



A Generation in Jeopardy

How pesticides are undermining our children's health & intelligence

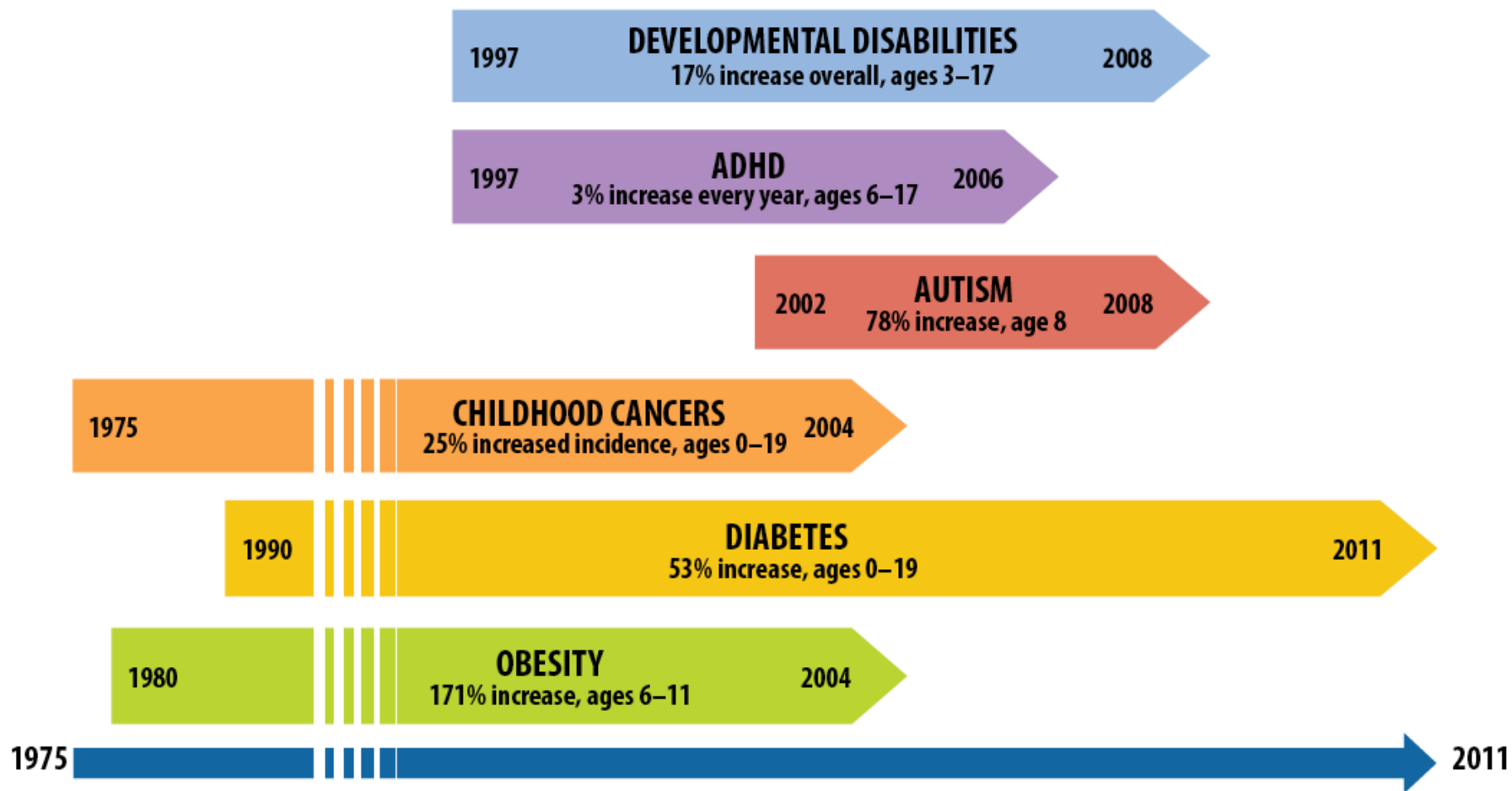
November, 2012



Kids are less healthy



This generation is experiencing diseases & disorders their parents or grandparents were unlikely to face.

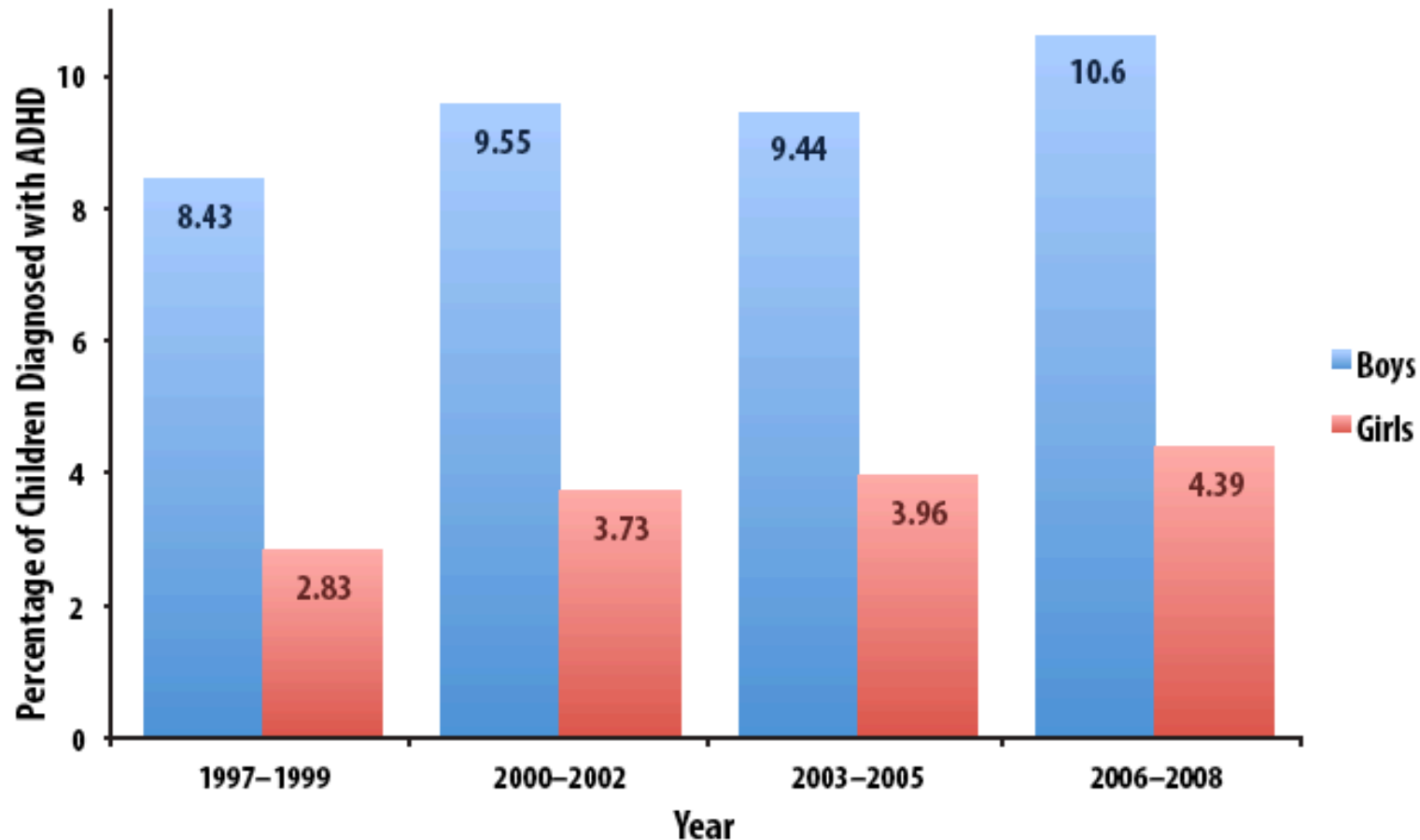


Children's Health Harms on the Rise, 1975 - 2011

Kids are less healthy

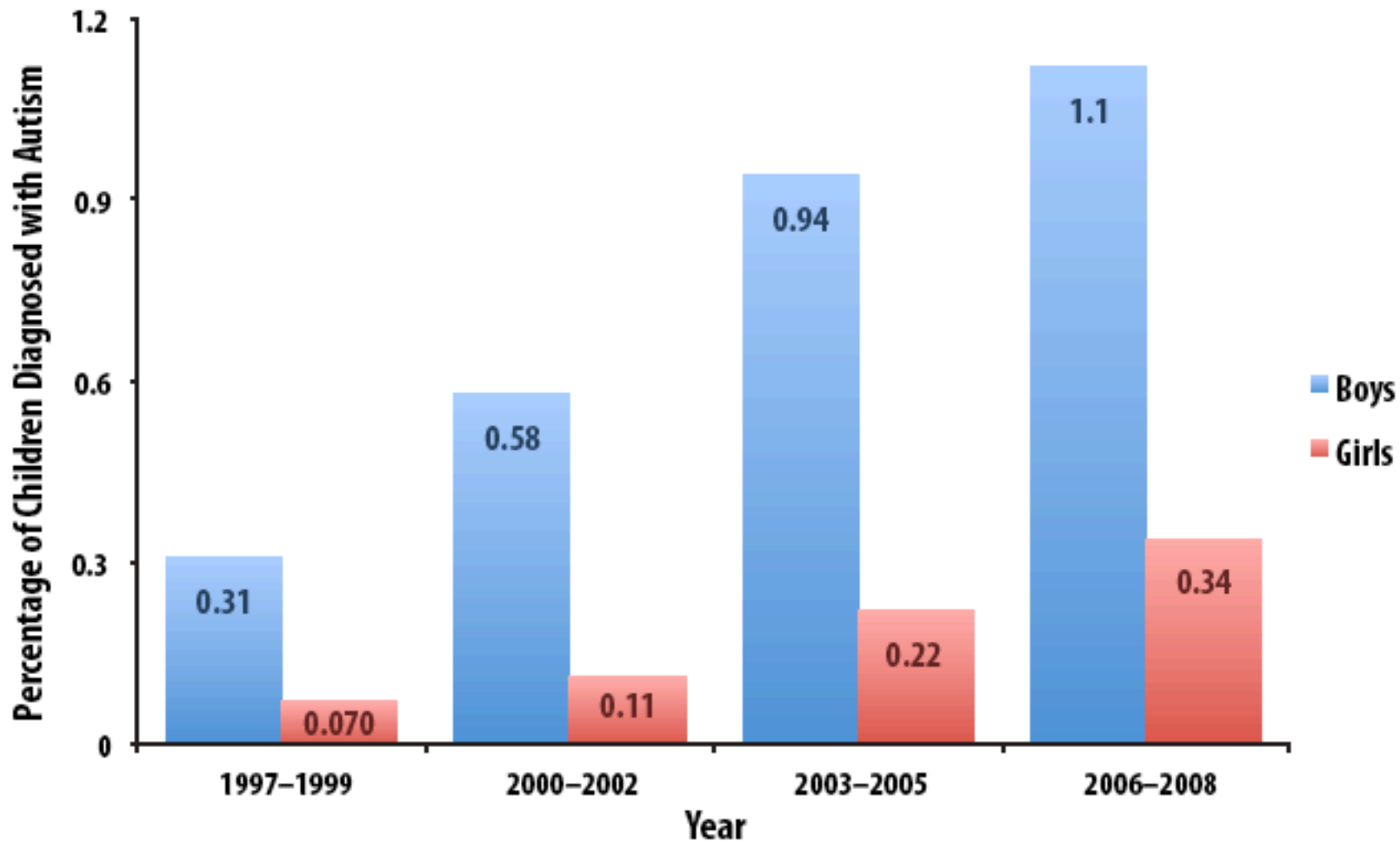
- ❖ **Developmental disabilities.** 400,000 to 600,000 of the 4 million children born each year are affected.
- ❖ **Childhood cancer:** Overall incidence up 25% since 1975; leukemia & childhood brain tumors up 40% and 50%, respectively.
- ❖ **Asthma:** More than 7 million now affected, up from 2 million in 1980.

ADHD increased average of 3% per year, 1997-2008



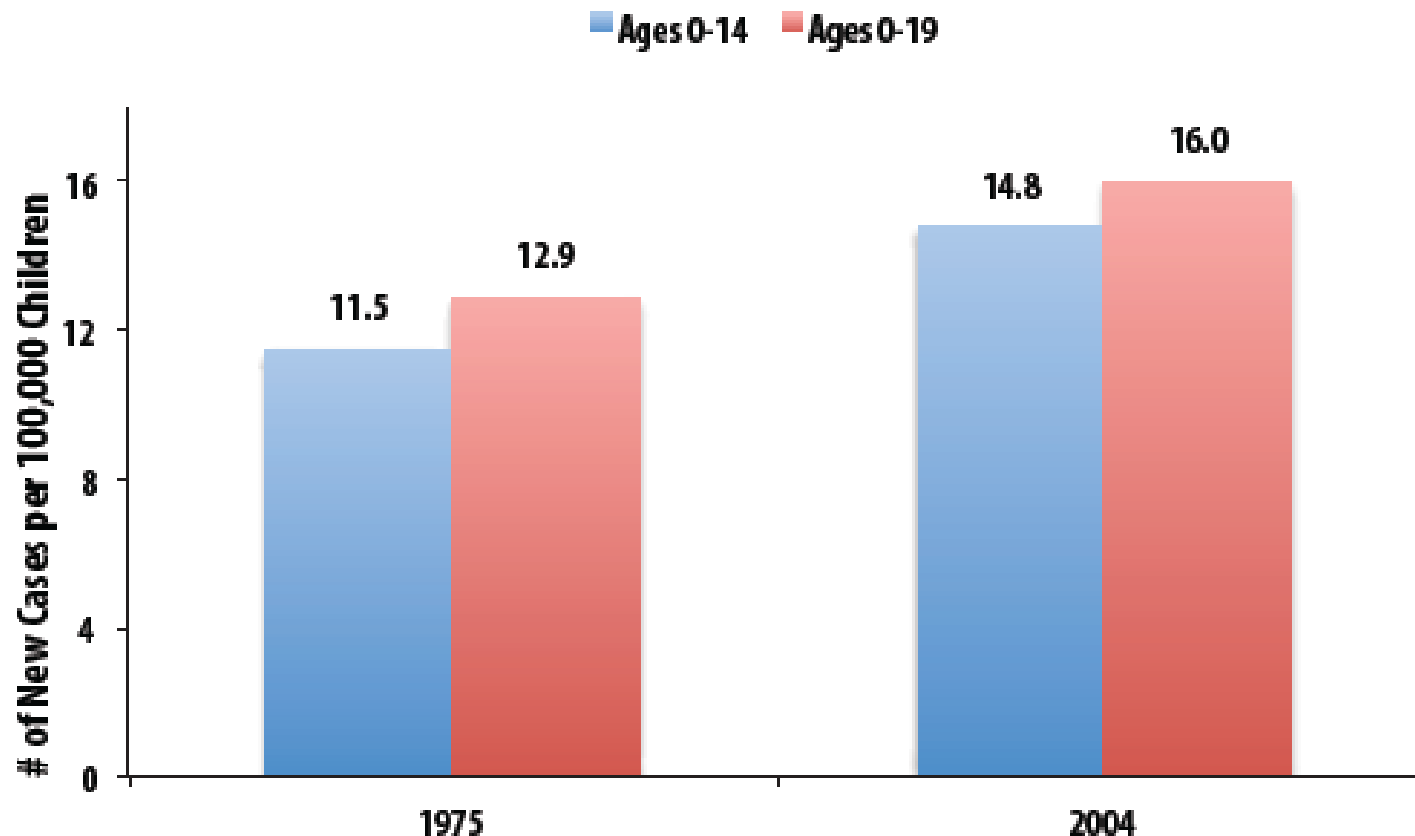
The number of children diagnosed with ADHD increased an average of 3 percent every year from 1997 to 2008. Boys are much more likely to be affected. Source: C. Boyle et al, "Trends in the Prevalence of Developmental Disabilities in U.S. Children, 1997- 2008."

Autism prevalence has jumped in past decade



Rates of autism have risen dramatically in the past decade. While overall prevalence is higher among boys, the rate of increase is higher among girls. Source: C. Boyle et al, "Trends in the Prevalence of Developmental Disabilities in U.S. Children, 1997-2008."

Increased incidence of cancer



Over the past 30 years, the number of children diagnosed with all forms of cancer has increased from 11.5 to 14.8 cases per 100,000 children per year.

Source: SEER, 2004

Pesticides contribute to childhood health harms



Particularly compelling data:

- ❖ Brain & nervous system.
- ❖ Certain childhood cancers.



Brain & Nervous System Harms



Prenatal exposure to OP pesticides:

- ❖ Children likely to have developmental disorders -- including autism -- by age 3.
- ❖ Children more likely to have increased attention problems & ADHD by age 5.

Brain & Nervous System Harms



- ❖ Children exposed to chlorpyrifos in the womb showed differences in MRI images of the brain.
- ❖ Areas related to attention, language, emotions and control were all affected.

Kids are exposed to pesticides where they live, learn & play



Environments we'd like to consider "safe" — from womb to classroom to kitchen table — often bring children into contact with harmful pesticides.

Kids are exposed to pesticides where they live, learn & play



Relative to their size, children eat, breathe and drink much more than adults.

Kids are exposed to pesticides where they live, learn & play



- ❖ Even at very low levels, interference from pesticides at critical moments can derail development.
- ❖ Some effects can last a lifetime.

Guarantee a solid start for kids



How?

- ❖ Individual choices help.
- ❖ We need local & national policy change.

Key steps to reduce kids' exposure to pesticides



- ✓ Pull pesticides off the market swiftly when independent science suggests harm to children.
- ✓ Block new pesticides from the market when studies show they may harm kids.
- ✓ End use of harmful pesticides in homes, daycare centers and schools.



Key steps to reduce kids' exposure to pesticides

- ✓ Establish pesticide-free zones around schools, daycare centers, and neighborhoods in agricultural areas to protect children from harmful exposures.

Key steps to reduce kids' exposure to pesticides



Jim and Jimmy on the farm, 2004

- ✓ Increase investment & support for innovative farmers who are stepping off the pesticide treadmill.

Working together



How can PAN and our partners best support EPA's efforts to protect children's health?

Online Resources



- ❖ **Healthy Kids Campaign** :: www.panna.org/campaigns/kids-health
- ❖ **What's On My Food?** www.whatsonmyfood.org
- ❖ **Analysis** :: GroundTruth Blog, www.panna.org/blog
- ❖ **Pesticide information** :: detailed toxicity & regulatory info, www.pesticideinfo.org

