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**PCB congener profiles in fish, sediment, and air from Akwesasne,
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Polychlorinated biphenyls (PCB) are ubiquitous in our bodies, environment and terminology. They are persistent pollutants that bioaccumulate in humans as well as wildlife. The Mohawk Nation of Akwesasne (New York, Ontario, and Quebec, Canada) was heavily contaminated by PCBs released from three primary sources; General Motors Foundry, Reynolds, and Alcoa. The Mohawks relied on fishing, hunting, and use of the land as their means of survival. After PCBs were discovered in fish and other wildlife samples, eating local fish and from gardens was prohibited. This dramatically changed the daily lives of the Mohawks including their diets, which consisted mainly of fish.

The goals of this study are to look at total PCB levels and profiles in wildlife, air (before, during, post-remediation), and sediment samples. Species of wildlife included yellow perch, brown bullheads, small mouth bass, shiners, and tree swallows. The results support our hypothesis that wildlife closer to contamination sites had higher total PCB levels and different congener profiles. Congener profiles were found to be different between species of fish caught from the same locations. This also supports the theory that different species of fish metabolize PCBs differently. I would also like to compare the congener profiles seen between fish and humans and follow the path of PCBs in the food chain and the changes in composition that occur. We have also found that total PCB levels for air samples increased during remediation and decreased to below pre-remediation by the end of the process.