

## **Annual Policy Review of Criteria and Levels of Concern for Certain Toxic Substances Used in Determining Whether to Issue a Fish Consumption Advisory**

In October 2000, pursuant to § 32.1-248.01 of the *Code of Virginia*, the Virginia Department of Health (VDH) submitted its guidelines for issuance of fish consumption advisories due to contamination of fish with polychlorinated biphenyls (PCBs), polybrominated diphenyl ethers (PBDEs), mercury, dioxin, and Kepone. The guidelines included criteria and levels of concern for these contaminants that VDH would use in determining whether to issue a fish consumption advisory. In 2004, VDH revised its guidelines for PCBs, lowering the concentration of PCBs in fish for issuance of consumption advisories. The new PCB guidelines became effective July 1, 2004.

The VDH level of concern for mercury in fish tissue is 0.5 parts per million (ppm). Recently, the Environmental Protection Agency changed the action level for mercury in fish from 0.5 ppm to 0.3 ppm. Subsequently, the Virginia Department of Environmental Quality (DEQ) lowered their action level for mercury in fish tissue to that same level, 0.3 ppm. That action by the DEQ will result in the designation of additional waterways in Virginia being placed on the impaired waters list for contaminants in fish tissue. VDH recognizes that mercury in fish tissue is a contaminant and that actions taken to reduce mercury in Virginia waterways will result in an improvement in water quality and the nutritional quality of fish taken from those waters. VDH has reviewed its guidelines for issuance of fish consumption advisories and at this time, recommends retaining a health action level of 0.5 ppm. This action level will continue to be used in risk assessments that determine whether a consumption advisory is necessary and the monthly limits placed on fish consumption for each fish species. This action level is based on the reference dose recommended by the National Academy of Sciences of 0.0001 milligrams per kilogram per day (mg/kg/day) for sensitive and non-sensitive populations. Concentrations of mercury in fish tissue at the 0.5 - <1.0 ppm level result in an advisory limiting consumption to two, eight ounce meals per month; concentrations between 1.0 ppm and <2.0 ppm result in an advisory limiting consumption to one, eight ounce meal per month. When mercury concentrations exceed 2.0 ppm, VDH recommends that fish should not be consumed. VDH will continue to recommend that pregnant women, nursing mothers, and young children should not consume fish contaminated with mercury at concentrations above 0.5 ppm. Recent scientific studies published in the *Journal of the American Medical Association* have concluded that the health benefits of fish consumption far outweigh the negative effects of small quantities of contaminants found in fish. By limiting consumption of contaminated fish to one or two meals per month as suggested in the present advisories, people can still lower their risk of heart disease while limiting the effects of mercury contamination.

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