

US EPA ARCHIVE DOCUMENT



Fact Sheet

Update: National Listing of Fish and Wildlife Consumption Advisories

Summary

The 1995 update for *The National Listing of Fish and Wildlife Consumption Advisories* is now available from the U.S. Environmental Protection Agency. This database includes all available information describing State-issued fish and wildlife consumption advisories for the 50 States, the District of Columbia, and four U.S. Territories. The database contains information provided to EPA as of December 1995. The number of waterbodies under advisory rose by 209 in 1995 to a total of 1,740, representing a 14% increase over 1994. The number of waterbodies under advisory represents 15% of the Nation's total lake acres and 4% of the Nation's total river miles. In addition, 100% of the Great Lakes waters and their connecting waters, and a large portion of the Nation's coastal waters are also under advisory. The number of advisories increased for five contaminants (mercury, PCBs, chlordane, dioxins, and DDT).

Background

The States, the District of Columbia, and the four U.S. Territories (hereafter referred to as States) have primary responsibility for protecting their residents from the health risks of consuming contaminated noncommercial fish and wildlife. They do this by issuing consumption advisories for the general population, including recreational and subsistence fishermen, as well as for sensitive subpopulations (such as pregnant women, nursing mothers, and children). These advisories inform the public that high concentrations of chemical contaminants (e.g., mercury and dioxins) have been found in local fish and wildlife. The advisories include recommendations to limit or avoid consumption of certain fish and wildlife species from specific waterbodies or, in some cases, from specific waterbody types (e.g., all lakes).

States typically issue five major types of advisories and bans to protect the general population and specific subpopulations that may be at greater risk from exposure to chemical contaminants in fish and wildlife. When levels of chemical contamination pose a health risk to the general public, States may issue a no consumption advisory for the general population (NCGP). When contaminant levels pose a health risk to sensitive subpopulations, States may issue a no-consumption advisory for the sensitive subpopulation (NCSP). In waterbodies where chemical contamination is less severe, States may issue an advisory recommending either the general population (RGP) or a sensitive subpopulation (RSP) restrict consumption of specific species for which the advisory is issued. The fifth type of State-issued advisory is the commercial fishing ban (CFB), in which the State prohibits the commercial harvest and sale of fish and/or wildlife species from a designated waterbody and by inference, the consumption of all species in the fishing ban in that waterbody.

As shown in Table 1, all types of advisories except the NCGP have increased in number from 1993 to 1995.

Table 1. Advisories Issued from 1993 to 1995 by Type

	1993	1994	1995
NCGP	503	462	463
NCSP	555	720	778
RGP	993	1,182	1,372
RSP	689	900	1,042
CFB	30	30	55

Advisories in Effect

The revised database identifies the types of advisories and bans that are currently in force in each State. It also includes information on:

- Species and size range of fish and/or wildlife
- Chemical contaminants identified in the advisory
- Geographic location of each advisory (including landmarks, river miles, or latitude and longitude coordinates of the affected waterbody)
- Lake acreage or river miles under advisory
- Date the advisory was issued

The database can generate national, regional, and State maps that illustrate any combination of the advisory parameters. In addition, the 1995 database can provide information on the percentage of waterbodies in each State that is currently under an advisory. The name of each State contact is also provided as well as a phone number and FAX number so users can obtain additional information concerning specific advisories.

Advisory Trends

The number of waterbodies under advisory reported to EPA in 1995 (1,740) represents a 14% increase from the number reported in 1994 (1,532 advisories) and a 36% increase from the number of advisories issued since 1993 (1,278 advisories). The increase in advisories issued reflects an increase in the number of assessments of the levels of chemical contaminants in fish and wildlife tissues. These additional assessments were conducted as a result of increased awareness of health risks associated with the consumption of chemically contaminated fish and wildlife. Figure 1 shows the number of advisories currently in effect and the increase or decrease in the number of advisories since 1994. The number of advisories decreases if States determine that the monitored concentrations of chemical contaminants in fish or wildlife tissues have decreased and no longer pose a risk to human health.

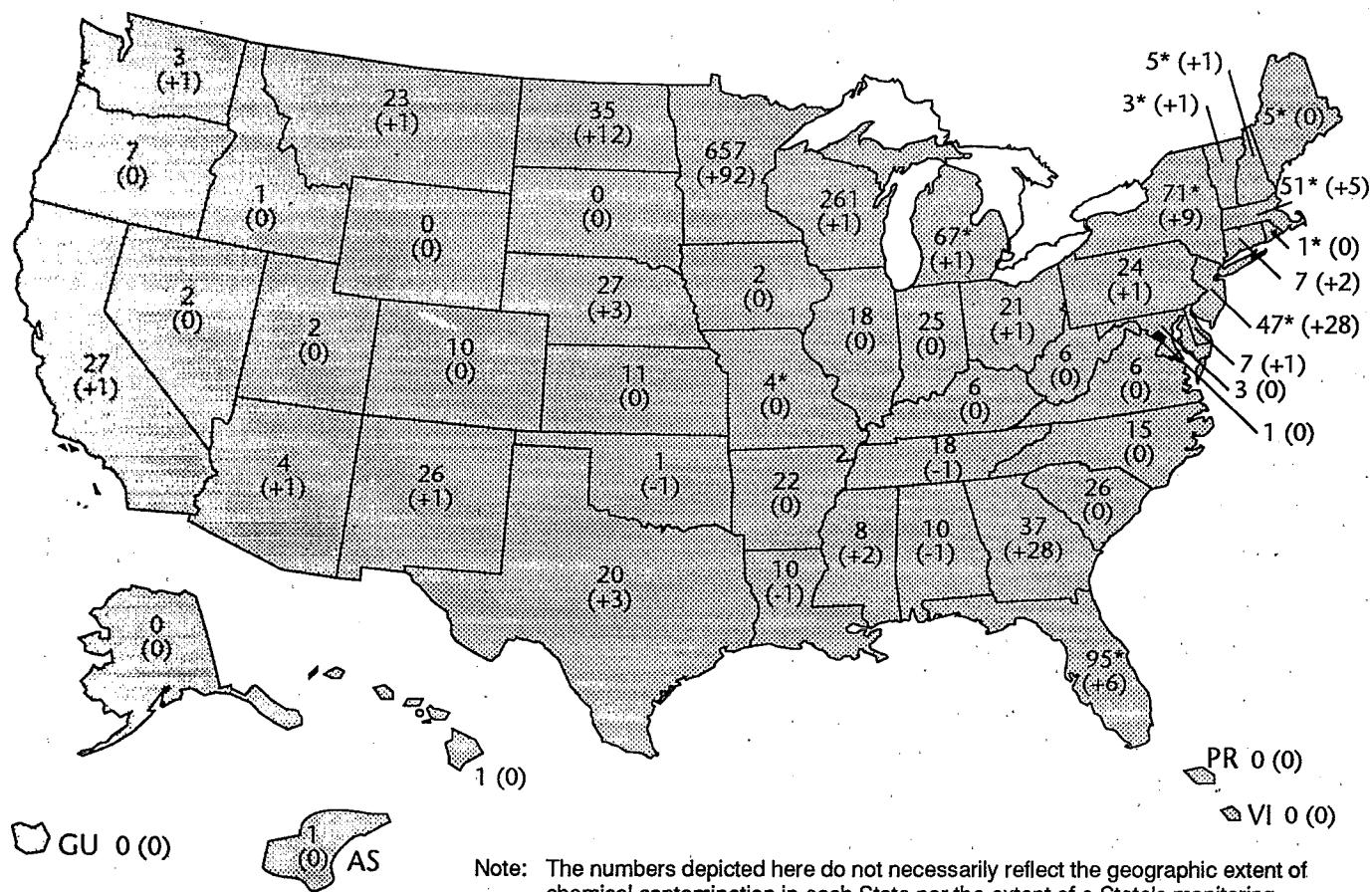
Bioaccumulative Pollutants

Although advisories have been issued for a total of 45 chemical contaminants, most advisories involve five primary contaminants. These chemical contaminants are of primary concern because they are known to accumulate in the tissues of aquatic organisms at concentrations many times higher than concentrations in the water and their concentration increases at each higher level of the food chain. As a result, top predators in a food chain, such as trout, salmon, or walleye, may have extremely high concentrations of these chemicals in their fatty tissues.

Mercury, PCBs, chlordane, dioxins, and DDT (and its degradation products DDE and DDD) were responsible for almost 95% of all fish consumption advisories in effect in 1995. This pattern was also seen in the 1993 and 1994 databases. (See Figure 2)

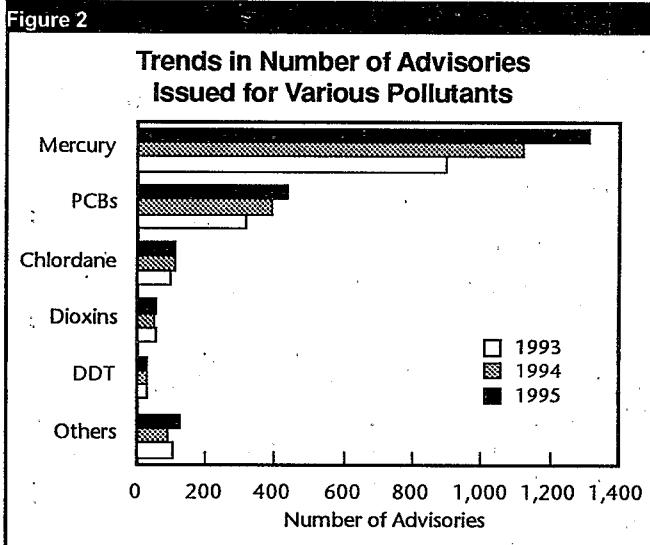
Figure 1

**Number of Fish Advisories Issued by Each State in 1995
(change in number from 1994)**



Note: The numbers depicted here do not necessarily reflect the geographic extent of chemical contamination in each State nor the extent of a State's monitoring efforts. An asterisk (*) denotes States that have issued statewide advisories for particular pollutants or types of waterbodies.

Figure 2



The number of waterbodies under advisory for all of the major contaminants except dioxins has increased since 1993. This increase is most striking for two contaminants: mercury and PCBs.

Mercury -- Advisories for mercury increased 46% from 1993 to 1995 (899 to 1,308). The number of States that have issued mercury advisories also has risen steadily from 27 in 1993 to 35 in 1995. The rise in the number of mercury advisories in 1995 is attributed primarily to issuance of new mercury advisories in 19 States.

Eight States issued 90% of the 190 new mercury advisories in 1995: Minnesota (89), New Jersey (30), Georgia (19), North Dakota (12), Massachusetts (7), Florida (6), Arkansas (4), and Nebraska (4).

Ten States have issued 90% of the 1,308 mercury advisories in effect States: Minnesota (646), Wisconsin (237), Florida (94), North Dakota (35), Massachusetts (34), New Jersey (30), Michigan (28), New Mexico (26), South Carolina (24), and Georgia (23).

PCBs -- Advisories for PCBs increased 37% from 1993 to 1995 (319 to 438). The number of States that have issued PCB advisories increased only slightly from 31 to 35 States from 1993 to 1994 and then declined to 34 States in 1995. This decline was the result of one PCB advisory being lifted in Oklahoma.

The rise in the number of PCB advisories in 1995 can be attributed to the issuance of new advisories by 12 States. The majority (83%) of the 47 new advisories, however, were issued by only two States: Minnesota (21) and Georgia (18). In addition, six States rescinded advisories for PCBs.

To date, 81% of the 438 PCB advisories have been issued by 11 States: Minnesota (117), New York (47), Michigan (44), Wisconsin (25), Indiana (22), Georgia (21), Nebraska (19), Ohio (18), Pennsylvania (16), Massachusetts (16), and New Jersey (11).

Other Pollutants -- The total number of advisories for chlordane, DDT (and its degradation products), and all other chemical contaminants also increased 16%, 3%, and 16%, respectively, from 1993 to 1995.

The total number of advisories for dioxins was highest at 59 in 1993, then declined to 54 in 1994, and rose to 55 advisories in 1995. Dioxins are one of several chemical contaminants for which advisories have been rescinded by some States, in part because many pulp and paper mills have changed their pulping and bleaching processes.

Wildlife Advisories

The database also contains several wildlife advisories. Four States have issued consumption advisories for turtles: Arizona (3), Massachusetts (1), Minnesota (5), and New York (statewide advisory). One State (Massachusetts) has an advisory for frogs, and New York has a statewide advisory for waterfowl (mergansers).

1995 Advisory Listing

The 1995 database lists 1,740 waterbodies currently under advisory in 47 States, the District of Columbia, and the U.S. Territory of American Samoa. The database counts one advisory for each waterbody name regardless of the number of fish or wildlife species that are affected or the number of chemical contaminants detected at concentrations of human health concern.

Ten States (Florida, Maine, Massachusetts, New Hampshire, New Jersey, New York, Michigan, Missouri, Rhode Island, and Vermont) currently have statewide advisories in effect. A statewide advisory is issued to warn the public of the potential for widespread contamination of certain species of fish in certain types of waterbodies (e.g., lakes). In such a case, the State may have found a level of contamination of a specific pollutant in a particular fish species over a relatively wide geographic area that warrants advising the public of the situation.

The database also lists advisories issued in 1995 by 47 States for 1,730 specifically named waterbodies. These waterbodies represent about 15% of the Nation's lake acreage and 4% of the Nation's river miles. In addition, 100% of the Great Lakes waters and their connecting waters and a large portion of the Nation's coastal waters are also under advisory. The Great Lakes waters and their connecting waters are considered separately from other lakes, and river miles.

The percentages of lake acres and river miles in each State that are currently under a fish advisory are shown in Figures 3 and 4, respectively. Comparing 1994 and 1995, all of the Great Lakes and their connecting waters were under advisory in both years. However, only 14% of lake acres and 4% of river miles nationwide were under advisory in 1994.

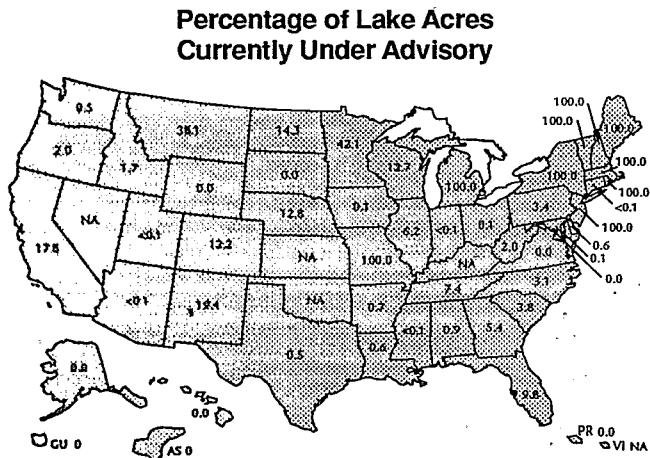
Database Use and Access

The database is designed primarily to help Federal, State, and local government agencies and Indian Tribes assess the potential for human health risks associated with consumption of chemical contaminants in noncommercial fish and wildlife. It may also be used by the general public to make informed decisions about the waterbodies in which they choose to fish or harvest wildlife; the frequency with which they fish the waterbodies; the species, size, and number of fish they collect; and the frequency with which they consume fish from specific waterbodies.

The 1995 update of the database is available for downloading from the Internet through the following URL:

<http://www.epa.gov/OW/OST/Tools>

Figure 3



Nine States have 100% of their lake acres under fish advisories (these include some States with statewide advisories), another 8 States have 10% to 50% of their lake acres under advisories, 24 States have <10% of their lake acres under advisories, and 9 States have no lake acres under advisories.

NA = Not available, lake acreage under advisories not known.

The 1995 version of the National Listing of Fish and Wildlife Consumption Advisories is PC-based and is also available to the public free of charge on 3.5-inch diskettes. For copies of the diskettes, contact:

U.S. Environmental Protection Agency
National Center for Environmental
Publications and Information
11029 Kenwood Road
Cincinnati, Ohio 45242
(513-489-8190)

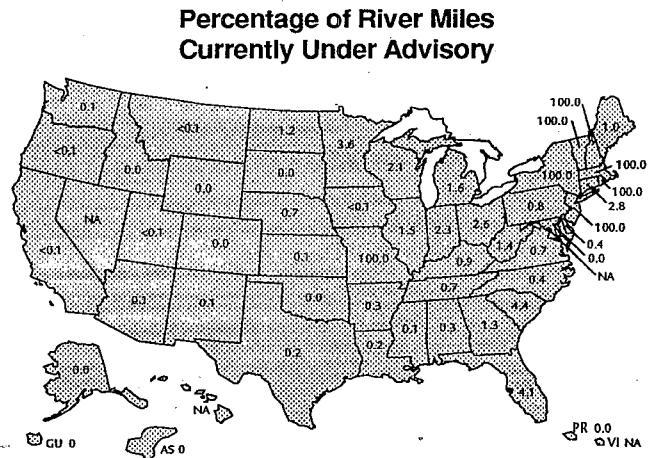
Refer to document number EPA-823-C-96-011.

For further information on specific advisories within a particular State, contact the appropriate State agency contact given in the database.

For more information concerning national fish contamination information, contact:

U.S. Environmental Protection Agency
Office of Science and Technology
Standards and Applied Science Division (4305)
401 M Street SW
Washington, DC 20460

Figure 4



Seven States have 100% of their river miles under fish advisories (these include some States with statewide advisories), 34 States have <10% of their river miles under advisories, and 10 States have no river miles under advisories.

NA = Not available, river miles under advisories not known.