

# PBB Talking Guide

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**These tips are recommended for talking to teenage and adult children whose parents were exposed to PBB.**

Possible routes of PBB exposure for your children:

- If your adult child was born before 1974, then your child may have directly consumed contaminated meat, eggs, or milk from Michigan farms.
- If your child's mother consumed the contaminated foods, your child could have been exposed in the womb or through breastfeeding.
- If only your child's father consumed the contaminated foods, it is unknown if there are any health effects. This possibility is being researched.

Share the PBB story with your child.

## Your family's personal PBB story:

The PBB disaster was traumatic for many families in many ways. *Decide how much of your family's personal story you would like to share.*

- It may help your children to understand the importance of the health implications if they are familiar with their family's personal story.
- Sharing your family's story may be very emotional for both you and your children.
  - Acknowledge these emotions.
  - If you can, share your feelings with your children.
  - Answer your children's questions as much as possible.
- Additional resources for you and your children to learn about the PBB contamination:
  - Bitter Harvest, a book written from the perspective of a farmer who helped discover the contamination.
    - Available on Amazon as book and made-for-TV-movie (DVD)
  - News articles available on-line:
    - Michigan Public Radio series: [One Company's Toxic Legacy](#)
    - Detroit Free Press: [Decades later, PBB contamination suspected in illnesses and deaths](#)
    - Great Lakes Echo: [Michigan passes PBB health study on to Emory University](#)
  - The Michigan PBB Registry website: [www.pbbregistry.emory.edu](http://www.pbbregistry.emory.edu)

### **Summary of the contamination events:**

- In the 1970's, a chemical company made two products at the same plant: a fire-retardant used in electrical appliances and a nutritional supplement for livestock feed.
- In 1973, the fire-retardant was shipped, instead of the nutritional supplement, to grain mills and mixed into livestock feed. The fire-retardant was PBB (polybrominated biphenyl).
- This contaminated feed was eaten by cattle, pigs, and chickens.
- In the farm animals, the PBB caused a reduction in egg and milk production, skin disease, hoof deformities, kidney and liver damage, and birth defects.
- It took a year to discover that the cause of the farm animals' illnesses was PBB.
- During this year, contaminated milk, meat, and eggs were sold throughout the state.
- Many people in Michigan ate the contaminated farm products, so the PBB got inside their bodies.
- Some people experienced skin rashes, hair loss, memory problems or joint pain. Early research suggested that there may be problems with the immune system or the liver among those with high PBB exposure.
- No one knew what the long-term health effects of the PBB would be.
- To study the possible long-term health effects related to PBB exposure, Michigan residents joined a research registry in 1976 that was managed by Michigan's state health department.

### **Research findings relevant to children whose parents were exposed to PBB:**

*Note:* PBB can mimic estrogen, is classified as an endocrine-disrupting chemical, is stored in fat, and remains in the body for many years.

- PBB transfers to children in the womb and through breast milk.
  - Many children who were born years after contaminated products were removed had PBB detected in their blood, and those who were breastfed were much more likely to have PBB in their blood.
- On average, breastfed daughters of women with high PBB exposure started menstruating a year earlier than unexposed girls.
- Daughters of women with high exposure to PBB were more likely to experience a miscarriage.
- Sons of women with high exposure to PBB were more likely to report a genital or urinary condition.
- The health effects of children born to men with PBB exposure are now being studied.

### **Acknowledge the uncertainty.**

It is important to acknowledge the uncertainty of the implications of these research findings for individuals.

- It is not possible to say with certainty that an individual's health problems are due to their PBB exposure.
- Instead, the research indicates an increased risk for certain health outcomes due to the PBB exposure.

- A familiar example of risk and exposure: lung cancer risk increases with the number of cigarettes smoked.

### Ways to empower your child.

- If your child has experienced health problems related to the PBB exposure, it may be a relief to understand what may have caused the problem or it may be difficult to learn that PBB may have affected their health.
  - Acknowledge your child's emotions.
  - Understanding the health risks associated with PBB exposure may help inform your health care decisions.
- Encourage your child to help spread the word about the PBB contamination and the continuing research, so that lessons learned will not be lost.
  - Like the Michigan PBB Registry on Facebook:  
[www.facebook.com/PBBRegistry](http://www.facebook.com/PBBRegistry)
  - Share stories and brochures with family members and friends.
- **If your child is interested in participating in future PBB health research, encourage him/her to complete the [Health Research Interest Form](#).**