Research Findings Related to the Michigan PBB Contamination

- Some women with high exposure to PBB had fewer days between menstrual periods, more days of bleeding, and lower estrogen levels. However, there was no evidence that these women had reduced fertility.

- There were a few more breast cancer cases among women with high exposure to PBB than expected.

- Some men with high PBB exposure were more likely to report thyroid disease.

- PBB was transferred to children in the womb and through breast milk. Children who were born after contaminated products were removed from farms 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.

For more information please visit the PBB Registry website at www.PBBregistry.emory.edu
PBB and Michigan Residents

In the 1970’s, the Michigan Chemical Company made two products at the same plant: polybrominated biphenyls (PBB), a fire-retardant chemical used in the manufacture of electrical appliances, and magnesium oxide, a nutritional supplement for livestock feed. In 1973, the company accidentally shipped PBB to the Farm Bureau instead of magnesium oxide. The PBB was mixed into livestock feed and eaten by cattle, pigs, and chickens. Contaminated milk, beef, and other farm products were sold throughout the state until the accident was discovered about a year later. People in Michigan who ate contaminated meat or drank contaminated milk were exposed to PBB.

The Michigan PBB Registry

In order to study the possible long-term health effects of PBB exposure, the Michigan Department of Community Health (MDCH) established the PBB Registry in 1976. At first, the registry consisted of approximately 4,000 people throughout Michigan who were exposed to PBB by eating contaminated food. The registry now also includes their children and grandchildren, who may have been exposed in the womb and through breastfeeding. MDCH managed the registry for more than 30 years, but it no longer has the resources to continue. MDCH is transferring management of the Michigan PBB Registry to Emory University, under the leadership of Dr. Michele Marcus. Dr. Marcus and her team have worked together with the MDCH for many years.

HOW DO I KNOW WHETHER I’VE BEEN EXPOSED TO PBB?
Your blood was tested for PBB when you first enrolled in the study, and our team can provide you with those results. About 1,000 of the registry members did not have PBB detected in their blood.

CAN I HAVE MY BLOOD TESTED FOR PBB NOW?
Yes. These tests are not routinely available at doctors’ offices, but blood samples can be sent to Emory University for analysis. For additional information, please contact us.

CAN MY FAMILY MEMBERS OR OTHERS WHO ATE CONTAMINATED FOOD JOIN THE PBB REGISTRY NOW?
Yes. These individuals will need to complete consent forms, a short questionnaire, and have their blood tested for PBB. For additional information, please contact us.

DOES PBB LEAVE THE BODY AFTER EXPOSURE?
Yes, gradually. On average, it takes about 15 years for half of the PBB in the body to be eliminated. There is currently no medical treatment that will lower PBB levels in the human body.

IS THERE ANY INFORMATION ABOUT PBB THAT I COULD SHARE WITH MY DOCTOR?
An information sheet is available for download from the PBB Registry website or can be requested by contacting us.

WHY CONTINUE THE PBB REGISTRY?
Some of the health effects of PBB exposure may take many years to develop and will only be found by continued research. The study findings can help you and your doctor decide if you need more frequent tests for certain conditions.

Our research has shown health effects among the sons and daughters of people who ate contaminated food. It is important to continue to study the health of these children as they grow up and have children of their own.

HOW DO I CONTINUE TO BE INCLUDED IN THE PBB REGISTRY?
In order to stay in the PBB Registry, you must provide consent to transfer your PBB records from MDCH to Emory University. Consent forms can be downloaded from the PBB Registry website or can be requested by contacting us. By transferring your health records to Emory University, you will receive up-to-date information on study findings and will have opportunities to guide future research priorities.

HOW ELSE CAN I BE INVOLVED?
Several community meetings are planned to discuss research findings and to solicit your input on future research priorities. An advisory board composed of PBB Registry members and local health professionals is being established to help guide the researchers.

HOW DO I CONTACT THE EMORY UNIVERSITY PBB RESEARCH TEAM?
Please call us toll-free at 1-888-892-0074 or send an e-mail to PBBregistry@emory.edu. More information can also be found on the PBB Registry website at www.PBBregistry.emory.edu.