



Project Summary

Directory to Literature on Stool-Shed Viruses and Shellfish: Illness Outbreaks and Virus Detection Methods

Fred P. Williams, Jr., and Eric A. Grab

The volume comprises a 16-page bibliography of technical literature on stool-shed viruses and shellfish. It covers illness outbreaks and virus detection methods.

This Project Summary was developed by EPA's Environmental Monitoring Systems Laboratory, Cincinnati, OH, to provide to investigators concerned with the detection of virus-contaminated shellfish a source of references to pertinent literature in this field (see Project Report ordering information at back).

This directory was developed as part of an effort to assemble and review the scientific and technical literature relating to bivalve molluscan shellfish and human stool-shed viruses. Shellfish exposed to fecally polluted waters are known to concentrate from those waters human viruses. Although the uptake of these stool-shed viruses is not detrimental to the exposed shellfish, the consumption of virus-contaminated shellfish by humans can cause illness. Outbreaks of such shellfish-borne illness occur in the United States and in many other countries. One consequence of the development and expansion of human coastal communities is that shellfish habitats are becoming increasingly at risk for exposure to fecally polluted waters. It is thus important for investigators concerned with the detection of contaminated shellfish to have effective methods available for use. The aim of this directory is to provide investigators, both within and outside of the Agency, with a source of references to literature on such methods. Although the primary focus of the directory is on methods, references describing shell-

fish-borne outbreaks of viral illness have also been included. Such references are evidence of the public health risk associated with the consumption of contaminated shellfish.

The directory has been divided into four subject areas: Shellfish-Borne Outbreaks of Viral Illness, Methods for Recovering Viruses from Shellfish, Use of New Virus Assay Procedures, and Virus & Shellfish Miscellanea. Within the four subject areas there are additional subdivisions. Individual references have been multiply listed and appear under all appropriate subject and subdivision headings. Every effort has been made to provide as comprehensive a list of references as possible. Users of this directory should be aware, however, that the listed references vary greatly in their content. In some references, methods and procedures have been described in great detail. In other references, methods and procedures are less well described. The directory does not reflect an attempt to validate the findings of any of the authors listed. Inclusion of a particular reference in this directory should not be considered an endorsement of that reference.

A review covering much of the literature presented in this directory has recently appeared in *Environmental Science & Technology* (Vol. 26, pp. 689-696, 1992) under the title "Contamination of Shellfish by Stool-Shed Viruses: Methods of Detection" (F.P. Williams, Jr. and G.S. Fout, authors).



Fred P. Williams, Jr., and Eric A. Grab are the EPA authors. The complete report, entitled "Directory to Literature on Stool-Shed Viruses and Shellfish: Illness Outbreaks and Virus Detection Methods," will be available only from:

**Virology Branch, Mail Stop 320
Microbiology Research Division
Environmental Monitoring Systems Laboratory
U.S. Environmental Protection Agency
Cincinnati, OH 45268**

**United States
Environmental Protection Agency
Center for Environmental Research Information
Cincinnati, OH 45268**

**Official Business
Penalty for Private Use
\$300**

EPA/600/SR-92/072

**BULK RATE
POSTAGE & FEES PAID
EPA
PERMIT No. G-35**