ALASKA TRAUMA REGISTRY

By Ms. Barbara L. Simonsen

Mrs. Kathleen W. Johnson: Our last speaker for this session is Ms. Barbara L. Simonsen. Since 1985, Barbara Simonsen has been the Quality Assurance Coordinator for the Providence Hospital Emergency Department and since 1988 the Alaska Trauma Registrar for the Alaska Trauma Registry. She is a member of the Advisory Council on Emergency Medical Services, the Anchorage EMS Advisory Board, and the Alaska Trauma Register Steering Committee. Ms. Simonsen received her Bachelor's degree in Nursing in 1975 from Montana State University. Ms. Barbara Simonsen:

The information that I am going to present is the information that we have abstracted from the Alaska Trauma Registry. I want to briefly explain the Trauma Registry so you understand what it includes and does not include.

The Alaska Trauma Registry is a registry of all people that are seriously traumatized and either require hospitalization, transfer to a higher level of care, or die in the emergency room. We include all intentional and unintentional injuries. In the State of Alaska, we have decided to include two categories that are not routinely included in other state registries.

- First, we include people who are injured due to decrease in temperature: hypothermia. We have a lot of injuries in this state due to cold exposure and this included a number of people involved in the fishing industry.
- Second, we also include near-drownings and drownings.

The Trauma Registry includes many aspects surrounding the injury. It includes patient data, demographics, age, sex, residence, where the injury occurred, and mechanism of injury.

You will find that we have a little trouble translating the mechanism of injury information, specifically the fishing injuries, because we use ICD-9 codes, and these codes are limited. Additionally we include pre-hospital care, the care provided in the hospital, length of stay, disability, if any, and payment source.

> We would like to make this information available in the hopes that it will serve as a tool for making the fishing industry a safer occupation.

The information that I am going to present to you today is from March of 1988 through February of 1992. This information is only from the three hospitals here in Anchorage, so only the patients injured in the Anchorage area or were injured so severely that they had to be transported into Anchorage facilities will be included.

Unfortunately my presentation will not include the Southeast Region (of Alaska), and I recognize that the Southeast is a big fishing area. In the near future we will have the 1991 data for all the hospitals in the State.

When we looked at this information, we came up with 272 injuries that we can prove are fishing-related injuries out of the 367 injuries that occurred on a ship. When we first started collecting data for the Trauma

Registry, we did not include occupation. We have since identified that the patient's occupation is important information to collect.

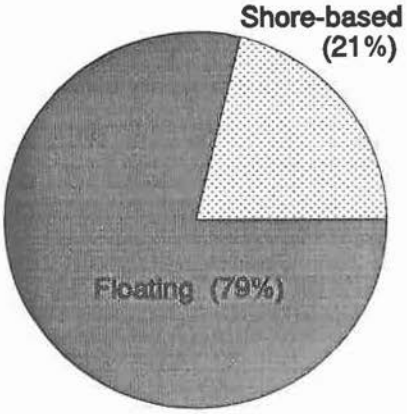

Figure 1. Fishing-Related Injuries.

Of the 367 vessel injuries, they could have been on a cruise ship or water transport, but not specifically fishing injuries. We are looking back, but it means manually pulling all those records, between 272 to 367, to see if they are fishing-related.

Of the 272 injuries, 79 percent were in floating vessels on the ocean and 21 percent were in the shore-based processing plants, as shown in Figure 1. Figure 2 shows that 62 percent of the injuries were in the Aleutian Pribilofs; Bristol Bay had 10 percent; Kenai had 6 percent; Kodiak, 10 percent; and Prince William Sound, 4 percent.

The region of occurrence is listed according to the place that the first medical intervention occurred. Unfortunately the medical record does not always include the exact location of the injury, but usually lists the location of the patient's first medical care.

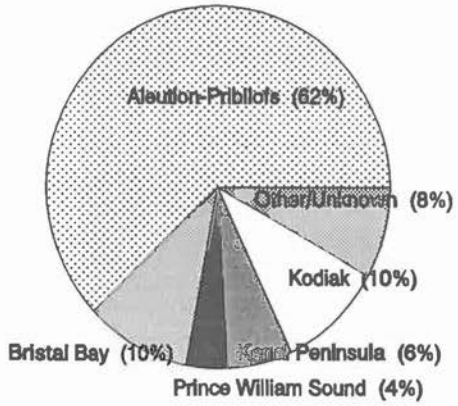

Figure 2. Region of Occurrence.

Figure 3 shows that 62 percent of the people injured live outside of Alaska. Some are foreign nationals, but most are from the Northwestern United States; 38 percent are from Alaska. Figure 3 also shows the breakdown according to their city of residence in Alaska.

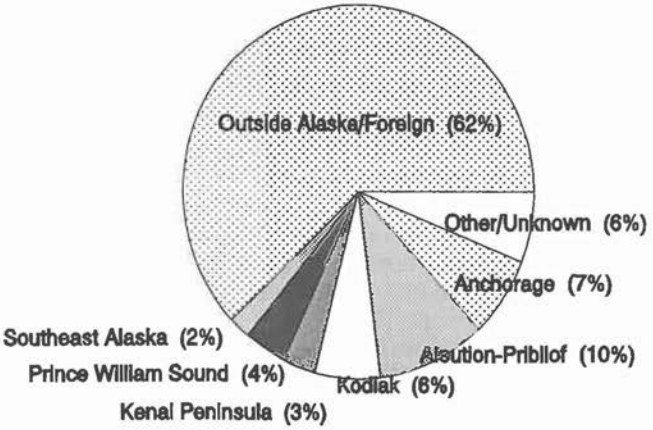

Figure 3. Patient Residence.

As I said before, we utilize ICD-9 codes for mechanism of injuries and these codes are not very specific for fishing injuries. The codes for water-related injuries include falls, fall on stairs, fall from one level to another, struck by machinery, and another category that is a catchall for injuries.

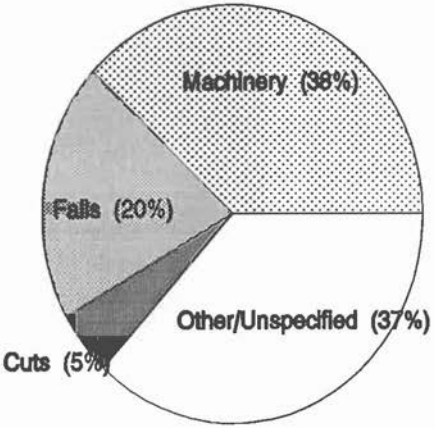

Figure 4. Mechanism of Injury.

As shown in Figure 4, we are able to identify that 38 percent are machinery injuries, 20 percent falls, 5 percent cuts and the other 37 percent were injuries such as hit by a wave, struck by a crab pot, entanglements, altercations, and all other types of injuries.

As shown in Figure 5, the largest number of injuries are extremity injuries. Sixty-three percent are limb injuries, 20 percent are head and neck injures, and 14 percent are injuries to trunks.

As shown in Figure 6, 86 percent of the patients were dismissed home. Of that, 10 percent had permanent disabilities. Three percent were transferred to an acute care rehabilitation center. That 3 percent can be considered disabled, so a total of 13 percent were permanently

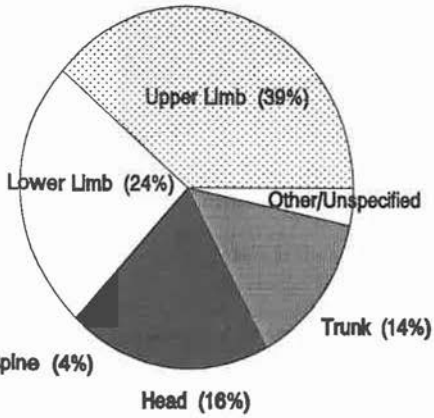

Figure 5. Body Region of Injury.

disabled, 1 percent died, and 86 percent where dismissed home without a permanent disability. That 86 percent may have had short-term disability but should have returned to their pre-injury status.

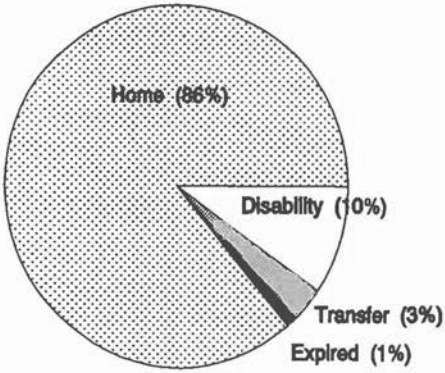

Figure 6. Patient Discharge.

Sample injury descriptions that are recorded in addition to E-codes are —

- *Struck in head by a block and tackle on the boom of a...*
- *2000 pound steel door fell across pelvis on fishing boat...*
- *Cleaning battery on fishing barge and battery exploded...*
- *Crab pot weighing 600 lbs fell on leg.*

- *On fishing vessel, hand amputated in surimi machine.*
- *Halibut hook caught in wrist and nearly carried him up...*
- *Crabbing boat, pulling up crab pots and ground line snapped.*
- *Caught arm in gilling machine conveyor belt when trying...*
- *Slipped on deck of fishing vessel.*

We collect as much information as we can to provide a more complete description of the injuries. It is unfortunate that we do not have statewide information for 1991 and 1992 because in the last few months of data collection, I can tell you that there have been a large number of fishing- related injuries that are not captured in the information I am presenting today.

Figure 7 refers to payment source. Seventy-five percent are identified as workers' compensation injuries. Thirty-seven percent have private insurance, 7 percent self-pay, 30 percent are Fishermen's Fund, 10 percent are Indian Health Service, and 15 percent are other.

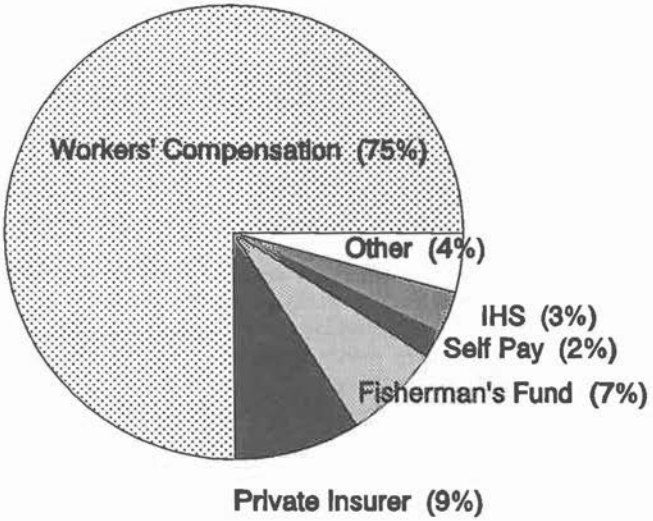

Figure 7. Source of Hospital Payment.

In the future, we will be able to provide more information related to fishing injuries and we would like to make this information available in the hopes that it will serve as a tool for making the fishing industry a safer occupation. Information is available upon request from the Alaska Department of Health and Social Services, Emergency Medical Services Section, in Juneau. □

CDC

CENTERS FOR DISEASE CONTROL AND PREVENTION

NIOSH

Proceedings of the National Fishing Industry Safety and Health Workshop

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

PROCEEDINGS

of the

NATIONAL FISHING INDUSTRY

SAFETY AND HEALTH WORKSHOP

Edited by

Melvin L. Myers, M.P.A.

and

Michael L. Klatt, M.S.

October 9-11, 1992
Anchorage, Alaska

Convened by

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

January 1994

DISCLAIMER

Sponsorship of the FISH Workshop and these *Proceedings* by the National Institute for Occupational Safety and Health (NIOSH) does not constitute endorsement of the views expressed or recommendations for use of any commercial product, commodity, or service mentioned. The opinions and conclusions expressed in the papers are those of the authors and not necessarily those of NIOSH.

Recommendations are not to be considered as final statements of NIOSH policy or of any agency or individual who was involved. They are intended to be used in advancing the knowledge needed for improving worker safety and health.

Publication Dissemination, DSDTT
National Institute for Occupational Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226
FAX (513) 533-8573

For information on other occupational safety and health problems, call:
1-800-35-NIOSH

DHHS(NIOSH) Publication No. 94-109