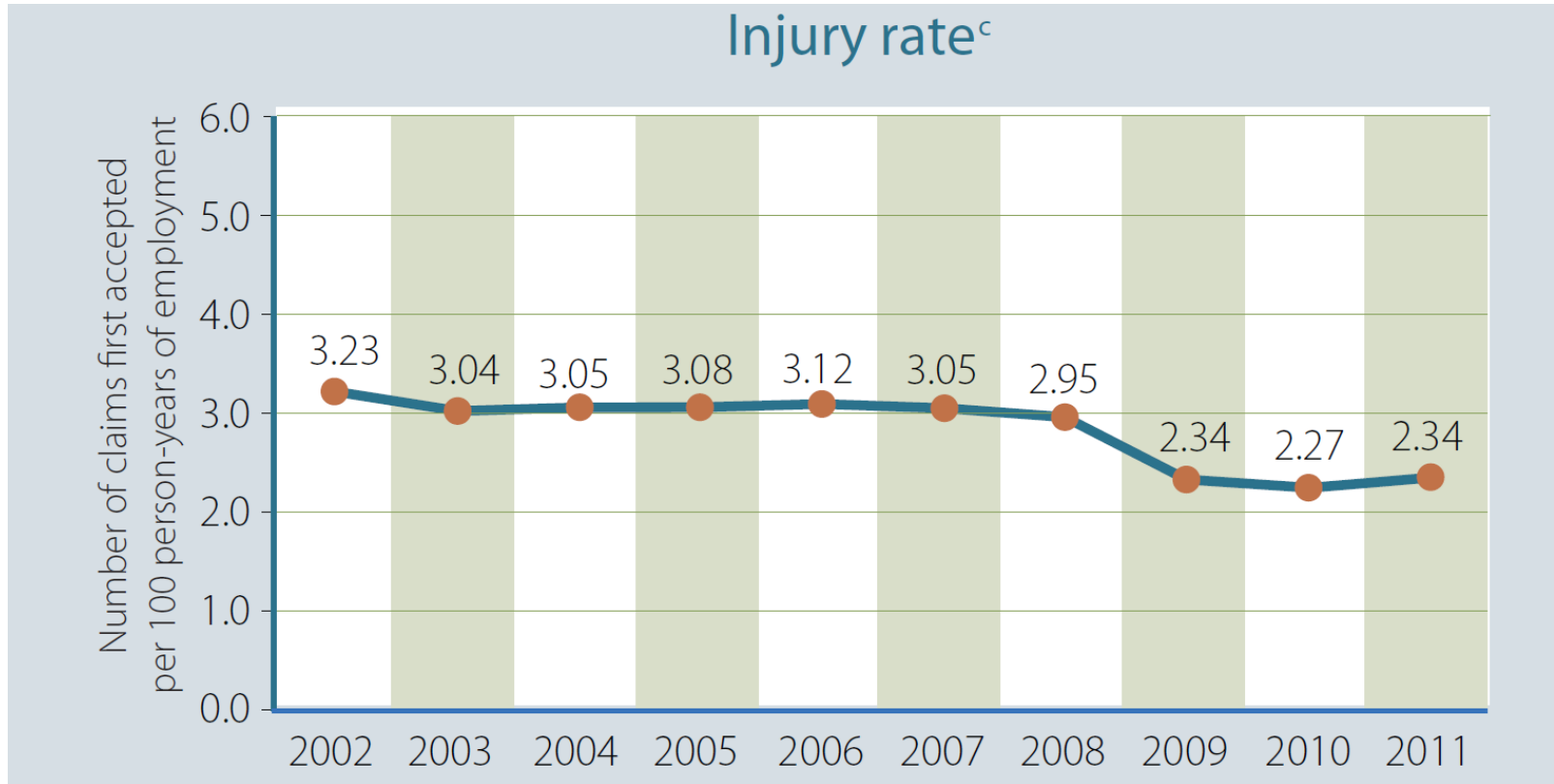


Joint Occupational Health & Safety Committee

Task Hazard Analysis

WCB Claims Statistics



Source: WCB Statistics 2011 – Annual Report Supplement

WCB Claims Statistics

Chart 5-1 : Serious injury rates^{1,2} (number of serious injury claims per 100 person-years of WorkSafeBC-covered employment)



Learning Objectives

At the end of this lesson, participants will be able to:

- **Define Task Hazard Analysis**
- **Explain what hazard analysis is and describe the process**
- **Define Hazard & Risk**
- **Apply the 5 Step Model to Risk Assessment using case studies**
- **Explain the relationship between Job, Duty, Task, and Element**
- **State the steps involved in developing safe work procedures**
- **Explain the Hierarchy of Hazard Control**
- **Analyze a job task, identify related hazards, and develop safe work procedures to address hazards that cannot be eliminated**

Agenda

- **Hazard Analysis – An Overview**
- **The 5 Step Model to Risk Assessment**
- **Examining the Job**
- **Analyzing Hazards**
- **Establishing Safe Work Procedures**
- **Summary**

Hazard Analysis Process

- **Examine the job and determine the components**
- **Identify tasks likely to present hazards**
- **Identify and assess hazards**
- **Determine and devise control measures**
- **Develop safe work procedures if hazards cannot be eliminated**

Five Steps to Risk Assessment

- **Step 1** Identify the hazards
- **Step 2** Decide who might be harmed and how
- **Step 3** Evaluate the risks and decide on precautions
- **Step 4** Record your findings and implement them
- **Step 5** Review your assessment and update if necessary

Step 1 - Identify The Hazards

- **Look around your workplace**
- **Ask your co-workers**
- **Check out WorkSafeBC.com and other OH&S websites**
- **Contact your association or union**
- **Check manufacturer instructions or MSDS**
- **Review accident and first aid records**

Step 2 – Who Might Be Harmed?

Be clear about who is at risk, for example;

- **Workers with particular requirements**
- **Workers who are not in the workplace regularly**
- **Members of the public**
- **Multiple employer or shared workplaces**

Step 3 - Evaluate the Risks

- **Can the hazard be eliminated?**
- **If not, can the risk be controlled by...**
 - ❖ **using less hazardous options?**
 - ❖ **preventing access to the hazards**
 - ❖ **reduction of exposure to the hazards**
 - ❖ **reorganizing hazardous work activities**
 - ❖ **issuing and ensuring that PPE is worn**
 - ❖ **provision of other facilities**

Step 4 – Record and Implement

A sufficiently conducted risk assessment should demonstrate that...

- ❖ an appropriate assessment was done**
- ❖ affected workers and others were consulted**
- ❖ significant hazards were controlled**
- ❖ any remaining hazards are low risk**
- ❖ staff were involved in the process**
- ❖ precautions are reasonable**

Step 5 – Review and Update

Review and update the assessment when ...

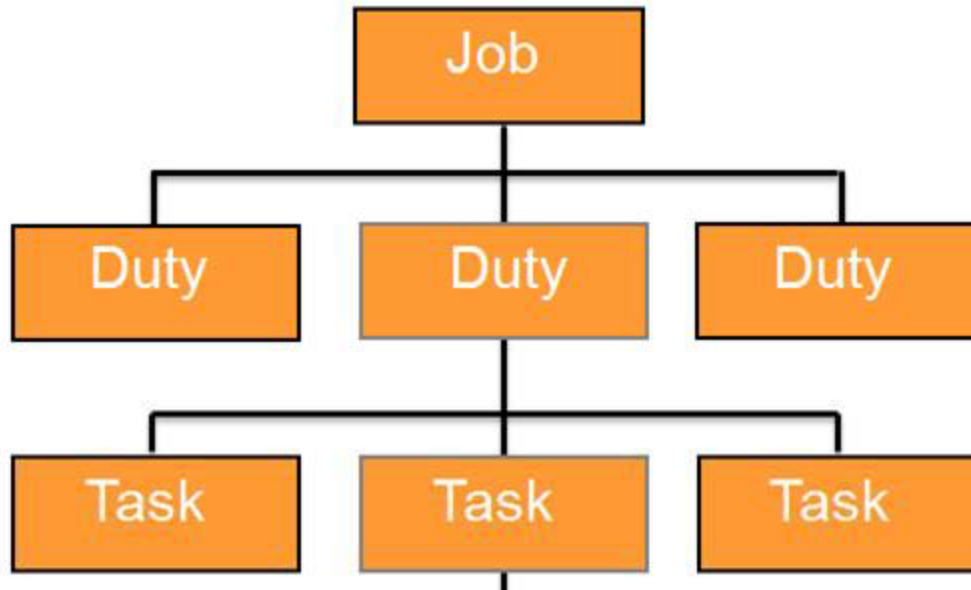
- **New equipment, controlled substances or procedures could lead to new hazards**
- **Workers spot problems not yet identified**
- **Reviewing accident investigations, near misses and/or first aid records**
- **After significant changes**
- **At least annually**

Safe Work Procedures

➤ Benefits of Safe Work Procedures

- ↪ **Helps to reduce the risk of injury or disease**
- ↪ **Shows safety commitment**
- ↪ **Reference for possible changes**
- ↪ **Consistent and safe way to do a job**
- ↪ **Training tool for workers**
- ↪ **Reference for accident investigations**

Job Hierarchy & Components



Job Hierarchy & Component Worksheet

Job Hierarchy and Component Worksheet

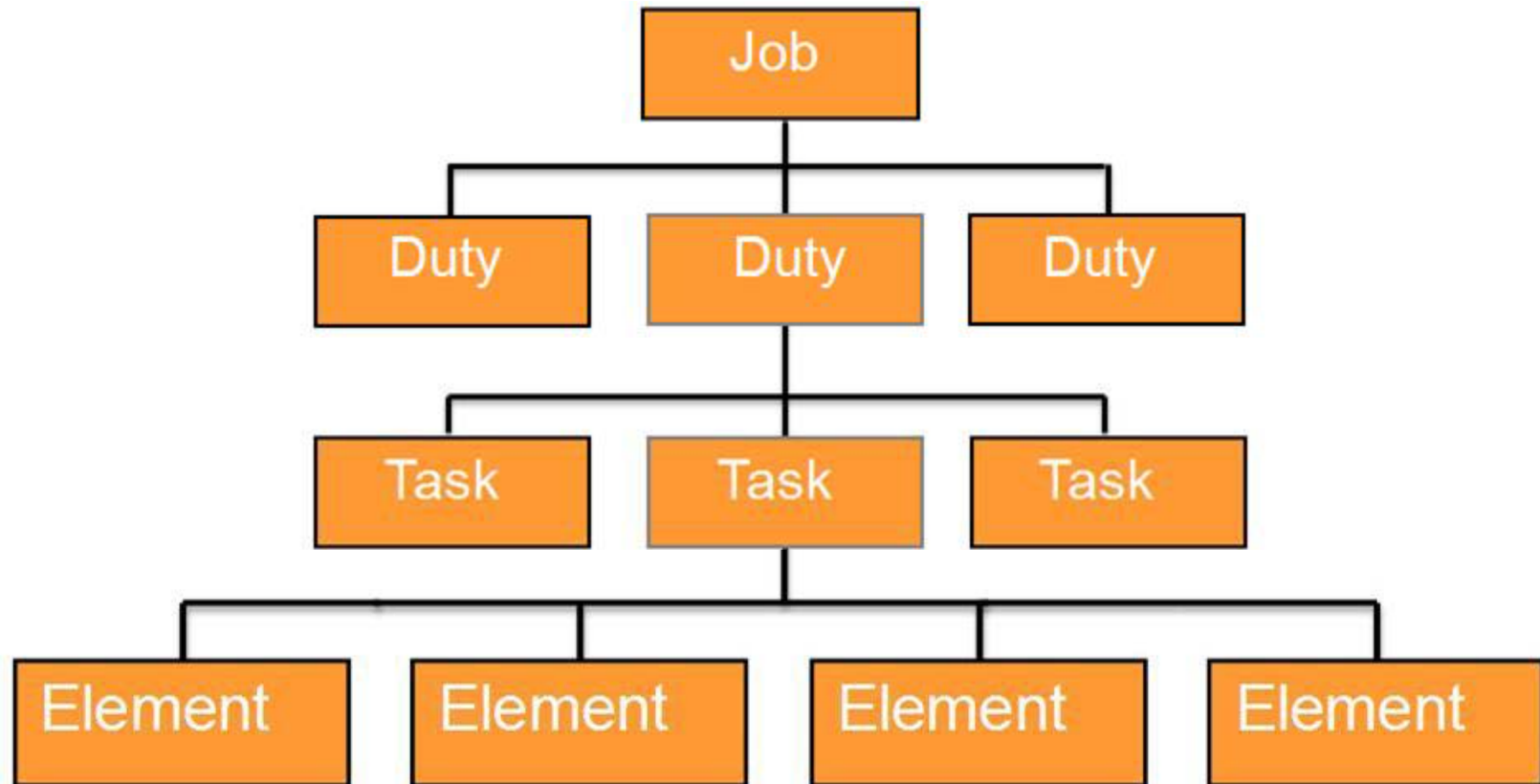
Date: _____

Job: _____

Duty: _____

Task							
Task Priority							
	Elements	Elements	Elements	Elements	Elements	Elements	Elements
	1	1	1	1	1	1	1
	2	2	2	2	2	2	2
	3	3	3	3	3	3	3
	4	4	4	4	4	4	4
	5	5	5	5	5	5	5
	6	6	6	6	6	6	6
	7	7	7	7	7	7	7
	8	8	8	8	8	8	8
	9	9	9	9	9	9	9
	10	10	10	10	10	10	10

Job Hierarchy & Components



Identifying Hazardous Tasks

- **Tasks with known or obvious hazards**
- **Tasks with high potential for serious injury**
- **Tasks with high accident or injury frequency**
- **New/changed tasks**
- **Tasks using new equipment**
- **Tasks performed infrequently**
- **Tasks which are repetitive**

Exercise #1

Identifying Hazardous Tasks



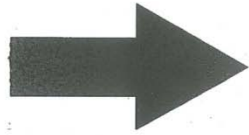
Sample Job Hierarchy and Components

Date: January 10, 2012

Job: Auto Service Technician

Duty: Perform Spring/Fall Service (Other Duties Include: Perform Tune-up and Maintain Inventory)

Task	Change Tires	Change Oil	Check Cooling System & Top up Fluids	Write a Report	Check Electrical System	Check Lights and windshield washer/ wiper	Check Brakes & Exhaust System
Task Priority	1	5	3	7	4	6	2
	Elements	Elements	Elements	Elements	Elements	Elements	Elements
	1 Secure Car	1	1	1	1		1
	2 Hoist Car	2	2	2	2		2
	3. Remove wheel cover & lug nuts	3	3	3	3		3
	4 Remove wheel	4	4	4	4		4
	5 Remove old tire from wheel	5	5	5	5		5
	6 Install new tire on wheel	6	6	6	6		6
	7 Place wheel back on car (studs)	7	7	7	7		7
	8 Put lug nuts back and tighten them	8	8.	8	8		8
	9 Lower car	9.	9	9	9		9
	10 Test drive	10	10	10	10		10



5 steps to risk assessment

**CASE
STUDIES**



Different Work Activities

but a common 3 stage approach

- **Stage 1: Preparation**
- **Stage 2: Touring the workplace**
- **Stage 3: Completing the risk assessment**

Case Study 1:

Risk assessment for an office

- Preparation
- Tour of the office
- Completing the risk assessment



Exercise #3 - Group Work



Working through a case study

Developing Safe Work Procedures – Exercise 4

- **Identify hazards**
- **Assemble expertise (knowledge & skills) in safe task performance**
- **Review and analyze task-related accident investigation reports**
- **Document procedures**
- **Test new procedures and revise as needed**
- **Implement procedures**