

## 2017 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) published 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 initial guidelines established the criteria and contaminant levels of concern that VDH would use for determining whether a fish consumption advisory should be issued for certain fish species in state waters. Yearly, VDH reviews the guideline criteria and levels of concern for determining whether these toxic substances in fish warrant a fish consumption advisory.

In June 2017, the VDH State Public Health Toxicologist reviewed the current guidelines and applicable science related to PCBs, PBDEs, mercury, dioxin, and Kepone and determined that a change to the current fish consumption advisory guidelines is not indicated at this time. The most current guidelines are available on the Virginia Regulatory Town Hall through the following links: [dioxin](#), [Kepone](#), [mercury](#), [PBDEs](#), and [PCBs](#). Below is the current list of contaminants and associated action levels that prompt a fish consumption advisory in Virginia:

**PCBs** – When PCBs levels in fish range from 100 to below 500 micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ), VDH recommends limiting consumption of contaminated fish species to two 8-oz meals per month. When levels equal or exceed 500  $\mu\text{g}/\text{kg}$  in fish, VDH recommends avoiding consumption of contaminated fish species.

**PBDEs** – When PBDEs levels in fish range from 0.5 to below 1.0 milligrams per kilogram ( $\text{mg}/\text{kg}$ ), VDH recommends limiting consumption of contaminated fish species to two 8-oz meals per month. When levels equal or exceed 1.0  $\text{mg}/\text{kg}$  in fish, VDH recommends avoiding consumption of contaminated fish species.

**Mercury** – When mercury levels in fish range from 0.5 to below 1.0  $\text{mg}/\text{kg}$ , VDH recommends limiting consumption of contaminated fish species to two 8-oz meals per month. When levels range from 1.0 to below 2.0  $\text{mg}/\text{kg}$ , VDH recommends limiting consumption to one 8-oz meal per month. When levels equal or exceed 2.0  $\text{mg}/\text{kg}$  in fish, VDH recommends avoiding consumption of contaminated fish species.

**Dioxin** – When dioxin levels in fish range from 2.0 to below 5.0 nanograms per kilogram ( $\text{ng}/\text{kg}$ ), VDH recommends limiting consumption of contaminated fish species to two 8-oz meals per month. When levels range from 5.0 to below 10  $\text{ng}/\text{kg}$ , VDH recommends limiting consumption to one 8-oz meal per month. When levels equal or exceed 10  $\text{ng}/\text{kg}$ , VDH recommends avoiding consumption of contaminated fish species.

**Kepone** – VDH is currently using the U. S. Food and Drug Administration action level of 0.3  $\text{mg}/\text{kg}$ . When Kepone levels in fish are 0.3  $\text{mg}/\text{kg}$  or higher, VDH recommends avoiding consumption of contaminated fish species.

The next annual review of Virginia's guidelines for issuance of fish consumption advisories due to contamination of fish will be conducted during June-July 2018.

Prepared by: Dwight D. Flammia, Ph.D.  
State Public Health Toxicologist  
June 17, 2016

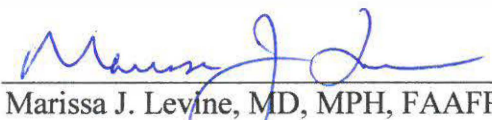
Reviewed by: Caroline Holsinger, DrPH, CPH  
Division Director  
Environmental Epidemiology

Approved:   
Laurie Forlano, DO, MPH

7/5/17  
Date

Approved:   
S. Hughes Melton, MD, MBA, FAAFP FABAM

7-7-17  
Date

Approved:   
Marissa J. Levine, MD, MPH, FAAFP

7/13/17  
Date