Health and safety measures in the Norwegian fishing fleet

Senior research scientist Ingunn Marie Holmen
SINTEF Ocean, Trondheim, Norway
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Illustration from Fugelli & Aasjord (1992): The fisherman's work environment handbook (Fiskerens arbeidsmiljøbok)
Number of fishing vessels in Norway 1985-2017

Active fishing vessels in the years 1985-2017

Source: The Norwegian Directorate of Fisheries
Norwegian fishing vessel groups

Small coastal fishing vessels < 15 m

Deep sea fishing vessels >28 m
Norwegian fishing vessel groups (2)

Medium to large coastal fishing vessels
15-21 m, 21-55 m
Key figures for the Norwegian fishing fleet

- 4,669 active fishing vessels with registered income > 50,000 NOK (≈USD 6,200)

<table>
<thead>
<tr>
<th>Very small coastal &lt;10 m</th>
<th>Very small coastal 10 m -</th>
<th>Small coastal 11 m -</th>
<th>Medium coastal 15 m -</th>
<th>Large coastal 21 m -</th>
<th>Deep sea fishing 28 m -&gt;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2132</td>
<td>1461</td>
<td>625</td>
<td>116</td>
<td>104</td>
<td>231</td>
<td>5390</td>
</tr>
</tbody>
</table>

- Production of fish (tons):

<table>
<thead>
<tr>
<th></th>
<th>Capture</th>
<th>Aquaculture</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>93,400,000</td>
<td>73,800,000</td>
<td>167,200,000</td>
</tr>
<tr>
<td>Norway</td>
<td>2,185,513</td>
<td>1,325,182</td>
<td>3,510,695</td>
</tr>
</tbody>
</table>

Norwegian Fishers

Source: The Norwegian Directorate of Fisheries
Occupational health and safety challenges in the Norwegian fisheries
Fishing fatalities in Norway per year 1990 – May 2018
(SINTEF Ocean database)
Fishing fatalities in Norway 1990 - May 2018
Fatality mode/fleet group

- Vessel disaster
- Overboard accident
- Drowning in port
- Crush/impact
- Fire/gas/electricution
- Falling/flying object
- Accidental fall
- Sting/cut

Fleet groups:
- Deep sea fishing fleet; Loa > 28 m
- Med. & large coastal fleet > 15 m
- Small coastal fishing fleet < 15 m
Occupational injuries 2000 – 2017 – mode of injury
(Registered by the Norwegian Maritime Authority)
Contributing causes of occupational accidents in Norwegian fisheries

- Climate/weather and vessel movements
- Vessel stability/loading
- Fishers' performance (fatigue)
- Training and experience
- Insufficient safety management
- Lack of planning and risk assessments
- PPE not used
- Working alone
- ...

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Safe communication on board?

- 500-900 foreign fishermen are employed in the Norwegian fishing industry.
- Fishers do not see language and communication barriers as risk factors.
- Fishing experience is a more important qualification than language proficiency.
- Possible implications for safety in the event of something unexpected.

Work environment and health in the Norwegian fishing fleet

- 832 active fishers participated in the survey
- High job satisfaction: 99% yes!
Self-reported absence

Absence: 29% (241 out of 832 respondents) 95 out of the 241 longer than 8 weeks in total
Work-related pain (often/very often)
Safety measures
Mandatory safety training for fishermen
Regulations and controls

- Ship Safety Act
- Safety management
- Work environment, safety and health on board – safety representative
- Construction and inspection of vessels
- Vessel certificate documenting technical condition
  • Inspections by the Maritime Authority
Mandatory safety management system on board

- Mandatory to establish and maintain a safety management system on all fishing vessels
- Perform and document risk analyses
- Internal control
- Ensure employee participation
Improved fishing technology

- New vessel designs
- High focus on fish quality
- Ergonomic design of workplaces
  - Remodeling
- Safety barriers
- Attractive workplaces

New Prestfjord trawler to be delivered in 2020, 77 m
Rolls-Royce design
SimFisk project: Realistic simulator for training, practice and technology concept testing in the fisheries

• Tool for standardised training in a safe environment
• Developed a trawler simulator demo
• Other vessel types and fishing gears will follow
• Supported by the Norwegian Research Council
"HSE in the fishing fleet" collaboration

- Well-established tripartite cooperation
- Campaigns – films
- Safety conference for fishers
- Webpage launched 2010
  - Easy access to relevant information on safe operation of vessel; regulations, inspection checklists, stability etc.
- Fiskrisk.no – online risk assessment tool

www.yrkesfisker.no
Safer work clothing for fishermen

Regatta Fisherman (on market in 2005)

Northern Norway, June 2006
Photo: Norwegian Society for Sea Rescue
Thank you for listening!

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E-mail: Ingunn.Holmen@sintef.no
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