

# **Looking for Solutions: Community- Based Workshops on the Work- related Health Challenges in Shellfish Processing Communities**

-

## **Carbonear, Tors Cove, Goose Bay and Battle Harbour Spring and Summer 2006**

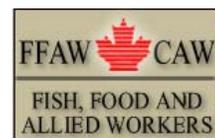
### **A Summary Report**

**October 2006**



Public Health  
Agency of Canada

Agence de santé  
publique du Canada



## Acknowledgements

Many thanks to our Participants:

Worker and Company Representatives,  
Nunatsiavut Department of Health & Social Development,  
Labrador Health Centre,  
Department of Fisheries and Aquaculture,  
Department of Government Services,  
Department of Health & Community Services,  
Fish, Food and Allied Workers Union (FFAW),  
Association of Seafood Producers,  
Newfoundland and Labrador Lung Association,  
Town Representatives,  
and  
OHS consultants

Thanks also to our funders:  
Public Health Agency of Canada (PHAC),  
Canadian Institutes of Health Research (CIHR),  
Atlantic Network for Prevention Research (ANPR),  
and  
SafetyNet.

Please Note: The opinions expressed in this publication are those of the author and do not necessarily reflect the views of the Public Health Agency of Canada.

## **TABLE OF CONTENTS**

	<b>Page</b>
<b>1.0 EXECUTIVE SUMMARY</b>	<b>4</b>
<b>2.0 INTRODUCTION</b>	<b>4</b>
<b>3.0 A COMMUNITY BASED APPROACH</b>	<b>6</b>
<b>3.1 What has happened so far?</b>	
<b>3.2 The Groups Gathered</b>	
<b>4.0 UNDERSTANDING THE DYNAMICS WHICH IMPACT OHS IN SHELLFISH PROCESSING</b>	<b>7</b>
<b>4.1 From the perspective of the workers</b>	<b>7</b>
<b>4.2 From the perspective of the companies</b>	<b>8</b>
<b>4.3 From the perspective of the communities</b>	<b>8</b>
<b>4.4 From the perspective of health professionals</b>	<b>9</b>
<b>4.5 Communication Barriers</b>	<b>9</b>
<b>4.6 Need for Action</b>	<b>9</b>
<b>5.0 RISKS AND RESOURCES</b>	<b>9</b>
<b>5.1 OHS Risks</b>	<b>9</b>
<b>5.2 Resources</b>	<b>11</b>
<b>5.3 Questions Arising</b>	<b>12</b>
<b>6.0 THE BATTLE HARBOUR MEETING</b>	<b>12</b>
<b>7.0 CONCLUSION</b>	<b>13</b>

## 1.0 Executive Summary

Shellfish processing can be dangerous work. Occupational health challenges have been identified as a serious issue within the shellfish industry. An estimated 32,000 workers living in hundreds of rural and remote communities worked in shellfish processing in Eastern Canada in 2004 (see [www.shellfishohs.ca](http://www.shellfishohs.ca)). It is estimated that up to 15% of workers in Labrador and Newfoundland could suffer from occupational allergy and asthma to snow crab. Other shellfish workers are also at risk, and work-related musculo-skeletal disorders are a common problem in the industry. Some of these health problems are poorly understood and consequently they are less commonly compensated than other injuries.

Representatives from the industry gathered together with policy makers, researchers and community groups in a series of four meetings in Newfoundland and Labrador to explore the occupational health risks and resources that exist in communities in this province, to expand on our understanding of the issues of concern and to explore the possibility of a community based approach (CBA) to the problem. A CBA depends on community participation, requires collaborative decision-making and promotes sharing knowledge and information. With a CBA, those who are most affected by workplace health & safety conditions are involved in finding solutions to the occupational health problems they experience. This approach to prevention is a good fit for communities in Labrador and Newfoundland because it allows those most involved and aware of the realities of their communities – realities such as workers with occupational diseases, resource scarcity and economic uncertainty – to play a leading role in deciding when and how to intervene.

All of these meetings demonstrated the value of coming together around an issue, as important discussions were had, questions asked, and opinions voiced. At the Battle Harbour meeting in particular, participants were able to take some steps toward exploring what a Community Based Approach (CBA) to dealing with occupational health issues would look like in their area. A steering committee resulted from this discussion, allowing for the possibility of the southern Labrador coast acting as a potential model for how other communities in Atlantic Canada can begin to develop their own CBA projects.

## 2.0 Introduction

Shellfish processing can be dangerous work. Occupational health challenges have been identified as a serious issue within the shellfish industry. Common risks to health include Occupational Asthma and Allergies (OAA), work-related musculoskeletal disorders (WMSDs), envenomation, injuries related to accidents, and others.

An estimated 32,000 workers living in hundreds of rural and remote communities worked in shellfish processing in Eastern Canada in 2004. Rural Atlantic Canada presents many unique challenges when addressing the area of occupational health and safety. For example, it is estimated that up to 15% of workers in Labrador and Newfoundland could

suffer from occupational allergy and asthma to snow crab.<sup>1</sup> Other shellfish workers are also at risk, and WMSDs are a common problem in the industry.<sup>2</sup> Some of these health problems are poorly understood and consequently they are less commonly compensated than other injuries.

Representatives from the industry, from government and from the health care sector gathered together with researchers at four regional meetings between February and July 2006 to explore the occupational health risks and resources that exist within those communities, to expand on our understanding of the issues of concern and to explore the possibility of developing a community based approach (CBA) to prevention developed in collaboration with policy makers and researchers. Two meetings were held in Labrador, in Battle Harbour and Goose Bay, and two were held on the island of Newfoundland, in Carbonear and Tors Cove.

All of these meetings demonstrated the value of coming together around an issue, as important discussions were had, questions asked, and opinions voiced. Due to the number of people involved and the time available, participants at the Battle Harbour meeting were able to move beyond discussion into concrete action. A steering committee was established to develop a Community Based Approach (CBA) to occupational health issues in shellfish processing communities in their area.

This report describes the OHS risks in shellfish processing discussed in these meetings, as well as community and government assets that could be mobilized to promote prevention of work-related illness and injury within the shellfish processing industry.

SafetyNet, a community research alliance based at Memorial University in St. John's <http://www.safetynet.mun.ca> has partnered with several other groups, including the Workplace Health Safety and Compensation Commission (WHSCC), the Fish Food and Allied Workers Union (FFAW) and the Newfoundland and Labrador Lung Association to work with several communities on a project to develop and test pilot several CBA's to shellfish processing occupational health in Atlantic Canada. As part of this project, SafetyNet has developed a website on OHS in the shellfish processing industry <http://www.shellfishohs.ca> and will also develop a manual and an associated resource kit, as well as other tools to help communities deal with OHS issues. As the project moves forward, these tools will be adapted and will be available to communities in the other three Atlantic Provinces as they develop their own pilot CBAs.<sup>3</sup>

---

<sup>1</sup> Howse et al (2006). Gender and snow crab occupational asthma in Newfoundland and Labrador, Canada. *Environmental Research*. 101: 163 – 174.

<sup>2</sup> Solberg, Shirley and Andrea Barron (2006). WMSDs and workplace factors affecting workers in a fish and crab processing plant. [Conference presentation]. Memorial University of Newfoundland.

<sup>3</sup> This project is funded by the Public Health Agency of Canada, Canadian Institutes for Health Research and by the Atlantic Network for Prevention Research, with support from SafetyNet and Memorial University. The tools will also be posted on [www.shellfishohs.ca](http://www.shellfishohs.ca) on shellfish processing OHS in Eastern Canada where they can be accessed by workers, employers, health professionals and others interested in these issues.

### **3.0 A Community-Based Approach**

Community Based Approaches (CBA) involve a range of different individuals and organizations that are reflective of the community. CBA is particularly appropriate in rural and remote communities such as those in Newfoundland and Labrador, because those involved are aware of the realities of the communities – realities such as workers with occupational diseases, resource scarcity and economic uncertainty. A community-based approach is a good fit with occupational health and safety issues because it depends on community participation, requires collaborative decision-making and promotes sharing knowledge and information. Because a CBA focuses on participation on every level, it allows for power, control, responsibility and ownership of a project to be shared. Essentially those who are most affected by workplace health & safety conditions and a broad range of community groups and assets are recruited in an attempt to find solutions to the occupational health problems they experience.

#### **3.1 What has happened so far?**

Phase One of the CBA: Regional Meetings in Newfoundland and Labrador

Four regional meetings were held in Newfoundland and Labrador during the spring and summer of 2006. Half day sessions were held in Carbonear, Tors Cove and Goose Bay concluding with a two day meeting in Battle Harbour from Thursday, July 13<sup>th</sup> to Friday, July 14<sup>th</sup>, 2006. The meetings were designed to bring key stakeholders together to:

- discuss the occupational health and safety (OHS) hazards associated with processing shellfish
- learn more about occupational snow crab asthma and allergy and work-related musculoskeletal disorders through presentations by researchers and occupational health and safety consultants
- identify assets and barriers that help or hinder the ability to work on OHS issues in communities and regions
- begin the process of collaboratively looking for solutions through policy innovation and community based approaches.

#### **3.2 The Groups Gathered**

For each of the regional meetings, all plants processing shellfish within the regions were invited through fax and telephone to send worker and management representatives to their respective meetings. The main contact in each plant was asked to extend the invitation to anyone within the plant who had an interest in attending. Invitations were also sent out to economic development associations, health professionals, schools, government officials and town councils.

Participants at each of these regional workshops included plant representatives (employers, workers, occupational health & safety representatives); researchers; health care professionals (local physicians, public health nurses, physiotherapists, massage therapists, and asthma educators); OHS consultants; unions (Fish, Food and Allied

Workers Union); the Association of Seafood Producers; town councils; the Departments of Fisheries and Aquaculture, Health & Community Services, and Government Services; the Workplace Health, Safety & Compensation Commission; the local Regional Economic Development Boards; and the Newfoundland and Labrador Lung Association.

## **4.0 Understanding the Dynamics which Impact OHS in Shellfish Processing**

OHS within the shellfish processing industry has its own unique problems. Workshop participants raised issues specific to their regions as well as those that are relevant to many other small communities in Newfoundland and Labrador. Participants suggest that occupational health issues in the shellfish processing industry are influenced by many factors and affect a wide spectrum of people, from plant workers and their families to policy makers, union employees, researchers, and employers. Engaging all of these groups in looking for solutions allows for a greater chance of being effective, having as wide an impact as possible and ensuring that the solutions are sustainable.

### **4.1 From the perspective of the workers**

The reality is that injured workers can experience severe health and socio-economic problems. When a clear diagnosis is not available, some workers struggle with the choice between work and health. Workers find themselves trying to get through the short duration of time the plant is open because there are no other employment options. The economic and resource uncertainty and the changing nature of the industry in terms of what is processed, when and where, are also factors that workers no doubt consider when they may be putting themselves at risk. For example it may appear less serious to a worker who chooses to go to work for one more season when there is no guarantee there may be another season.

Work is highly seasonal and the industry is plagued by uncertainty making it difficult for injured workers to take time off work without jeopardizing their eligibility for Employment Insurance and future employment.

Seasonal workers with low wages generally do not have access to drug plans or sickness benefits and this may limit their access to important drugs and treatments essential to rehabilitation and effective management of their illness.

Workers must often travel long distances for health care, especially if they are required to see a specialist. Travel may also be hampered by poor weather or road conditions and by long waitlists for access to specialists.

Unfortunately workers are faced with a slippery slope. There is pressure in the short term to under-report illness out of fear that plants might close. Yet when we fail to prevent or accommodate an injury, it can result in clusters of injured or ill workers which in turn places a substantial health burden on the families, communities and health care

professionals within them. In the long term, should a plant close, the community will be left with both the loss of its major industry and responsibility for a large number of workers whose employment alternatives and quality of life are compromised by work-related injuries and illness.

#### **4.2 From the perspective of the companies**

Industry uncertainty and limited access to research results and to OHS expertise make it difficult for companies to invest in improved prevention. There is a serious shortage in rural areas of OHS specialists and health professionals knowledgeable about these risks who are available to support industry and workers in their efforts to deal with these problems.

Resource shortages, market and other sources of uncertainty can discourage investment in plant infrastructure essential to reducing risk and limit the funds available for investment in training and OHS expert advice. Fixing this problem requires not only improving the management of our resources – a major focus of industry and government at present – but also addressing the industry’s long term need for a healthy, stable workforce. It appears that crab stocks are responding to quota cuts and seem to be increasing. This bodes well for a continued fishery and highlights the need to plan for a future rather than operate season to season with the expectation that the crab fishery might be over. The shrimp industry is facing challenges but the resource is strong and planning for a future with jobs that protect the health of workers will be good for plant workers, families, communities and the industry.

Increased awareness and action to reduce the risks associated with shellfish processing among workers and their families could help address the challenges posed by emerging labour force shortages in the industry. If no action is taken, workers and their children may begin to avoid the industry because of perceived risks. Recruitment problems could contribute to the challenges facing workers left in the industry many of whom appear to have injuries and illnesses that can make it difficult for them to do their jobs.

#### **4.3 From the perspective of the communities**

One of the biggest issues for many rural Newfoundlanders and Labradorians is geographic isolation. Shellfish processing communities are often single industry communities and dependent on the employment and revenue generated by local plants. The plants are often open for a short season and workers no doubt feel the need to seize the work opportunity. Rural and remote shellfish processing communities are associated with substantial occupational health risks. Access to OHS training among youth and adults in these communities can also be hampered by distance, cost and education/awareness. Failure to prevent injury and illness can result in a large number of injured and sick workers clustered in a single community amplifying the substantial social, economic and health challenges confronting employers, workers and their families and the community as a whole.

#### **4.4 From the perspective of health professionals**

Rural and remote communities also have very limited access to health professionals with the training and skills necessary to diagnose and treat some occupational diseases and conditions. Given that local health professionals are often the first line of detection for problems like occupational asthma, these gaps can delay or interfere with the diagnosis of occupational diseases and conditions, delaying recognition of problems within plant labour forces and can hinder access to compensation. High turnover among health professionals can lead to problems with continuity of care.

#### **4.5 Communication Barriers**

Other potential obstacles to properly addressing OHS issues in rural communities include communication barriers between community members and outside researchers or professionals, lack of Internet access and limited computer skills.

#### **4.6 Need for Action**

We must begin to address these issues in Newfoundland and Labrador and indeed in Atlantic Canada as a whole.

We must work towards preventing work-related health problems, accommodating affected workers and reducing the risk of further injury. We need to improve access to appropriate and high quality diagnostic and treatment tools.

In situations where accommodation at their original workplace is not possible, individuals need appropriate compensation and provision of alternative employment options.

### **5.0 Risks and Resources**

At the four meetings, much discussion focused on risks within the industry, and the resources available for dealing with these risks. Presentations were given by researchers and OHS professionals, and small and large group discussions focused on varying aspects of these two themes.

#### **5.1 OHS Risks**

At each of the four meetings, researchers presented on work they've done to better understand health risks within the shellfish processing industry, including work-related musculoskeletal disorders (WMSDs) and respiratory problems among snow crab processors.

WMSDs are injuries to soft tissue like muscles and nerves, which are usually caused gradually over time by repetitive motion, heavy lifting, cold temperature and awkward

postures. Evidence shows that they are common in shellfish processing plants, as about half of all WHSCC claims in fish processing between 1999 and 2005 were for WMSDs.

Occupational asthma is a work-related health condition that causes air passages to become smaller leading to shortness of breath, wheezing, cough and chest tightness caused or aggravated by workplace exposures to allergens, chemicals and other agents. A major cause of occupational asthma in shellfish processing plants is exposure to aerosolized crab and shrimp proteins. Workers who breathe in these proteins can become sensitized to them resulting in skin problems among some workers and asthma in others. Exposures to sulphites, cleaning chemicals and forklift fumes can also contribute to respiratory problems among shellfish processing workers.

Participants at all the meetings were excited to learn more about the risks and how they affect workers. They also identified occupational health concerns, risks and challenges and, based on their experience, brought new questions forward about other potential risks.

#### Occupational Health Concerns Noted:

- **Lack of information:** physicians and workers do not easily recognize shellfish allergy or asthma and this contributes to a lack of recognition about the seriousness of work-related health problems. There is clearly not enough research done in this field.
- **Spreading effect:** There is a concern that one allergy may lead to other allergies and that family members of plant workers are at risk of exposure to allergens brought home from the plant.
- **Headaches/migraines:** Some participants identified problems with headaches and migraines and questioned whether they might be work-related. Could they be caused by ergonomic problems, environmental triggers (perfumes, cleaners, etc), temperature?
- **Compromised reproductive health:** Some participants raised the concern that there is a perceived high incidence of miscarriage among plant workers. Some women are planning their pregnancy around plant work.
- **Pressure on healthy workers:** There can be additional emotional and physical stress on healthy workers as they accommodate those who are sick.
- **Extra work during peak times:** During high season, at times when the workload is heaviest, and when rest breaks are most necessary to prevent injury, workers tend to get fewer breaks and work is more demanding.
- **Financial insecurity:** Some workers lack health insurance or can't afford to take time off because this could jeopardize access to EI. They fear complaints could end in job loss.

- **Lack of political attention:** policy makers need to be more informed and interested in OHS; some participants feel that rural Newfoundland is not considered a priority by governments
- **Lack of standards:** relatively new industry, and certain OHS standards (like ventilation) still lacking
- **Aging workforce:** there aren't enough young people working in plants to replace older workers
- **Uncertainty of industry:** difficult to plan for future when there is job insecurity
- **Lack of fitness opportunities:** workers find it difficult to stay in shape during the off-season
- **Attitudes:** workers don't want to be seen as complainers; people may be unwilling to speak out about their concerns
- **Lack of communication between employees:** workers may not inform each other about ways they have adapted better to their jobs
- **Issues with jurisdiction:** transition of certain lands to the Inuit creates confusion over responsibility of OHS
- **Lack of access to professionals:** rural and remote areas often must wait a long time to have access to respirologists, engineers, OHS consultants, and so on
- **Other issues:** obesity, diabetes, smoking, alcohol and drug abuse are all interrelated issues that contribute to OHS problems

## 5.2 Resources

At the first three meetings there was some general discussion on assets available for dealing with OHS issues, including:

- **Local jobs:** beneficial to be able to work in own community
- **Technological improvements**
- **Health & safety committees:** although not in all plants
- **Access to health care and fitness facilities:** this was only mentioned in Carbonear
- **Dedication of employees**
- **Increased awareness**

As noted, resources do exist to address some of these OHS problems, but participants mentioned many times throughout all the meetings that communication is key to using resources effectively; otherwise the people who need the resources may not know they are there, or are not able to use them appropriately.

At Battle Harbour there were four presentations on: Government Services as a Resource for OHS; Ergonomics; Industrial Hygiene; and the services provided by the Workplace Health Safety and Compensation Commission. Although all of these were recognized as possible assets for improving occupational health and safety, participants agreed that use of these resources within their communities was limited for a number of reasons, including:

- **Lack of effective feedback concerning the results of inspections:** Many plants would like a report card accompanying government inspections, to allow them a comparative view of other plants, as well as positive feedback instead of getting attention only when there is a problem.
- **Lack of universal standards:** There is no universal norm for all plants in terms of ergonomic initiatives and health & safety committees, and many plants still do not have them.
- **Pressure on individual:** Much of the responsibility for addressing OHS problems lies with the individual, rather than the workplace or the community.
- **Lack of communication:** Much silence still surrounds OHS problems within communities and families, and many times important information is not passed down the ladder from employer to employee.

### 5.3 Questions Arising

At the end of the main discussion sessions of the four meetings, many questions, issues and problems had arisen that still needed further attention. These include:

- **Is there a higher incidence of asthma in Newfoundland and Labrador, and if so, is this related to incidence of crab asthma?**
- **Do employers, health care professionals and others know enough about OHS?**
- **Are there viable alternatives to drugs as treatment for work-related illness?**
- **What life style factors affect OHS?**
- **Would distance education/training work for rural areas?**
- **How can a stronger culture of OHS be created?**
- **Is there a possibility that shrimp may cause asthma and allergy?**
- **How do you get politicians involved/interested in OHS issues?**

## 6.0 The Battle Harbour Meeting

The results of the Battle Harbour meeting can stand as a potential model for the development of a CBA for OHS in shellfish processing in other regions because of the wide range of participants from many different levels and the quality of engagement,

collaboration, and communication the group achieved. While the other three regional meetings were half day sessions, participants at this southern Labrador meeting had two days to work closely together as they shared information about risks, resources and realities, explored the issues from the perspective of the different participants, focused on understanding their common interests and made the commitment to move forward with an action plan.

Similar to the other meetings, the Battle Harbour workshop included time spent exploring the two themes: risks and resources. However, more time was given to both presentations on these themes, as well as ensuing discussion.

One of the most important aspects of a community-based approach is the sharing of information and the identification of community and governmental and other assets to deal with problems. The Battle Harbour meeting was able to work toward these goals by discussing the roles groups and organizations can and should play in prevention of injury and disease and supporting those with work-related health problems. Discussion focused on ways that various groups could strengthen their responses and action and thereby contribute successfully to addressing the problem.

Participants were also given the opportunity to view the drama *A Second Wind* on the dilemmas associated with snow crab occupational asthma, and evaluate it as a possible tool for dealing with OHS issues within the CBA

As one of the last activities, participants at the Battle Harbour meeting met with their respective groups (plant workers, researchers, health care professionals, government, and the Regional Economic Development Board) and a brainstorming session was conducted on how to continue in the immediate future and how to support a collaborative process.

Within this process, one of the most important actions to arise was the creation of a voluntary steering committee with representatives from each of the sectors at the workshop, including plant workers, a health care professional, the assistant deputy minister of OHS, and representatives from WHSCC, the Department of Fisheries and Aquaculture and the local Regional Economic Development Board. This committee will move the project forward, and ensure continuity of communication between all groups. Momentum from the initial meeting will be kept up as they continue to meet, and it was agreed that participants would like to see some results of the committee before the beginning of next season in April 2007. The results from this project may be relevant and appropriate to other communities in developing their own CBA, and could be possibly used as a model for future action in other regions in Atlantic Canada.

## **7.0 Conclusion**

Phase One of the Community-based Approach to Shellfish Processing OHS project resulted in four regional meetings including one two-day workshop in Battle Harbour Labrador. Important discussions were had, information was shared, and questions were asked as participants at each meeting engaged in key first steps in creating a Community

Based Approach to occupational health in the shellfish processing industry. The two-day meeting at Battle Harbour, in particular, can possibly be used as a model for developing a CBA in other regions and provinces because of the diversity of participants and strong representation of policy makers who were able to engage in meaningful discussion on what the problems are and what can be done about them.