



A Second Wind
Facilitator's Guide

Facilitator's Guide - Contents

Introduction	3
Facilitation Plan	5
Key Terms and Definitions	7
Questions and Answers	9
True or False Questions	17
True or False Answers	18
Discussion Questions - Option 1	19
Discussion Questions - Option 2	20
Evaluation Questionnaire	21

Acknowledgements

Funding for the production of the *Facilitator's Guide* for the drama *A Second Wind* was provided through the Knowledge to Action grant program of the Canadian Institutes for Health Research. We would also like to acknowledge substantial in-kind support from SafetyNet and the Department of Distance Education and Learning Technologies (DELT) at Memorial University, the Workplace Health and Safety Compensation Commission (WHSCC), Newfoundland and Labrador, and the FFAW/CAW union. Useful comments and advice on the text were provided by Dr. André Cartier, MD, F.R.C.P. (C) - Hôpital du Sacré-Cœur de Montréal. Margaret Ann McCarthy at SafetyNet and Albert Johnson at DELT contributed in important and substantial ways to the development of this material. Lyly Fortin translated the *Guide* and related materials from English to French.

Disclaimer

The information provided in this DVD and Facilitator's Guide is for educational and informational purposes only. It is not intended to take the place of professional medical advice, diagnosis or treatment. Users of these resources should present specific medical questions to their own health care providers. The information provided here is current as of the time of release of the DVD in October 2006.



A Second Wind Facilitator's Guide

Introduction

This Guide can also be accessed on the internet at www.shellfishohs.ca.

This Guide contains several information tools for use by facilitators interested in using the drama to promote awareness about occupational health risks associated with shellfish processing.

Facilitators may be shop stewards, employers or management, members of occupational health and safety committees, occupational health experts, health practitioners or educators in post secondary and high school OH&S (Occupational Health and Safety) courses.

These tools include a list of frequently asked questions and answers about *A Second Wind*. They also include a list of key terms and their definitions, sample discussion questions, learning objectives and links to a wealth of resources related to the occupational health of shellfish processing workers.

The Guide is designed to promote awareness about crab asthma. It is appropriate for use with different groups including students, workers, managers, health professionals, OHS committees and OHS experts. The drama is based on research findings from a study of crab asthma in four Newfoundland and Labrador plants done between 2001 and 2004.

(Continued from page 3)

The core objective of the Facilitators Guide is to encourage and support open discussion and brainstorming about the issues and dilemmas associated with dealing with shellfish occupational asthma and allergy in rural and remote communities in Eastern Canada. It is also designed to encourage discussion of the policy changes that might be needed to protect the occupational health of workers employed in shellfish processing and other, similar rural and remote industries.

Appropriate Audiences:

- Occupational Health and Safety (OHS) Committees
 - Workers
 - Employers
- High School and Post Secondary Students
 - OHS Experts
 - Health Practitioners

Facilitation Plan

75 Minute Plan

Learning Objectives

By the end of this discussion participants will:

- know what occupational asthma to snow crab (Crab Asthma) is
- be able to discuss the health effects of crab asthma
- have a better understanding of the issues and dilemmas faced by shellfish processing workers, managers and communities
- have had an opportunity to discuss potential ways to address these issues and dilemmas including the role Health and Safety Committees, Health Professionals and others could play in preventing Crab Asthma and helping those affected.

Presentation Plan

I. Introduction (5 minutes)

The facilitator will initiate a discussion with the participants to help them focus on the topic described in the video. The facilitator will begin by briefly describing what the participants will see in the video.

A Second Wind is a 22 minute drama about the issues and dilemmas associated with occupational asthma to snow crab. Based on research findings from a study of crab asthma in four Newfoundland and Labrador carried out between 2001 and 2004, the drama is designed to promote awareness and discussion about this occupational disease and the challenges it can create for workers, their families, employers and shellfish processing communities in Eastern Canada.

II. Key Terms (5 minutes)

The facilitator will go over key terms (*page 7*) to look for in the video and definitions for the key terms.

III. Watch the Video (22 minutes)

Facilitation Plan

(Continued from page 5)

IV. Discussion Warm up Activity (10 minutes)

The facilitator will ask participants if they have any questions about the drama (the 'Questions and Answers' provided (*pages 9-16*) can be used to help answer these questions and to raise questions for discussion). After the Q and A, participants might be asked to answer the True or False Questions provided (*page 17*). Both tools are good warm up activities to start the discussion.

V. Discussion (28 minutes)

Divide the participants into groups of (4, 5 or 6). Provide them with one of the two lists of discussion questions (*page 19 or 20*). Keep the groups on task by giving them time checks indicating when they should be proceeding to the next question. Ask each group to appoint a spokesperson to report their findings to the larger group. When asking for responses make sure the facilitator asks each of the groups for a response not necessarily to each question, but each group should have an opportunity to offer the first response to a question.

VI. Wrap up (5 Minutes)

Introduce the participants to the online forum and explain how it operates (anonymous postings that are moderated, does not name people or places, etc.). Ask them to complete and submit the evaluation of A Second Wind and the Workshop (*page 21*). Please forward the evaluations with any of their own comments to:

Dr. Barbara Neis
c/o SafetyNet
Memorial University of Newfoundland
St. John's, NL, Canada A1C 5S7

Key Terms and Definitions

Asthma

A condition that results in breathing problems. These problems occur when the breathing tubes tighten up and become swollen.

Occupational Asthma and Allergy (OAA)

Asthma or allergies experienced by some workers that are caused by their work. Occupational asthmas and allergies are associated with many different kinds of jobs. For example, bakers, auto body spray painters and animal handlers are also at risk of OAA.

Crab Lung (also known as Crab Asthma)

A form of work-related asthma that affects some crab processing workers. Asthma is considered to be work-related when it is caused by exposures at work.

Inhaler or 'Puffer'

An inhaler is a hand-operated pump. It's used to give a precise dose of medication through the lungs. There are two types of puffers: *rescue* and *controller*. The *rescue* inhaler (often blue in color) relieves symptoms of asthma such as cough, wheezing or shortness of breath but is short acting and does not control asthma. The *controller* often called the steroid puffer (inhaler) comes in various colors (orange, brown, burgundy, purple, red), and is used to control symptoms (not to relieve them) and reduce the need for the reliever inhaler. It should be taken regularly. Its main components are corticosteroids (not the steroids that enhance muscle strength). These steroids are an anti-inflammatory medication that decreases airway swelling in the lungs.

Key Terms and Definitions

(Continued from page 7)

Respiratory Therapist

A health professional who works with doctors and other health care professionals in treating and caring for patients with breathing problems.

Workers' Compensation

Workers' compensation is an employer-funded no fault insurance system. The jurisdiction of Workers' Compensation Commissions can vary from province to province. Depending on the province, they can be responsible for promoting safe and healthy workplaces, providing return-to-work programs and fair compensation to injured workers and their dependents.

References

1. Answer.com (2007). Retrieved March 2007 from www.answers.com/respiratory+therapist&r=67
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3. Shellfish Occupational Health and Safety Website (1999-2005). Retrieved March 2007 from www.shellfishohs.ca/glossary.html
4. Workplace Health, Safety and Compensation Commission (WHSCC). Retrieved March 2007 from www.whscc.nf.ca/workers.htm.

Questions and Answers

The facilitator should ask participants if they have any questions about the drama. The following 'Questions and Answers' can be used to help answer questions about the drama and to encourage further discussion.

What is Crab Asthma?

It is a form of occupational asthma that affects some crab processing workers. Asthma is a condition that results in **breathing** difficulties. These breathing difficulties occur when the breathing tubes tighten up and become swollen. It is considered to be occupational, or work-related, when it is caused by exposures at work.

What causes Crab Asthma?

It is caused by exposure to crab proteins found in dust, steam, and vapor. Crab proteins get in the air during such activities as cleaning, steaming, boiling, washing, sawing, or crushing crab in processing plants. These crab proteins are breathed in. Over time, some workers become sensitized to these proteins and develop an allergy to snow crab. This allergy can result in occupational asthma and, in some cases, other allergic symptoms such as hay fever type symptoms (itchy, watery eyes; sneezing, runny and stuffy nose) or skin problems (dermatitis).

What are the symptoms of Crab Asthma?

Symptoms of crab asthma are chest tightness, wheezing, coughing and difficulty breathing. These symptoms are generally worse at work and better away from work but may also happen in the evening.

How can crab workers find out whether or not they have Crab Asthma?

If a worker thinks they have Crab Asthma, they should start by visiting their family doctor, who might refer them to a lung specialist. A work and medical history questionnaire, skin test or blood test to show allergy to crab, and a lung function test (both

Questions and Answers

(Continued from page 9)

at work and not at work) can be used to test for crab asthma. It is important to remain at work while this type of testing is being carried out. Workers who have had severe asthmatic attacks may be withdrawn from the workplace prior to the end of the tests. The doctor may also ask workers to keep a record of the time of day that symptoms occur, the effects on the body, any periods of improvement or worsening and the overall pattern of the symptoms. Workers with crab asthma can respond immediately when they are exposed to crab or they might respond later in the day or in the evening, away from work.

A Second Wind suggests that women workers are more likely to develop Crab Asthma than men. Why?

In many workplaces, men and women tend to do different jobs. As a result, they may have different workplace exposures and therefore develop different kinds of injuries and illnesses at work. Research done in Newfoundland and Labrador snow crab processing plants found women were more likely than men to test positive for allergy and asthma to snow crab. In these plants, on average, women had worked longer than men with crab and they were more likely to have worked at jobs with higher allergen exposures. As a result, on average, the cumulative exposures of women workers in this study were higher than those of the men workers. Since the likelihood of developing crab asthma increases with the level of exposure, this difference helped to explain the larger number of positive tests among women workers. In this study, men were more likely than women to work outside the main processing area and, in some cases, on the wharf.

Does smoking increase the risk of developing Crab Asthma?

Smoking is bad for your health and should be avoided. Smokers appear to be at higher risk of developing Crab Asthma but smoking does not cause Crab Asthma.

Questions and Answers

(Continued from page 10)

The plant manager would like to know who is likely to get Crab Asthma. Is it possible to screen workers when they are being hired to weed out those most at risk of developing this problem?

People who smoke and those who are atopic (i.e. who have a genetically determined hypersensitivity to allergens) appear to be more likely to develop Crab Asthma. However, almost 50% of the general population is atopic and many people smoke. In addition, some people who develop Crab Asthma are not atopic and do not smoke. Screening would not be the most appropriate or the most effective way to reduce the risk of Crab Asthma in a plant labour force.

Would increased ventilation in the plant help prevent crab asthma?

Organizing work and designing machinery in ways that reduce the amount of protein that gets into the air can help reduce the risk. In addition, plants should include a well designed ventilation system. Well designed systems remove the proteins at the point where they first get into the air. They do this by drawing the air with the proteins away from the breathing zones of the workers. This air is vented directly outside. Ventilation systems need to be designed so that make-up air can be brought into the plant to replace the air that is being removed. The exhaust vent needs to be located in a way that prevents bad air from getting drawn back into the plant through the air intake or an open door or window. A ventilation system that just blows air around (or one that is poorly designed), might actually increase the number of workers at risk.

Why isn't everyone required to wear a mask? Wouldn't they want to wear a mask of some sort? And why would the employees be responsible for the cost of the masks?

Personal Protective Equipment like masks should be a last resort in a prevention plan – coming after steps to stop the proteins from getting in the air and the installation of an effective and appropriate ventilation system. When masks are used, they should be appropriate for the types of exposures and individual

Questions and Answers

(Continued from page 11)

workers need to be fit-tested to make sure they don't leak around the edges. As well, masks are often uncomfortable to wear in a damp environment like that found in crab plants – which may affect workers' willingness to wear them. In Newfoundland and Labrador plants, workers wearing masks have reported that employers expected them to pay for them. To our knowledge, the masks they have been wearing have generally not been fit-tested or evaluated to ensure that they are effectively filtering out the proteins.

Are workers not required to wear gloves?

Most crab processing workers wear gloves. This may reduce the risk of skin problems.

What will happen to Linda if she keeps working at the plant?

Some, but not all workers with crab asthma who continue to work with crab find that their asthma gets worse. In the short term, they often find they are fine when they are away from work on the weekend or in the off season. The longer workers continue to work with crab after they develop crab asthma, the greater the risk that they will continue to have breathing problems after they leave their jobs. These problems may be triggered by such things as exercise, perfumes, cigarette smoke and cold weather.

If Linda was moved to making boxes would she stop having symptoms?

Boxes are often assembled in an area away from the main crab processing work and, in these cases, the amount of protein in the air should be lower here. Other places where she might have fewer symptoms could include working on the wharf (if the fumes from the plant are vented away from this area) or perhaps work in the office or cold storage and cold air might trigger her asthma. If she is very allergic it might be hard for her to work anywhere around crab. Some workers who report severe symptoms say these can be triggered even by allergens on the clothes of family members when they come home from the plant.

Questions and Answers

(Continued from page 12)

Linda's daughter says the puffer is only 'buying her mother time'. What does she mean by that?

The medication can help Linda manage her asthma and relieve her acute symptoms. However, it cannot cure it or eliminate the risk that it will get worse if she continues to work with crab.

Tell me more about the two different kinds of puffers.

"Puffers" or inhalers are essential to those who are prone to asthma attacks. Most people with asthma will be prescribed two kinds of medicine, *rescue medicine* and *controller medicine*. *Rescue medicine* comes in the form of an inhaler often blue in color. It is kept on hand to be taken during an asthma attack, if breathing gets bad, or sometimes before exercise. However, it only helps in the short term. *Controller medicine* can come in the form of an inhaler (of various colors: orange, brown, burgundy, purple, red) or pill. It is taken everyday to ensure airways stay clear and to reduce swelling in the breathing tubes. It is used to control symptoms (not to acutely relieve them) and reduce the need for the reliever inhaler. The main components of controllers are corticosteroids (not the steroids that enhance muscle strength). These steroids are an anti-inflammatory medication that decreases airway swelling in the lungs.

Don't crab plant workers have drug plans to pay for their prescription drugs?

In Newfoundland and Labrador, crab plant workers, like many other seasonal workers, generally do not have drug plans. They have to pay for their own medications. The exception would be medications required to treat work-related illnesses for which they have filed a successful claim with their provincial workers' compensation commission.

Questions and Answers

(Continued from page 13)

Why doesn't the plant manager admit there is a problem?

The plant manager is in a difficult position. He doesn't seem to know a lot about crab asthma or how to prevent it – something that needs to change. He knows his workers and their families and feels he is doing what he can to help out. He could be working more effectively with the plant's health and safety committee, local doctors, his employers and OHS experts in the area to reduce the risk of Crab Asthma.

Do people fear they will lose their jobs if they bring up the issue of Crab Asthma?

Crab processing workers tend to be seasonal, low-income workers; they are often not unionized and frequently live in remote, single industry communities. If they lose their job in the plant or don't get enough hours of work during the season, they may have to move away to find work, leaving their homes and their communities. There are a limited number of positions in many plants where a sick worker would not be exposed to crab allergens. If there is no work available in those areas of the plant, or if there is less work in those areas, workers with Crab Asthma may not get enough hours to qualify for Employment Insurance (E.I.). This is an issue, because these workers often depend on E.I. for income during the off-season. Workers who fail to qualify for E.I. in a particular season may have to work more hours in order to qualify the following year. Also, time off work on Compensation cannot easily be counted towards E.I. eligibility. All of these issues make it hard for workers to bring up the issue of crab asthma with their employers.

Why does Linda not want to admit she had Crab Asthma?

Linda is afraid she might have crab asthma. She is afraid because if she does have crab asthma this might affect her ability to continue working at the plant. Her doctor was not very helpful because he or she gave her a note indicating she is unable to work with crab without doing a thorough investigation first in order to find out whether or not she has crab asthma. Under normal circumstances doctors should ensure that workers with

Questions and Answers

(Continued from page 14)

symptoms of asthma receive a clear diagnosis of crab asthma before suggesting they give up their job at the plant. There are two reasons for this: 1) respiratory problems might be caused by something other than the crab; and, 2) there may be severe economic and social consequences for workers who must give up their jobs.

Why would Linda want to expose her daughter to potential harm?

In Newfoundland and Labrador, in recent years most plant workers appear to be discouraging their children from taking jobs in fish and shellfish plants. Some reasons for this could be: that the work has become so uncertain in recent years; the wages are often fairly low; and perhaps because of the health risks. So Linda is probably not typical of plant workers today, but would have been more typical of plant workers in the past. With that said it is normal for parents to want to have their children living near them. The fishing industry will need young workers in the future if it, and rural communities in Eastern Canada, is going to survive. A renewed fishing industry needs to be a safe industry where our youth and current workers don't feel they have to "choose between their jobs and their health".

Where can I get more information on crab asthma?

You can contact your family doctor and your provincial workers' compensation commission. Some information is also available at www.shellfishohs.ca.

Questions and Answers - References

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6. Workplace Health, Safety and Compensation Commission (WHSCC). Retrieved March 2007 from www.whsc.nf.ca/workers.htm

True or False Questions

Answer "true" or "false" to the following:

1. **Crab asthma is something that crab suffers from.**
2. **Occupational asthma only occurs in the crab processing industry.**
3. **Both men and women can develop crab asthma.**
4. **There is no cure for asthma.**
5. **Employers who want to reduce the risk of crab asthma should install lots of fans.**
6. **Crab asthma is contagious.**
7. **Using a 'puffer' prevents you from getting crab asthma.**
8. **Not everyone in the crab processing industry gets asthma.**
9. **Crab asthma affects more than the worker.**
10. **Crab asthma only affects your 'work life'.**

True or False Answers

- 1. Crab asthma is something that crab suffers from.**
False
- 2. Occupational asthma only occurs in the crab processing industry.**
False
- 3. Both men and women can develop crab asthma.**
True
- 4. There is no cure for asthma.**
True
- 5. Employers who want to reduce the risk of crab asthma should install lots of fans.**
False
- 6. Crab asthma is contagious.**
False
- 7. Using a 'puffer' prevents you from getting crab asthma.**
False
- 8. Not everyone in the crab processing industry gets asthma.**
True
- 9. Crab asthma affects more than the worker.**
True
- 10. Crab asthma only affects your 'work life'.**
False

Discussion Questions (Option 1)

A Second Wind talks about the issues and dilemmas confronting workers, their families and their employers when dealing with crab asthma. It is based on research carried out in four crab plants in Newfoundland and Labrador between 2001 and 2004.

- 1. How is the situation described in the drama similar to or different from the situation in your area?**
- 2. What are some issues and dilemmas in the drama that confront workers and their families?**
- 3. What are some of the issues and dilemmas confronting the manager of the plant?**
- 4. There is nothing in *A Second Wind* about the responsibilities of the OHS Committee. What are the responsibilities of the OHS Committee? What could/should they be doing?**
- 5. How might health care professionals in the area provide more support to workers and management?**

Discussion Questions (Option 2)

1. Kim says that crab processing workers have to choose between their jobs and their health. Why does she say that? What do you think of this?
2. Could Linda, Kim, Richard, April and Melanie have done anything more to help bring a second wind to Libby's Cove?
3. In *A Second Wind* there are no actors playing the role of the OHS committee, local health professionals, the provincial government, the Compensation Commission, researchers, experts and trainers, local government and economic development associations, the company and the union leadership.

If you were to write a part for two of these groups (to be identified by the facilitator) into the docudrama, what would you have them do?
4. Did viewing *A Second Wind* provide any new insight for you into occupational health in *shellfish* processing communities?

Evaluation Questionnaire

1. **What are some of the strengths of A Second Wind?**
2. **Did you notice any errors or weaknesses? Ways to improve A Second Wind?**
3. **Did you find the group discussion exercise useful?**
4. **Do you have any suggestions for ways to improve this discussion?**
5. **In your opinion, who should see A Second Wind? For whom would it not be appropriate?**
6. **Overall, do you think A Second Wind is a useful and appropriate tool to use in raising awareness about the occupational health challenges in crab processing communities?**
7. **Any other comments / suggestions about the docudrama and discussion exercise?**

Notes

Notes

For more information contact:

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www.shellfishohs.ca

Tell us what you think!

Return completed evaluation questionnaires
to the address above.
