: Residents have the right to know when and where spraying happens.
- **Share Your Story**: Talk with neighbors, teachers, and community groups.
- **Show Up**: Attend County or Mosquito Control meetings and demand safer methods.
- **Push for Alternatives**: Support larviciding, habitat cleanup, and biological controls (like mosquito fish & Bti bacteria).

📞 Key Contacts

- **Florida Dept. of Agriculture & Consumer Services (FDACS)**: 1-800-HELP-FLA
- **County Mosquito Control Office**: [Insert local phone number/website]
- **Poison Control Center** (for pesticide exposure): 1-800-222-1222

🌱 Our Vision

We deserve neighborhoods where families breathe clean air, children play safely outdoors, and pollinators thrive. Public health should never mean trading one harm for another.

Together, we can protect our communities. Together, we are Sisters of Safety.

🐝 Effects on Bees

- **Direct toxicity**: Many mosquito adulticides (like pyrethroids, organophosphates, or older forms of malathion) are neurotoxic to insects broadly — not just mosquitoes. Bees exposed during or shortly after spraying can die in large numbers.
- **Sub-lethal effects**: Even if they don't die immediately, bees may experience impaired navigation, reduced foraging, or weakened immune systems, making hives more vulnerable to disease.
- **Residues on flowers**: Pesticides can settle on blooming plants, so bees collect contaminated pollen/nectar and bring it back to the hive.
- **Timing matters**: Spraying at night (when most bees are in their hives) reduces impact — some Florida mosquito control programs do this intentionally.

🐸 Effects on Amphibians

Amphibians (frogs, toads, salamanders) are especially vulnerable because they have **permeable skin** and live in both water and land environments.

- **Developmental effects**: Exposure in tadpoles can disrupt growth, hormone balance, and metamorphosis.
- **Neurological impacts**: Like insects, amphibians can be harmed by neurotoxic pesticides, leading to paralysis or abnormal behavior.
- **Ecosystem ripple**: Fewer amphibians means more mosquitoes long-term (they are natural predators), and it disrupts food chains (birds, snakes, fish).

- **Water contamination**: Spray drift and runoff can carry chemicals into wetlands and ponds, directly harming eggs and larvae.

🌎 Bigger Picture

- **Non-target impact**: Spraying reduces beneficial insect populations (pollinators, dragonflies, butterflies), not just mosquitoes.
- **Resistance problem**: Over time, mosquitoes can evolve resistance to chemicals, making sprays less effective and pushing agencies to increase dosage or switch chemicals.
- **Alternative methods**: Some Florida counties now integrate larviciding (targeting mosquito larvae in standing water), introduce mosquito fish, or use bacterial controls (like *Bacillus thuringiensis israelensis*) which are less harmful to bees and amphibians.

🚼 Babies & Children

Children are more vulnerable because:

- **Developing bodies**: Their brains, nervous systems, and endocrine systems are still forming, so low-dose exposures can have larger impacts.
- **Closer contact**: Babies and toddlers spend more time on grass, soil, and floors, where pesticide residues can settle.
- **Smaller size**: A dose that might be negligible for an adult can be significant for a child.

Potential effects (depending on chemical):

- Short-term: skin irritation, respiratory issues (coughing, wheezing), nausea, headaches.
- Long-term/repeated exposure: research links some pyrethroids and organophosphates to developmental delays, learning/attention issues, and hormone disruption.

👩 Adults

Most healthy adults tolerate very low-level exposure without obvious symptoms, but risks exist:

- Short-term: eye/skin irritation, dizziness, asthma flare-ups, headaches.
- Long-term: chronic exposure has been associated with nervous system issues, reproductive/hormonal effects, and possibly higher cancer risks (especially for applicators and agricultural workers with high exposure).

Pregnant People

- Some mosquito-control chemicals are suspected endocrine disruptors and could affect fetal development.
- The irony is: spraying often ramps up during **Zika virus scares**, which itself can cause birth defects — so agencies weigh mosquito-borne disease risk vs. pesticide exposure.

🧴 Types of Chemicals Used in Florida & Health Notes

- **Pyrethroids (permethrin, resmethrin, etc.)**
  - Widely used. Considered lower human toxicity than older chemicals.
  - Can trigger asthma, skin tingling, and neurological effects in ***high exposure***.
- **Organophosphates (malathion, naled)**
  - More toxic. Affect the nervous system by inhibiting enzymes.
  - Linked to developmental delays in children and neurological effects in adults.
  - *Naled* was controversial during Zika spraying in Miami (2016) — residents protested due to concerns over babies and pregnant women.
- **Larvicides (Bti bacteria)**
  - Target mosquito larvae in water. Generally considered safe for humans, including babies and children.

🌎 Exposure Reality in Florida

- The claim is that sprays are **ultra-low volume (ULV)**, meaning very fine mists at low doses. Health departments say this keeps human exposure minimal. ***However, this may not be the reality.***
- Risk rises if:
  - You're outside during/after spraying.
  - Windows are left open.
  - Kids play on freshly sprayed grass.

✅ **Precaution Tips for Families** (CDC and Florida mosquito control suggest):

- Stay indoors, close windows/doors during spraying.
- Bring toys, pets, and laundry inside.

- Wash skin and clothing if you've been outside after spraying.
- Rinse fruits/veggies from your yard.

Why we shouldn't simply spray the way we sometimes do today

- **Harms to non-targets:** Adulticides (pyrethroids, organophosphates) kill or impair pollinators, beneficial insects, and can harm amphibians and aquatic life through drift and runoff.
- **Human health risks:** Repeated or high exposures raise concerns for children, pregnant people, workers, and people with asthma or other vulnerabilities.
- **Resistance:** Heavy reliance on the same chemicals drives mosquito resistance, making sprays less effective over time and escalating doses/chemical rotations.
- **Ecological ripple effects:** Removing predators (dragonflies, some frogs) can worsen mosquito problems in the long run.
- **Equity & trust issues:** Blanket spraying without local engagement can cause community backlash, especially when people feel insufficiently informed about risks and benefits.

Why some spraying still happens / may be necessary

- **Outbreak control:** During outbreaks of West Nile, dengue, chikungunya, or Zika, rapid adulticiding can lower immediate disease transmission risk.
- **Acute public-health response:** In places where larval habitat is widespread or access to breeding sites is limited, adult spray may be the fastest tool.

A practical policy recommendation (what "phase down" looks like)

1. **Adopt Integrated Mosquito Management (IMM) as policy priority**
    - Make larval control, habitat reduction, monitoring, and targeted interventions the default.
2. **Limit adulticiding to targeted, evidence-based use**
    - Reserve for outbreaks or high-risk, well-justified public-health events. Use the least-harmful effective chemical.

3. **Prioritize larvicides and biological controls**
    - Expand use of bacterial larvicides (Bti) in standing water and support biological controls (mosquitofish where appropriate).
4. **Deploy precision and targeted methods**
    - Use ground-based treatments, targeted ULV in focused zones, and avoid blanket aerial spraying. Time applications to minimize exposure to pollinators.
5. **Implement non-chemical alternatives where feasible**
    - Source reduction (drainage, cover containers), community cleanup campaigns, traps, sterile insect or incompatible insect techniques, and habitat modification.
6. **Create buffer zones and sensitive-site protections**
    - No spraying within set distances of schools, daycare centers, hospitals, apiaries, and wetlands whenever possible.
7. **Strengthen monitoring & resistance management**
    - Routine surveillance of mosquito populations and insecticide resistance testing; rotate chemistries only when needed.
8. **Require public notification & participatory decision making**
    - Advance notice of spray schedules, transparent risk/benefit info, and channels for community input/complaint.
9. **Protect workers and applicators**
    - Proper PPE, training, medical surveillance, and limits on hours/exposures.
10. **Fund alternatives & research**
    - Public investment in long-term solutions (research into safer larvicides, sterile/male-release programs, landscape design, and community outreach).

Concrete short-term steps for families & communities

- Close windows/doors and bring in laundry/toys on spray nights.
- Rinse yard produce and wash skin/clothes if exposed.
- Eliminate standing water on properties.
- Advocate for local mosquito control to use larviciding and targeted treatments, not broad routine adulticiding.

Tradeoffs to be honest about

- Phasing down adulticides may slow immediate response capacity in sudden outbreaks unless alternatives and rapid response systems are scaled up first.
- Some alternatives (sterile insect techniques, Oxitec-style approaches, large-scale habitat modification) require funding, technical capacity, and community acceptance.

Breathing Safe: Standing Strong Against Harmful Sprays

Across Florida, and many other warm places, mosquito-control spraying is a regular part of life. While these programs are intended to protect communities from mosquito-borne illness, many women and men have begun noticing health problems they believe may be connected to pesticide exposure: breathing difficulties, headaches, rashes, fatigue, or brain fog that come after spray nights. For some, especially children, elders, and those with chronic conditions, these exposures can feel frightening and disempowering.

As **Sisters of Safety**, we believe that protecting our health is not only a personal responsibility, but also a collective right. When communities are exposed to chemicals without their informed consent, it becomes both a health issue and a justice issue. This essay offers guidance for those who may be experiencing symptoms and provides a roadmap for advocating for yourself and for others.

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1. Trust What Your Body Tells You

If you notice symptoms after spraying, you are not “imagining things.” Many pesticides are known irritants to the skin, lungs, and nervous system. Pay attention to your body’s signals:

- Keep a **symptom journal** — record when sprays happen and how you feel before, during, and after.
- Take photos or short notes if your children or loved ones show reactions too.
- Trust your lived experience — your story matters even when others try to dismiss it.

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2. Protect Yourself and Your Family

Practical steps can reduce exposure:

- Stay indoors and close windows during spray times.
- Bring pets, toys, and laundry inside.

- Rinse skin, hair, and clothes if you've been outdoors after spraying.
- Wash homegrown fruits and vegetables.
- Use indoor air filters if possible.

These are not perfect protections — but they give your body less to process.

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3. Seek Support, Medical and Emotional

- If you experience severe or persistent symptoms, **consult a healthcare provider** and share your exposure journal.
- You have the right to request your doctor note pesticide exposure as a possible factor — documentation matters.
- Emotional toll is real: connect with others who understand. Isolation makes harm worse; solidarity brings strength.

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4. Know Your Rights and the System

- Every county in Florida has a **Mosquito Control District** — they set spray schedules and policies.
- State agencies like the **Florida Department of Agriculture & Consumer Services (FDACS)** oversee pesticide use.
- You have the right to request **advance notice of spraying**, to file complaints, and to ask what chemicals are being used.
- Records of pesticide application are public information.

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5. Move From Self-Protection to Advocacy

- **Tell your story**: Share with neighbors, community groups, local press, and leaders. Personal testimony has power.
- **Form alliances**: Work with beekeepers, environmental groups, parents, teachers, and health advocates who share concerns.
- **Demand safer alternatives**: Push for larviciding, habitat reduction, and biological controls instead of routine blanket spraying.
- **Call for transparency**: Require agencies to notify residents in clear language, not just in obscure postings.

6. Solidarity in Action

For women especially, the role of caregiver often makes us the first to notice when something feels wrong — in our children, in our elders, in ourselves. But this responsibility should not mean suffering in silence. Men, too, are called to stand in protection of their families and neighbors. Together, we can transform personal pain into community action.

Advocacy may look like:

- Writing letters to county commissioners.
- Attending Mosquito Control Board meetings.
- Circulating petitions.
- Hosting “community listening circles” where others can share experiences.
- Supporting lawsuits or policy campaigns that push for safer, more transparent mosquito management.

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7. A Vision for Safer Communities

Ending harm from spraying is not just about chemicals; it’s about dignity. It’s about insisting that public health solutions do not trade one harm for another. We envision neighborhoods where women, men, and children breathe freely without fear of invisible toxins. We envision decision-making that values community voices, honors science, and protects the vulnerable.

Closing

If you are feeling unwell, you are not alone. If you are worried for your children, your bees, or your neighbors, your concern is justified. And if you are ready to speak up — you are part of a growing wave of voices saying *we deserve safety without sacrifice*.

As **Sisters of Safety**, we stand together — for our own bodies, for the health of our families, and for the right of all people to live without silent poisons falling from the sky.
