Part F. Step 3 - *How do you find symptoms and hazards?*

F.1 What's this part all about?

Surveillance is the detective work committees, reps and their employers are expected to do — looking for job related symptoms and the hazards behind them.

Health surveillance is looking for "sick" workers. The search for symptoms is important, but it's after the fact. People already are showing the effects of something that's going on in the workplace. The injuries, illnesses or diseases may be linked to an **incident** or show up when groups of workers use the first aid station.

Examples of health surveillance include getting information from people using:

- body maps
- formal and informal conversations or interviews
- surveys and questionnaires
- group discussions (focus groups)
- meetings
- reviewing written records in the workplace such as workers compensation claims, first aid reports, sick time information, absenteeism information, insurance claims

Hazard surveillance is more prevention-oriented than looking for symptoms. It involves looking for the "sick" parts of a workplace, hopefully before they affect anyone. However, hazards also may be found after an incident, during an **inspection** or **investigation**, or by analyzing symptoms.

Examples of hazard surveillance include getting information from people using:

- body and workplace maps
- formal and informal conversations or interviews
- surveys and questionnaires
- group discussions (focus groups)
- meetings (e.g. "brown bag" lunches)
- reviewing written records in the workplace

Accident - an unplanned event for which there is no apparent cause. The preferred term is "**incident**" that leads us to analyze the causes of events, injuries, illnesses, etc.

Chief Occupational Medical Officer - a doctor working for the Workplace Safety and Health Division, who specializes in occupational medicine.

Hazard surveillance - looking for hazards in a workplace or "sick" parts of a workplace, before they affect workers or others.

Health surveillance - looking for symptoms (e.g. musculoskeletal injuries, burns, cuts, breathing problems) amongst those affected by workplace activities.

Incident - an event that causes or could have caused someone to get hurt, ill or die, or property damage. Includes a "near-miss".

Inspections - organized tours of a workplace, or part of one, to find hazards. Inspections also offer the opportunity to talk with workers to find out about their symptoms, how well prevention measures are working, etc.

Investigations - a specialized type of inspection, done after an incident. Investigation reports try to name the causes of an incident and make recommendations about ways to prevent future events.

such as workers compensation claims, first aid reports, material safety data sheets (MSDSs), purchasing records, inventories
- "looking around" - observations of people at work, inspections, investigations
- research about what's happening elsewhere, what "the studies" say, etc.

Inspections and investigations are essential tools to prevent injuries, illnesses and diseases. That's why they should include all six hazard categories and be done in an organized way. Part of health and safety **programs**, they also are a key responsibility and activity for committees and representatives.

Ask "What the **HEC** is going on?" It can help you organize this detective work and make sense of what you find. There are three questions in this approach:
- is there a **H**azard?
  - look at the workplace for hazards by category
- is there an **E**xposure?
  - are workers affected by the hazard, can a substance get into the body, what is supposed to prevent/reduce the exposure and how well is it working?
- what are the **C**onsequences of exposure?
  - who could be exposed? how often? for how long? how much are they exposed to? what effects are possible both acute and chronic?

Inspections - what the HEC is going on? sheets (SH.5) can be prepared for each new hazard category. See the sample sheet in the Safety and Health Toolbox.

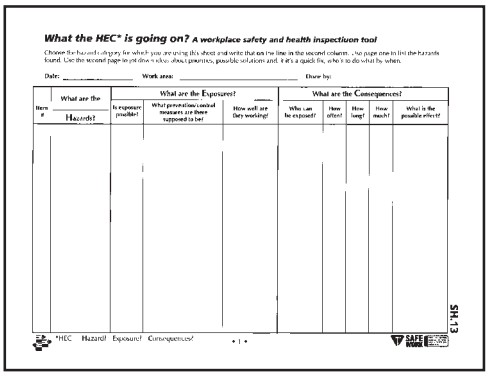
Medical workplaces - workplaces where physical or mental health treatment or care is provided, including ambulances, CancerCare Manitoba, a community health centre, dentist's office (if required in a regulation), doctor's office, hospital, medical clinic or laboratory, personal care home, psychiatric facility.

Monitoring - in a health and safety context, usually means measurements. May be done for chemical or biological substances in the air, noise, lighting or radiation levels, or posture angles, amongst other things. Also means to evaluate, as in monitoring how effective prevention measures or solutions are.

Program - documents explaining the organized approach to health and safety to be used in the workplace. Required by law, they must include such things as policies, who's responsible for what and ways to deal with specific hazards. (Also see Part G.)

Root cause analysis - a problem-solving and questioning method used to figure out the main reason(s) why something happened. In occupational health and safety, it's often used to analyze hazards and incidents. The *Root cause analysis and the 5 whys* (CP. 16) tool is one method.

Surveillance - looking for hazards and symptoms, being a "detective".


What the HEC* is going on? ***A workplace safety and health inspection tool***

Choose the hazards category for which you are using this sheet and write that on the line in the second column. Use page one to list the hazards found. Use the second page to jot down ideas about priorities, possible solutions and, if it's a quick fix, who's to do what by when.

Date: _____ Work area: _____ Done by: _____

Item #	What are the Hazards?	What are the Exposures?			What are the Consequences?			
		Is exposure possible?	What prevention/control measures are there supposed to be?	How well are they working?	Who can be exposed?	How often?	How long?	How much?	What is the possible effect?

*HEC Hazard? Exposure? Consequences?

• 1 •

SH.13

Another method to help committees/representatives figure out what's happening in their workplaces is called **SOBANE**. It stands for:

Screening,
OBservation,
ANalysis and
Expertise.

A four-stage process, the principles are like those in our law and this manual:

- prevention is the objective
- workers have the most knowledge about their jobs and so are key actors in prevention activities to improve workers' well-being
- use a preventive instead of a legalistic approach (don't argue about whether or not people are exposed to "too much" of a hazard; fix hazards that you find)
- deal with hazards rather than measuring them
- look for quick "fixes" wherever possible

The SOBANE authors have important advice for committee members and reps. Use measurements and "experts" only when needed, because proper **monitoring** is often a very complicated and expensive procedure.

Measurements and arguments about the numbers divert the focus of safety and health activities from prevention and fixing hazards. They are part of a legalistic approach that doesn't achieve well-being and can delay solutions.

Use measurements only after problems have been assessed in detail, so you know what the question really is (at the analysis or expertise stages). Using outside expertise or specialists only when necessary saves money, time, etc. and builds internal resources.

COMMITTEE ACTIVITY

1. Brainstorm about all the possible sources of information for symptoms and hazards in your workplace. Decide which ones you will start with and assign responsibilities for collecting the information to individual members. Set aside time at the next meeting to discuss at least one kind of information.

2. Take information that's easy to get, like WCB claims, and make body and workplace maps for your "first cut" at what's going on. If a subcommittee does this before a meeting, use the time at the meeting to analyze the map. Use *Root cause analysis and the 5 whys* (CP.16) for at least one symptom and one hazard.

3. Inspect the workplace before a meeting. At the meeting, make a workplace map or series of maps of the area(s) inspected (SH. 12). Discuss what you "see", what else needs to be done and what other information you need. Assign responsibilities for follow-up before the next meeting.

4. Build an inventory of hazards in the workplace. Keep track of them by category, as well as department, floor, or another kind of area. Use the inventory for inspections, priority setting, programs, reports to workers and management, etc.

The SOBANE approach is summarized below:

Issue	Stage 1 Screening	Stage 2 Observation	Stage 3 Analysis	Stage 4 Expertise
When?	All cases	If problem	Difficult cases	Complex cases
How?	Simple observation	Qualitative observation	Qualitative observation	Specialized techniques or measurements
Cost?	Very low 10 minutes	Low 2 hours	Average 2 days	High 2 weeks
By whom?	Workers and others in the workplace	Workers and others in the workplace	Workers, others in workplace + occ. health specialists	Workers, others in workplace + occ. health specialists + experts
Expertise: about the work about hazard	Very high Low	High Average	Average High	Low Very High

This chart is based on a document called *General strategy of risk management SOBANE. Method for the participatory screening of the risks Dèparis,* www.sobane.be/langues/eng/booklet_sobane_deparis_27_03_03.pdf.
The main SOBANE website is http://www.sobane.be/.

In this manual, we use the SOBANE screening approach for general inspections of all hazards and for the screening and observation stages for ergonomic hazards. See the Next Steps and *Resource Guide* for more about this method. The *Inspections - looking for all hazards - the SOBANE screening approach* (SH.4) is in the Safety and Health Toolbox.

COMMITTEE ACTIVITY

1. At a meeting, have committee members pair up. Practice using the *Ergonomic hazards: Step 1 - looking for symptoms* (SH.9) checklist for ergonomic hazards and musculo-skeletal injuries. Afterwards, talk about how you could use it in your workplace.

2. Before a meeting, have pairs of committee members use some of the *Ergonomic hazards: Step 2 - looking for hazards* sheets (SH.10 series) for their own jobs. At the meeting, discuss what people found, what would help committee members use the sheets for inspections and where to start using the sheets.

How do you make sense of your "results"?

Whatever the kind of surveillance, the information needs to be analyzed and put together in a way that is easy for everyone on the committee to understand. Visual methods can be very useful. See the mapping instructions (SH.12) in the Safety and Health Toolbox.

It may be hard for the committee or individual members to analyse results when numbers are involved. Maps will help for some things. They summarize information that can be related to an area in the workplace or part of the body.

However, you may need to find someone (within or outside the organization) who knows how to "make sense" of the information you collected. If you do that, be sure you know what questions you want answered. Assign one or two people to work with that person.

Whatever you do, start by asking:

- *What do you see?*
- *What are the patterns?*
  - by work area, equipment used, job, group(s) of workers, shifts, etc.
- *Why are the symptoms or hazards there?*
- *What information is missing?*
- *What are our questions?*

To find out what's really going on, the committee needs to know the root cause(s) of a problem. ***Root cause analysis*** provides a more complete picture about a situation. Done properly, it helps to discover most, or all, of the reasons behind a symptom or hazard, and recommend appropriate solutions. There are instructions for doing *Root cause analysis and the 5 whys* (CP.16) in the Committee Process Toolbox.

How do you keep track of what you find?

The employer is supposed to provide committees and representatives with resources to help them do this kind of work. [See the WSH regulation, section 3.3(4).] You'll need secure places to keep confidential information and space in general to

store materials, resources and the work that you do. Set up computerized and paper filing systems for the information - whether it's inventories, MSDSs, inspections, investigations or reports from outsiders.

F. 2 Why is this step important?

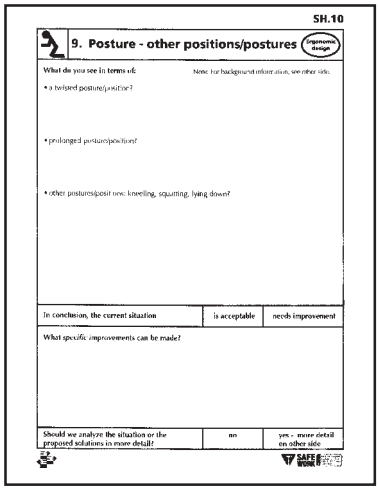
This step gets to the heart of a committee's or representative's work - finding symptoms and hazards and trying to make sense of and analyze what we find.

The committee has to understand what's happening in the workplace before it can recommend changes. It also need records of the surveillance activities for the next steps, especially to make a case for change(s).

To find symptoms or hazards in our workplaces, we must look for them. Some things may be obvious. But when we're dealing with long-term effects and more "invisible" hazards, it takes an organized approach to find them. That's what inspections, surveys and other tools provide. Remember to look for all six hazard categories, not just the safety or physical types on most inspection sheets.

It is also important to pay attention to what's happening around us. We may hear people's questions and complaints informally - over coffee, at breaks, in general conversation. During inspections, talk to and ask workers questions to find out about concerns, symptoms and hazards.

Observing people "on the job" also provides information about hazards. It brings in an outside set of "eyes", especially if the task is new to the observer. Tools such as the SOBANE observation tools for ergonomic hazards provide an organized method to do this; see SH.9 and SH.10.


SH.10

9. Posture - other positions/postures (Ergonomic design)

What do you see in terms of: (Note: for background information, see other side.)

- a twisted posture/position?
- prolonged posture/position?
- other postures/posit'ns: kneeling, squatting, lying down?

In conclusion, the current situation	is acceptable	needs improvement

What specific improvements can be made?

Should we analyze the situation or the proposed solutions in more detail?	no	yes - more detail on other side

Whatever surveillance is done, it's important to spend time on these activities before developing solutions and the strategies to implement them. It's easy to leap to conclusions about "the problem" sometimes. However, committees and

representatives need to dig beneath the surface to put together the most complete picture possible about a situation. The closer you are to the **root causes** of a problem, the easier it is to find short-term and long-term answers that will lead to a healthy and safe workplace.

F. 3 What tools can we use to find symptoms and hazards in our workplace?

These tools deal with different types of detective work. They are designed for general situations, except for the survey and inspection tools for ergonomic design hazards and musculoskeletal injuries.

There are references to using these tools in this Part of the manual and elsewhere in the manual.

- interviews/talking with people
  - do them (CP.12A)
  - practice (CP.12B)
- surveys and questionnaires
  (For information about how to do them, see pages 13 - 23 of *Barefoot Research*. The section includes case studies. The book, which is available on-line, is listed in the *Resource Guide*.)
- ergonomic screening (SH.9)
- mapping (SH.12)
  - body
  - workplace
- inspections
  - inspection guidelines (SH.3)
  - inspecting for hazards/SOBANE (SH.4)
  - SOBANE observation list for ergonomic hazards (SH.9, SH.10)
  - HEC sheets for recording what you find and/or summarizing the hazards found, by category investigations (SH.5)

For other tools, for other specific situations [e.g. indoor air quality (IAQ), noise, heat stress] see the Next Steps and *Resource Guide*.

COMMITTEE ACTIVITY

Starting being a "detective"

Set aside 15 minutes at one meeting, before inspections are assigned. Use a flip chart or black/white board, divided into four columns.

In the first column, list at least one hazard in each category.

In the second column, list how the committee inspects for each hazard now. In the third one, list what is done to find symptoms related to the hazard, by whom and how often.

For the last column, brainstorm other ways that could be used to look for the hazard and its symptoms. (If it's hard to do, start with the ideas listed in F.3.) Decide which methods you will use in the next few months. Assign responsibilities and set time lines in which to do this. Put the report-back on the agenda for next meeting(s).

F. 4 Next steps

1. Once you have a list or inventory of hazards in your workplace, go through the law to find out what information the employer is supposed to provide about them. For example, Part 12 in the *Workplace Safety and Health Regulation* covers the rules about noise. If you have electronic versions of the law, do this by using the "find" tool; e.g. you could search for "factor", "hazard" or "risk" (because the law uses all these words) for general information and "noise" if that is the hazard.

2. You may need help to make sense of what you find - the "results" of your detective work. To learn more about the symptoms and hazards, look for outside information about what to expect and what your "results" mean. Sources that might help are:
   - ✓ health and safety staff for the organization
   - ✓ books, reports or studies about specific jobs or kinds of workplaces (e.g. MFL Occupational Health Centre library)
   - ✓ others doing the same or similar work in the province or further afield
   - ✓ government health and safety departments
   - ✓ universities, research organizations or others doing health and safety work (e.g. Institute for Work & Health)

Check the *Resource Guide* for information about specific organizations and their websites.

3. Other things to try include:

   - Use the results of the Ergonomic hazards: *Step 1 - looking for symptoms* (SH.9) to make a large body map so you have a group picture, rather than individual ones
   - If you do a survey, transfer the results about symptoms to a body map that can be used at committee meetings, shared with others in the workplace and used in presentations

- Put the body and workplace maps up where people in the workplace can see and comment on them - in cafeterias, meeting rooms, coffee rooms
- Collect feedback by having committee members “hang out” around the maps at specific times, setting up ways for people to make notes, etc.
- Ask workers to add things to the workplace maps and review the new information
- Use the maps to prepare presentations for more in-depth discussions about symptoms and hazards
- Set up “inspection teams” with at least two sets of “eyes” each
- Divide the workplace into areas for inspections and have committee members or the inspection teams take turns inspecting each one for all six hazard categories
- Alternate that with the “inspection teams” each looking for one hazard category in the whole workplace or smaller parts of it
- Map what’s happened in the last five years in terms of symptoms and/or hazards: use one sheet of acetate or another clear material for each year, to build up a layered body and/or workplace map that lets you see trends from year to year

F. 5 What's the law say about finding symptoms and hazards? Who is supposed to do what?

Who?	What are they supposed to do?	WSH Act	WSH Regulation
Employer	an inspection schedule for the workplace	7.4(5)(e)	
	procedures to investigate incidents and refusals	7.4(5)(i)	
	procedures to include workers in inspections & investigations of incidents and refusals	7.4(5)(j)	
	let committee members/reps go with SHOs on inspections or investigations, if asked	41.3(2)	
	investigate and report on every needlestick injury *(*in **medical workplaces***)*	45.1(4)	
	provide committees/reps with appropriate resources to do their work		3.3(4)
	may not discriminate against: - workers for providing information to employers, inspectors, committee/reps, unions - workers trying to have the law enforced or doing their duty - committee members/reps who are doing their "job"	 42(1)(c) 42(1)(h) 42(1)(d)	
	consult and co-operate with the committee/rep	4(2)(e) & (f)	
Worker	report health and safety hazards (part of taking reasonable care)	5(a)	
	consult & co-operate with the committee or rep	5(c) & (d)	

The authors' wording presented above does not replace the Province of Manitoba's legislated Act and Regulations. The official versions can be found on-line at http://www.gov.mb.ca/labour/safety/actregnew.html or by contacting the Manitoba Workplace Safety and Health Division office.

Who?	What are they supposed to do?	WSH Act	WSH Regulation
Workplace safety & health committee/ Representative	must inspect the workplace regularly	40(10)(h)	
	participate in investigations of incidents	40(10)(i)	
	if SHO asks, go with the inspector on investigations/ inspections	41.3(1)	
	if they ask for it, the employer must give:		
	- information about tests of equipment, products or substances used in the workplace	41.2(a)	
	- inspection and investigation reports	41.2(b)	
	- reports of health and safety audits or measurements	41.2(c)	
	receive and deal with health & safety concerns/complaints	40(10)(a)	
	keep records about what they do, including how they get and deal with concerns & complaints	40(10)(j)	
Safety & health officers (SHOs)/ Inspectors	find out if the law is being complied with/obeyed	23(a)	
	investigate situations to find the cause & prevention of incident, injury and "ill health"	24(1)(d)	
	must investigate a work refusal and decide if there is a danger in the work	43.1(2)	

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Who?	What are they supposed to do?	WSH Act	WSH Regulation
Unions	may not discriminate against: - workers for providing information to employers, inspectors, committee/reps, unions - workers trying to have the law enforced or doing their duty - committee members/reps who are doing their "job"	 42(1)(c) 42(1)(h) 42(1)(d)	

Other "players"

The **Chief Occupational Medical Officer** (COMO) may require that medical tests and other kinds of health surveillance be done for current or former workers (with their consent) [*Act*, section 50].

Doctors or other health care providers may treat someone who is ill or injured at work or examine a worker in a "health surveillance" situation (see section 50). If they do this, they must give the Chief Occupational Medical Officer reports about their examinations, if the COMO requests it. If the worker is, or has been, a patient in a hospital, the COMO can ask for, and get, copies of relevant reports [*Act*, sections 51(1) and (2)].

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