

Sea Grant Initiative Helps Ensure Safety of Fishermen's Catch

Tuna, bluefish, mahi-mahi, mackerel, amberjack, marlin and wahoo are frequently found on restaurant menus or in retail stores all along the eastern seaboard. But these popular fish have something else in common. If not kept at the proper temperature from the time the fish are caught until they are consumed, compounds like histamine can begin to form in the fish tissue. When consumers eat fish that have high levels of these compounds an illness known as scombroid fish poisoning which has symptoms similar to an allergic-type reaction can occur.

Fish from commercial sources as well as those recreationally caught have been associated with scombrototoxin poisoning, currently the most frequent type of illness associated with the consumption of finfish in the U.S. For commercial seafood products, current Food and Drug Administration Hazard Analysis and Critical Control Point (HACCP) regulations require seafood processors and handlers to have effective time/temperature controls in place to prevent histamine formation in susceptible fish species. Processors who receive these fish from fishermen are encouraged to obtain records and conduct monitoring procedures that demonstrate that the fish were handled properly on board the vessel or test for histamine before they accept their catch.

A nationally-funded Sea Grant team developed outreach training materials that educators

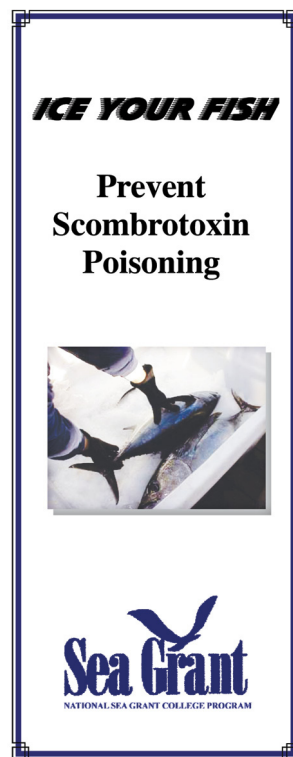
can use with commercial and recreational fishermen to make them aware of this potential food safety problem and help them to identify and implement effective strategies to prevent it. Training materials include fact sheets that describe control measures and FDA requirements, model control plans for various commercial fisheries, a PowerPoint presentation to reach targeted audiences, and an educational display for conferences and meetings. These resources and an extensive reference list are available at www.iceyourfish.seagrant.org hosted by the Maryland Sea Grant program.

This project is expected to have a significant impact in helping commercial fishermen improve their ability to implement effective on-board handling systems for fish species most "at risk" for developing scombrototoxin. As a result, commercial fishermen can improve their ability to comply with current FDA guidance for appropriate HACCP controls for this food safety hazard. Outreach efforts to recreational fishermen and charter and party boat operators should enhance both the safety and quality of the recreational

catch. It is hoped that the ultimate indicator of the project's success will be a decrease in the number of food borne illness incidents caused by temperature abused fish that have developed scombrototoxin (histamine).

NYSG: Part of a National Initiative

In 2002, funded by the National Sea Grant College Program's competitive Fisheries Extension Enhancement Initiative, a project was selected to develop educational materials and training strategies to help commercial and recreational fishermen understand this food safety hazard and implement effective controls to prevent it. Coordinated by Tom Rippen of MDSG, the national project team members included: Ken Gall and Dale Baker (NYSG), Dan Jacobs (MDSG), Lori Pivarnik (RISG), Doris Hicks (DESG), George Flick and Mike Jahncke (VASG), Dave Green and Barry Nash (NCSG), Keith Gates (GASG), Steve Otwell (FLSG), Jon Bell (LASG), and Mike Morrissey (ORSG). Experts from the FDA Office of Seafood and industry members also worked closely with the Sea Grant team throughout the project.



— Ken Gall and Barbara Branca