In February 1982, the death of a Belgian man who ate U.S. canned salmon contaminated with botulinum toxin triggered one of the largest series of food recalls in the Food and Drug Administration's (FDA's) recent history. FDA traced the cause to a small hole in the can made by defective canning equipment in Alaska. The hole allowed the deadly botulinum toxin to form. As a result of this incident, nine Alaskan canneries voluntarily recalled about 23 million cans of their 1980 and/or 1981 production, which totaled nearly 60 million cans. Except for the Belgian incident, no botulism cases from canned salmon have been reported.

GAO found evidence suggesting that two additional canneries that had produced defective cans should possibly have participated in the recalls. GAO also found instances of recalled products being mistakenly reintroduced into the market without being properly examined for defects.

Industry has since examined about 98 percent of the recalled salmon to screen out and destroy defective cans and has corrected the defective canning equipment. Industry has also strengthened its quality controls and taken other measures to help prevent similar incidents.

FDA's Oversight Of The 1982 Canned Salmon Recalls
B-210249

The Honorable John D. Dingell
Chairman, Subcommittee on Oversight
and Investigations
Committee on Energy and Commerce
House of Representatives

Dear Mr. Chairman:

At your request, we have reviewed the Food and Drug Administration's (FDA's) oversight of the 1982 salmon recalls. We determined (1) the roles and responsibilities of FDA and the industry in the recall, (2) FDA's basis for and the processes followed during the recalls, (3) the disposition of the recalled salmon, (4) the corrective measures taken by the industry to improve its quality controls, and (5) the impact of the recall on FDA and the salmon industry.

The 1982 salmon recalls were one of the largest series of recalls in FDA's history, affecting nearly the entire Alaskan salmon industry. Nine Alaskan canneries recalled about 23 million cans of salmon. FDA provided oral comments on the matters discussed in this report. We have incorporated those comments where appropriate.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 10 days from its cover date. At that time we will send copies to the Secretary of Health and Human Services, other congressional committees, and interested parties and make copies available to others upon request.

Sincerely yours,

Richard L. Fogel
Director
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**DIGEST**

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2 **A CASE OF BOTULISM: EVENTS LEADING TO THE RECALLS**
   - Initial recall included one Alaskan cannery
   - FDA/industry efforts to determine cause of can defects
   - FDA expands investigation to 30 other Alaskan canneries
   - Summary

3 **TWO MORE CANNERIES SHOULD POSSIBLY HAVE PARTICIPATED IN THE RECALLS**
   - Salmon in defective cans found in U.S. distribution terminal
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4 **THE RECALLS: THEIR IMPACT AND RESULTANT CORRECTIVE ACTIONS**
   - Retrieving the recalled salmon from the market
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**ILLUSTRATION**

Pictures of can with hole that led to salmon recalls
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>FDA</td>
<td>Food and Drug Administra</td>
</tr>
<tr>
<td>GAO</td>
<td>General Accounting Offic</td>
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<tr>
<td>NFPA</td>
<td>National Food Processors</td>
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