

2019 Annual Review of Policies Guiding Fish Consumption Advisories

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Executive Summary

The Virginia Department of Health (VDH) has published guidelines for issuance of fish consumption advisories since 2000. The annual review for 2019 was conducted in May which included a review of current guidelines and applicable science related to polychlorinated biphenyls (PCBs), polybrominated diphenyl ethers (PBDEs), mercury, dioxin, and Kepone. VDH does not have any recommendations to change any of the current advisory guidelines.

Introduction

The Commonwealth of Virginia is resourced with a number of bodies of water with abundant fish and shellfish available for consumption. However, some of these bodies of water may be contaminated resulting in fish and shellfish that contain chemicals or illness-causing microorganisms such as bacteria and viruses that expose consumers to health risks (Fish and Shellfish Advisories and Safe Eating Guidelines, 2019). Fish and shellfish advisories are meant to enable consumers to make informed decisions. The (EPA) defines a consumption advisory as “a recommendation to limit or avoid eating certain species of fish or shellfish caught from specific water bodies or types of water bodies (e.g., lakes, rivers or coastal waters) due to contamination” (Fish and Shellfish Advisories and Safe Eating Guidelines, 2019).

Background

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 guidelines’ criteria and levels of concern for determining whether these toxic substances in fish warrant a fish consumption advisory.

Findings

In May 2019, the VDH State Public Health Toxicologist reviewed the current guidelines and applicable science related to PCBs, PBDEs, mercury, dioxin, and Kepone. 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 (mg/kg), VDH recommends limiting consumption of contaminated fish species to two, 8-oz meals per month. When levels equal or exceed 1.0 mg/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 mg/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 mg/kg, VDH recommends limiting consumption to one, 8-oz meal per month. When levels equal or exceed 2.0 mg/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 (ng/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 ng/kg, VDH recommends limiting consumption to one, 8-oz meal per month. When levels equal or exceed 10 ng/kg, VDH recommends avoiding consumption of contaminated fish species.

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

Conclusion

Based on the review of current guidelines and applicable science, VDH recommends that the current fish consumption advisory guidelines remain the same at this time.

References

Fish and Shellfish Advisories and Safe Eating Guidelines. (2019, May 28). Retrieved June 10, 2019, from <https://www.epa.gov/choose-fish-and-shellfish-wisely/fish-and-shellfish-advisories-and-safe-eating-guidelines>.