FINANCE & MANAGEMENT SERVICES FACILITIES SECTION



DEPARTMENT OF HEALTH & SOCIAL SERVICES SAFETY PLAN



Sarah Palin, Governor State of Alaska

Karleen K. Jackson, Commissioner Department of Health and Social Services

Janet Clark, Deputy Commissioner Finance and Management Services



This page left intentionally empty

TABLE OF CONTENTS

1.0	Message from the Commissioner	5
1.1	Message	5
2.0	Introduction to the Safety Program	6
2.1	Overview	6
2.2	Purpose and Expectations of Manual	6
3.0	Program Responsibilities	7
3.1	Personnel	7
4.0	Safety Training and Communications	10
4.1	Policy Standard	10
4.2	Distribution of DHSS Written Safety Plan	10
4.3	DHSS Central Safety Advisory Committee	10
4.4	Safety Meetings—General	10
4.5	Safety Meetings—Director Designee/ Site Supervisor	11
4.6	New Employee Safety Orientation	11
4.7	Training (Non-Office Workers)	
	4.7.1 Director Designee/Site Supervisor4.7.2 Employee	
	1.7.3 Training Lesson Plans	
4	4.7.6 Training Records Retention	
4.8	Safety Bulletin Boards	14
5.0	Accident and Incident Investigation and Reporting	15
5.1	Objective and Definitions	15
5.2	Accident Incident Investigation Procedures	
<i>6.0</i>	Blood-borne Pathogens	
0.0 6.1		
6.2		
6.3		
6.4		
6.5	-	
7.0	Blood-borne Pathogens Exposure	
7.0		
7.1	•	
	•	
7.3		
7.4	Program Requirements Exposure Determination	21

8.0	Interim Tuberculosis Exposure Control Plan	31	
8.1	Purpose		
8.2	Scope		
8.3	Objective		
8.4	Facts Concerning Tuberculosis		
8.5	Program Requirements	32	
9.0	Safety and Health Inspections	33	
9.1	Annual Inspections		
9.2	OSHA Consultation Inspections		
9.3 9.	OSHA Compliance Inspections		
9.4	Hazard Classification Rating System		
10.0	Hazardous Material Management Program	37	
10.1	Purpose		
10.2	2 Scope		
10.3	3 Objective		
10.4	Definitions		
10.5			
	0.5.1 Responsibilities 0.5.2 Program Requirements		
10.7			
11.0	Hearing Conservation Program	43	
11.1			
11.2	2 Scope	43	
11.3	⁻ Objective	43	
11.4	Program Requirements	43	
12.0	Emergency Action Plans	44	
12.1	Purpose	44	
12.2	2 Scope	44	
12.3	- Objective	44	
12.4	Program Requirements	44	
GLOS	SSARY	46	
<i>APPENDIX A</i>			
(SAFETY PRACTICES AND PROCEDURES)			
A.	Preface		
B.	Accident Prevention Program		

C.	Accident Record Keeping Requirements (OSHA 300a Log)53
D.	Aisles and Passageways54
E.	Asbestos
F.	Back Safety Training
G.	Caution-Abnormal Condition Tag54
H.	Chemical Hygiene Plan
I.	Combative Clients, Guidelines for Handling (Office)
J.	Combative Clients, How To Deal With On Home Visits
P.	Combative Clients, Training For Those Who Work With61
Q.	Compressed Air, Use Of
R.	Drains for Flammable and Combustible Liquids62
T.	Emergency Flushing, Eyes and Body62
U.	Ergonomics
V.	Exits
W.	Extreme Weather Travel Policy64
X.	Eye and Face Protection65
Y.	Fire Protection
Z.	First Aid66
A1.	Flammable Liquids66
B1.	Floors, General Conditions67
C1.	Floor Openings
D1.	Food Handling67
E1.	Foot Protection
F1.	Hand Tools
G1.	Hand Protection
H1.	Head Protection
I1.	Housekeeping
J1.	Ladders, Fixed69
K1.	Ladders, Portable69
M1.	Personal Protective Equipment71
N1.	Radiation72
01.	Railings72
P1.	Respiratory Protection73
Q1.	Safety Markings73
R1.	Saws, Radial (Woodworking)75
S1.	Saws, Swing or Sliding Cut-Off (Woodworking)75

T1.	Saws, Table (Woodworking)	75
U1.	Scaffolds	76
V1.	Seatbelt Use	76
W1.	Stairs, Fixed Industrial	77
X1.	Stationary Electrical Devices	77
Y1.	Toilets	78
Z1.	Toxic Vapors, Gases, Mists and Dusts	78
B2.	Ventilation	78
D2.	Welding In Confined Spaces	79
APPENI	DIX B	80

1.0 Message from the Commissioner

1.1 Message

The safety of our employees is a responsibility that demands our continual attention. While we can calculate the costs of workers' compensation, we can only speculate on losses due to decreased productivity and human suffering. On behalf of the Department of Health and Social Services (DHSS), I strongly endorse a safety and loss prevention program that provides for a safe workplace and conserves the state's resources.

As State of Alaska employees we must minimize hazards in the workplace and train our employees in safe work practices. Because safety is a condition of employment, all employees are expected to comply with the program outlined in this handbook.

The obligation of loss prevention is a great challenge. DHSS is a vast department with employees scattered from Barrow to Ketchikan. This heightens the need for us to establish a focused and comprehensive policy that all our employees can follow. I look forward to working with you as we strengthen our commitment to safety.

Karleen K. Jackson, Ph.D. Commissioner Department of Health and Social Services

Signature

farte forles

2.0 Introduction to the Safety Program

2.1 Overview

This manual describes the safety standards that governs work to be performed at DHSS worksites.

At each location, every practicable effort will be made to sustain the integrity of DHSS's Health and Safety Program commensurate with maintaining the Commissioner's commitment to safety.

Section 3 details the specific safety safe work practice responsibilities of all DHSS employees. Our employees are expected to familiarize themselves with these safety responsibilities.

Accident and incident investigation is a very important part of any safety program because all available information and circumstances leading up to an accident or dangerous situation must be systematically evaluated to prevent recurrences. Section 5 describes the requirements of an accident /incident investigation.

Safety and health inspections are outlined in Section 9. This area describes how we recognize and report hazards.

Section 10 describes our Hazard Communication Management Program and outlines how we communicate these hazards to our employees.

Appendix A contains general safety standards and policies that serve as guidelines employees can follow to ensure safe work practices.

2.2 Purpose and Expectations of Manual

The purpose of the Safety and Loss Prevention Manual is to provide:

- 1. A practical system of policies, procedures and practices for the prevention and elimination of:
 - (a) Injuries and health hazards; and
 - (b) Negative environmental impacts.
- 2. Sufficient information which will assist and enable all workers to work at minimal risk to themselves, fellow workers and the public.
- 3. Line management with reliable information to successfully accomplish their health and safety obligations and responsibilities.

4. A consistent approach to health and safety throughout the Department of Health and Social Services.

The expectations for the use of the Safety Plan are for employees to:

- 1. Provide opportunities to know the health, safety and injury prevention information contained within the plan;
- 2. Implement and comply with the health and safety practices and procedures;
- 3. Provide input and feedback to improve the manual on an ongoing basis.

3.0 Program Responsibilities

3.1 Personnel

A. Safety Officer

- 1. Administer the safety program for DHSS;
- 2. Deal directly with division directors and safety committee representatives on safety issues;
- 3. Help directors develop safety training programs for their divisions;
- 4. Review work-related injuries.
- 5. Investigate work-related fatalities and overnight hospitalization cases.

B. Central Safety Advisory Committee Members

- 1. Assist in informing DHSS divisional employees about new and ongoing safety policies.
- 2. Recommend new and revised safety rules and procedures for adoption by management.
- 3. Promote accident prevention and safe job performance in their work areas.
- 4. Evaluate and respond to employees' safety suggestions and problems.

C. Division Directors

With the assistance of the Safety Officer will:

- 1. Ensure that safety training is conducted for division employees.
- 2. Ensure that safety rules and procedures are carried out in their division.

- 3. Evaluate division managers' and supervisors' safety performance through regular performance evaluations.
- 4. Prepare an annual training plan (non-office employees).
- 5. Ensure that each location (with 10 or more employees) has an emergency action plan and that training is provided.
- 6. Ensure that all employees who come in contact with hazardous materials as part of their employment are:
 - (a) provided necessary tools, equipment, training and information concerning safe work practices; and
 - (b) comply with safety practices, procedures and regulations pertaining to hazardous materials.

D. Employees

- 1. Observe established safety policies and procedures.
- 2. Notify supervisor of any unsafe conditions they discover.
- 3. Use personal protective equipment where required.
- 4. Attend required training or orientation to increase safety awareness.
- 5. Promptly report all job-related injuries or illnesses to supervisor.
- 6. Complete required workers' compensation forms within 24 hours of any work-related injury or illness.
- 7. Familiarize themselves with the information in the safety plan and participate in site safety meetings.
- 8. Provide input and feedback on the safety plan.
- 9. Abide by all regulations relating to hazardous materials and participate in required training.

E. Director Designees/Site Supervisors

- 1. Enforce the safety rules and procedures of this plan and any others that apply to their work.
- 2. Ensure that safety training activities are carried out according to training plan designed by their division director.

- 3. Promptly investigate all accidents and ensure corrective action is taken to eliminate cause of accidents.
- 4. Perform annual safety inspection to identify workplace hazards or unsafe behavior and ensure corrective action is taken.
- 5. Respond to employees' safety concerns and problems.
- 6. Make sure all required accident forms are completed in a timely fashion.
- 7. Keep records of safety meetings.
- 8. Be responsible for ensuring that safety materials are presented, and be available to employees.
- 9. Discuss at safety meetings the following: unsafe acts or practices, recent injuries or near misses, first aid and emergency procedures, safety audits and pertinent scientific reports or findings.
- 10. Conduct safety orientation with all new employees before they begin work and get Safety Orientation Checklist Form signed.
- 11. Attend training on accident investigation, dealing with combative clients (if applicable) and hazard recognition skills.
- 12. Develop and record a lesson plan for each safety training session.
- 13. Maintain up-to-date records on health and safety training for each employee and retain for three years.
- 14. Complete General Safety Inspection Form at least annually.
- Ensure the OSHA 300a Form is obtained from EEO Services, 240 Main Street, Juneau, AK ZIP, and that it is posted from February 1st through April 30th every year.
- 16. Ensure that safety plans are available and up to date.

4.0 Safety Training and Communications

4.1 Policy Standard

The objective of the safety training and communication element is to provide all employees with consistent safety information, education, instruction and training sufficient for them to develop the awareness to protect themselves and others from injury.

4.2 Distribution of DHSS Written Safety Plan

DHSS's written safety plan (i.e., safety manual) will be made available to every worksite location. This information will be kept in a location that is known and accessible to all workers.

4.3 DHSS Central Safety Advisory Committee

A Central Safety Advisory Committee will be established for the following purposes:

- 1. Promotion of accident prevention concepts to improve the department's overall safety performance;
- 2. Reviewing accidents/incidents and developing plans to prevent recurrence;
- 3. Presenting safety topics, literature, and/or videos which will enhance and maintain safety awareness;
- 4. Providing a forum for participation, feedback and teamwork;
- 5. Keeping current on safety issues;
- 6. Establishing and maintaining a uniform and consistent approach to the DHSS safety and loss prevention program.

4.4 Safety Meetings—General

The purpose of safety meetings is to acquaint employees with pertinent safety topics that relate to their work activities.

Safety meetings should be conducted within each division. Safety meetings provide an important communication link to each employee. Records of these meetings should be recorded on the DHSS Safety Meeting Lesson Plan.

Topics of discussion should pertain to safety items only. However, it would be reasonable for a supervisor to schedule the safety meeting before or after a regularly scheduled staff meeting.

4.5 Safety Meetings—Director Designee/ Site Supervisor

The division director will be responsible for ensuring that safety meetings are conducted for all non-office related employees and will give guidance to director designees/site supervisors as to which topics will be presented. The director designee will then be responsible for ensuring that the material is presented to employees. He/she shall:

- 1. Bring forward for discussion unsafe acts, practices or conditions that have been observed;
- 2. Review recent injuries and near miss incidents. Discuss why they happened and what can be done;
- 3. Encourage employee suggestions and discussion;
- 4. Review first aid and emergency procedures;
- 5. Use the results of safety audits as a source of discussion items;
- 6. Share contents of recent scientific report or findings that relate to employee safety;
- 7. Feel free to utilize written and audio visual aids. The Safety Officer in Juneau will collect and maintain a library of safety videos. These are intended to be loaned out to divisions per their needs. For more information call the Safety Officer at 465-4734.

4.6 New Employee Safety Orientation

All newly hired employees need to receive a general safety orientation before they begin work. This orientation includes a review of applicable safety rules, practices and procedures. During this review items discussed will be marked on the Safety Orientation Checklist form. An example of this form can be found in Appendix B. The employee will then sign the checklist and it will become part of his personnel file. The director designee/site supervisor will be responsible for conducting the orientation.

The general safety orientation is as follows:

- 1. Advise all personnel that working safely at all times is a condition of employment. It needs to be emphasized that DHSS is genuinely concerned about their safety.
- 2. Review all on-site physical layout as it pertains to emergency assembly and evacuations. A review of on-site physical layout includes the identification of the following:
 - (a) emergency site exits
 - (b) emergency assembly areas (for emergency evacuation head counts)

- (c) first aid facilities
- (d) lunchrooms
- (e) washrooms
- (f) telephone locations
- (g) interim storage areas
- (h) roadway systems
- (i) traffic logistics; and
- (j) restricted areas
- 3. Advise employees where safety handbooks and manuals are kept.
- 4. Explain accident/incident reporting procedures.
- 5. Identify the steps which must be taken.
 - (a) Recognize potential hazards;
 - (b) Eliminate potential hazards;
 - (c) Control potential hazards; and
 - (d) Minimize exposure to hazards.
- 6. The proper selection, care and use of protective equipment (if applicable).
 - (a) hard hats;
 - (b) safety glasses;
 - (c) safety footwear;
 - (d) eye protection/face shields;
 - (e) respiratory protection;
 - (f) hearing protection;
 - (g) gloves; and
 - (h) protective vests.
- 7. The location of fire extinguishers and hoses.
- 8. Reviewing the maintenance of tools, equipment and vehicles.
- 9. Housekeeping standards for work areas.
- 10. A review and demonstration of manual lifting procedures Bend your knees!!
- 11. A review of special mechanical lifting procedures (if applicable).
- 12. A review of DHSS's Hazardous Communications Program and employees' right to know about hazardous substances to which they may be exposed.
- 13. Instructions for emergency response situations.
- 14. Specific instructions or procedures for dealing with combative clients (if applicable).

4.7 Training (Non-Office Workers)

4.7.1 Director Designee/Site Supervisor

Director designees/ site supervisors are the key players in a successful safety program. They must promote the program directly to their employees. To accomplish this, the following training may be made available to them.

- 1. Accident Investigation Skills
- 2. Dealing with Combative Clients, (if applicable)
- 3. Hazards Recognition Skills

4.7.2 Employee

Safe work performance is a condition of employment within DHSS. Training requirements for non-office related employees will be determined and identified by division directors. The content of the training will address the specific hazards or needs relating to the employee's worksite. Director designees/site supervisors are responsible for presenting the material to their non-office designated employees

4.7.3 Training Lesson Plans

Careful planning and organization is required to present effective safety training. In order to fulfill DOL-OSHA expectations for training, a lesson plan will be developed for each training session. The DHSS Safety Meeting Lesson Plan form can be used for recording lesson plans. An example of this form can be found in Appendix B. Examples of completed lesson plans for topics such as back safety, slips and falls and video terminal ergonomics can be obtained by calling the Safety Officer.

A lesson plan should serve as a blueprint for training. A good lesson plan incorporates the following:

- 1. Presents material in proper order.
- 2. Emphasizes material in relation to its importance.
- 3. Keep classes focused and on schedule.
- 4. Encourages trainee participation.
- 5. Complies with OSHA expectations for safety training.

4.7.5 Defensive Drivers Training

A sizable percentage of DHSS employees must operate either state owned, leased, rented or personally owned vehicles to conduct state business. Considering the volume of this activity along with the frequent adverse weather conditions found in Alaska, it is important that the department help upgrade the basic level of competence. Defensive drivers training is intended to give employees the knowledge and tools to be better drivers. The areas covered in this training include:

- 1. Developing defensive driving skills;
- 2. Split-second decision making;
- 3. Backing-up;
- 4. Keeping safe distances;
- 5. Staying alert at intersections;
- 6. Driving in poor weather conditions.

Division Directors are encouraged to provide within their training budget an opportunity for employees who must drive frequently on state business to attend a defense driving class.

4.7.6 Training Records Retention

Up-to-date records must be kept of all health and safety training, including orientations for each employee. Training records must be retained for a minimum of three years. They should be readily available for review.

4.8 Safety Bulletin Boards

A safety bulletin board will be displayed in each DHSS facility that has 10 or more employees to provide employees with a centralized location for the posting of safety related information.

The following considerations should be made for bulletin boards:

- 1. Designate a specific bulletin board or portion of an existing board and reserved exclusively for safety material.
- 2. Place in a spot where there is the greatest employee exposure (lunchroom, break room, central part of facility);
- 3. Postings are arranged neatly;
- 4. Remove Posters, safety committee minutes and other information that is outdated;

Director designees/site supervisors will be responsible for the upkeep of bulletin boards.

The following items are to be posted:

- 1. OSHA 300a Summary (specifically during the period February 1st through April 31st);
- 2. OSHA 2003 Poster (Safety and Health Protection on the Job);
- 3. OSHA "It's Your Right to Know" Poster;
- 4. Emergency Telephone Numbers 8"x11".

5.0 Accident and Incident Investigation and Reporting

When an employee is injured on the job the employee is to complete the DOL Report of Occupational Injury and Illness form (ROI) (07-6101) and give it to his or her supervisor who in turn will forward it to:

ROI@admin.state.ak.us by email

Or

Fax to:

Employee Services Division of Personnel (907) 465-5850

The original form should be sent to:

Employee Services Division of Personnel 240 Main Street, Suite 501 Juneau, Alaska 99811

Employee's supervisor is required to complete the Supervisor's Accident Investigation Report form and send it accompanying the ROI.

These two forms may be downloaded from the Department of Administration Risk Management Web page. (See Forms) at Web site as follows:

http://www.state.ak.us/local/akpages/ADMIN/drm/riskinfo.html#forms

5.1 Objective and Definitions

The objective of an accident/incident investigation is to determine the cause and to implement suitable corrective measures.

An investigation is a systematic process of examination, observation, and inquiry comprised of three parts including:

- 1. Description of accident/incident;
- 2. Cause of accident/incident (Why did it occur?);
- 3. Recommendations.

After the cause of accident/incident has been determined, recommendations to prevent recurrence should be prepared.

Below are key definitions relating to accidents and injuries:

- 1. Recordable Injury
 - Any accident to an employee(s) that results in death or injury
 - Any accident that results in a loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment other than first aid
- 2. First aid Injury
 - Is an accident to employee that results in one time treatment of minor cuts, scratches, bums, etc., which do not ordinarily require medical care
 - Subsequent observation of said injuries.
- 3. Occupational Illness
 - Is any abnormal condition or disorder caused by exposure to environmental factors that is associated with employment.
 - o Caused by inhalation, absorption, ingestion, or direct contact.
- 4. Exposure incident
 - Is a specific eye, mouth, other mucous membrane, non-intact skin, or contact with blood or other potentially infectious materials that result from the performance of an employee's duties.

5.2 Accident Incident Investigation Procedures

5.2.1 Death or Overnight Hospitalization

Accidents involving the death or overnight hospitalization of a DHSS employee must be taken with extreme concern. It is the supervisor's responsibility to investigate and document all the circumstances related to employee accidents and take constructive action to prevent recurrences.

Immediately following an accident the supervisor must:

1. Complete the DOL Report of Occupational Injury and Illness form (ROI) (07-6101) and email it to: <u>ROI@admin.state.ak.us</u>

or

Employee Services Division of Personnel Fax: (907) 465-5850

Original form should be sent to:

Employee Services Division of Personnel 240 Main Street, Suite 501 Juneau, Alaska 99811

It will also be necessary for the supervisor to complete the Supervisor's Accident Investigation Report form and send it accompanying the ROI.

8. The Alaska Occupational Safety and Health Administration Statute 18.60.058(a) states that in the event of an employment accident, which is fatal to one or more employees or results in the overnight hospitalization of one or more employees, the employer must report the accident to the Division of Labor Standards and Safety no later than <u>8</u> hours after receipt of information that the accident occurred.

In order to comply with Section 18.60.058 and avoid serious penalties, it is critical that death and overnight hospitalization cases be reported to the *Alaska Department of Labor 907 (269-4940)* immediately. This reporting requirement also applies to injuries where there has been a loss of consciousness. These accidents must also be reported to the DHSS Safety Officer.

5.2.2 Recordable and First Aid Cases

The Supervisor must:

1. Investigate the accident by talking with the injured employee and anyone else who may be able to offer information. If possible, go with the employee to the exact area where the injury occurred and ask him/her to describe how it happened. The questions, who, what, when, where, why and how can be used to establish baseline information. Ask more pointed questions that can help uncover the real causes of the incident. Once causation has been determined, look at ways the accident could have been prevented. Be willing to modify physical work locations, job procedures, protective equipment requirements or anything else that can help prevent recurrence. Complete the DOL Report of Occupational Injury and Illness form (02-921) and distribute. It will also be necessary to complete the Supervisor's Accident Investigation Report form (02-932) and distribute. A copy of the Supervisors Accident Investigation form should be forwarded to the Safety Officer in Juneau.

6.0 Blood-borne Pathogens

6.1 Introduction

Blood or certain other body fluids may contain pathogenic agents, that is, microorganisms that cause disease. Among those pathogens that may be present are Hepatitis B and C viruses (HBV or HCV) or human immunodeficiency virus (HIV), which causes AIDS. If an individual has blood exposure to broken or injured skin, mucous membranes of the eyes, nose, mouth, or by needle stick or other injection, there is the potential of infection with any possible pathogen that might be present. To minimize the risk of infection, information and training must be provided to those who will likely be exposed; Hepatitis B vaccination is offered; protective measures in the work environment are instituted; and exposures are reported to ensure that proper medical evaluation and treatment can be provided. It is especially important that employees with potential exposure understand and follow the principle of "Universal Precautions" as required in the Occupational Safety and Health Administration standard. "Universal Precautions" is the infection control approach in which all blood and body fluids are treated as if they are infected and the necessary precautions are taken.

6.2 Scope and Application

State OSHA standards require a Blood-borne Pathogens Program for employees with job responsibilities which "reasonably expose" them to blood and certain other body fluids, unfixed human tissue or cell cultures. This program is intended to prevent infection with blood-borne pathogens. Under DHSS policy, the Blood-borne Pathogens Program applies to all individuals who may be exposed through department activities.

6.3 Program Description

6.4 Exposure Control Plan

Each department develops a written Exposure Control Plan indicating those job classifications and the tasks and procedures which involve potential exposure. The plan also includes an indication of the required engineering and work practice controls, personal protective equipment, housekeeping, labeling, training, and medical surveillance functions that will be instituted.

A. Training

Training must be provided initially at the time workers are assigned tasks involving exposure and annually thereafter. This training is provided by each division as needed with the support of the DHSS Safety Officer. Training content will include:

- 1. Material appropriate in content and vocabulary to the educational level, literacy and language of the staff
- 2. A copy of the regulatory text of 29 CFR 1910.1030 and an explanation of its contents
- 3. A general explanation of the epidemiology and symptoms of blood-borne diseases
- 4. An explanation of the modes of transmission of blood-borne pathogens
- 5. An explanation of the Exposure Control Plan and the means by which the staff can obtain a copy
- 6. An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious material
- 7. An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices and personal protective equipment
- 8. Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment
- 9. An explanation of the basis for section of personal protective equipment
- 10. Information on the Hepatitis B vaccine including information on its efficacy, safety, method of administration, benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge
- 11. Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious material
- 12. An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that must by made available
- 13. Information on the post-exposure evaluation and follow-up that will be provided
- 14. An explanation of the signs and labels and/or color coding required
- 15. An opportunity for interactive questions and answers with the person conducting the training

It is the responsibility of the supervisor to ensure that workers complete initial and annual training.

B. Medical Surveillance

Those who are potentially exposed to blood-borne pathogens are offered the Hepatitis B vaccination at no cost to the individual. Although this vaccination is strongly recommended, an individual can choose not to accept it and sign a declination statement. Each division will make available a medical service provider who will administer the vaccination series and provide any necessary medical follow-up as a result of exposures at no cost to the employee.

6.5 Roles and Responsibilities

A. Department Manager

- Identify individuals at risk of exposure
- Develop a written departmental Exposure Control Plan as described above
- Review the plan on an annual basis or as exposure conditions change
- Ensure that employees complete the required initial and annual training
- Provide personal protective equipment and engineering controls to eliminate or reduce exposure
- Maintain current written Exposure Control Plan

B. Supervisor

- Ensure that those exposed complete the required training
- Ensure that those exposed have available and use the appropriate personal protective equipment and that "Universal Precautions" are followed
- Conduct or arrange for initial and annual training

C. Safety Officer

Provide assistance in meeting OSHA standard requirements and audit department programs periodically.

D. Individual

Complete the provided training and understand the risk associated with the job.

Consider seriously the offer of Hepatitis B vaccination.

Follow the appropriate practices and procedures established for the work environment to limit or prevent exposures, and adopt the principle of "Universal Precautions." Report any exposures to supervisory personnel and undertake the necessary medical review and treatment.

If you have questions relating to blood-borne pathogens please refer to your site specific Blood-borne Pathogens Exposure Control Plan at your facility.

7.0 Blood-borne Pathogens Exposure

7.1 Purpose

To outline responsibilities, establish procedures, guidelines and proper practices for dealing with occupational exposure to blood-borne pathogens.

7.2 Scope

Applies to all DHSS employees who may come in contact with blood-borne pathogens during the course of their employment.

7.3 Objective

To protect the health of DHSS employees who may be exposed to blood-borne pathogens by establishing work practice controls and providing education and training to reduce the risk of exposure.

7.4 **Program Requirements Exposure Determination**

DHSS is required to determine which employees may have occupational exposure to blood or other potentially infectious materials. This determination is made in three categories: (I) job classifications in which all employees can be reasonably anticipated to have occupational exposure regardless of frequency of that exposure; (2) job classifications in which some employees have occupational ensure, again without regard to the frequency of that exposure and (3) those job classifications which do not have occupational exposure.

7.5 Engineering and Work Practice Controls

A. Compliance with Engineering And Work Practice Controls

Unit or shift supervisors are responsible for enforcing the following engineering and work practice controls.

B. Universal Precautions

Universal precautions will be observed at each facility in order to prevent contact with blood or other potentially infectious materials. All blood or other potentially infectious materials will be considered infectious regardless of the perceived status of the source individual. Blood is the single most important source of HIV, HBV, and other blood-borne pathogens in the occupational setting. Infection control efforts for HIV, HBV, and other blood-borne pathogens must focus on preventing exposures to blood as well as on delivery of HBV <u>immunizations*</u> Universal precautions also apply to tissues and to the following fluids: cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, semen, vaginal secretions and amniotic fluid. Exposure to these body

fluids is exceedingly rare within DHSS work settings. Universal precautions do not apply to saliva (except in dental practice where mixture of saliva and blood is common).

C. Hand Washing

- 1. Clinics where blood is drawn (ventipuncture, finger stick, heel stick, etc.), where patients are examined, dressings changed, or where potentially infected materials are collected should have an easily accessible sink supplied with warm running water, soap, and paper towels.
- 2. If blood must be drawn or other activities are engaged in that may lead to exposure to blood or other potentially infectious materials and a sink and running water are not available, either an antiseptic hand cleanser must be available in conjunction with clean paper towels, or antiseptic towelettes must be available. The employee must use the antiseptic for temporary cleansing and then wash his/her hands as soon as possible at a sink once the task(s) involving potential occupational exposure is completed.
- 3. Supervisors and program managers must ensure that employees wash their hands or use an antiseptic hand cleanser immediately or as soon as feasible after: (1) the removal of gloves or other personal protective equipment; and (2) finishing tasks in which an employee has been using an antiseptic towelette for temporary cleansing between exposures.

D. Work Practice Controls To Be Followed At All Times

- 1. Needles and Sharps
 - (a) Contaminated needles and other contaminated sharps shall not be bent or recapped under any circumstances.
 - (b) Only disposable needles and sharps will be used. There will be no reprocessing of disposable equipment.
 - (c) Immediately after or as soon as possible after use, contaminated needles or sharps shall be placed into a sharps container which is puncture resistant, labeled or color coded as a biohazard, leak proof on the sides and bottom, and cleansable. Lids must be kept closed on sharps containers when not in active use and during transportation.
 - (d) Sharps containers will be replaced when they are three-quarters full to prevent overfilling of the container. Containers must be positioned or mounted in such a way that the opening into which sharps are to be placed is clearly visible.

E. Work Areas

- 1. Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure. This includes any area where blood or other potentially infectious materials are collected, processed or tested.
- 2. Food and drink shall not be kept in refrigerators, coolers, freezers or cabinets, or on shelves, counter tops or bench tops where blood or other potentially infectious materials are present or may be placed. Equipment such as refrigerators and coolers used for storage or transport of biological samples shall not be used for any other purpose.
- 3. Blood Drawing, Blood Handling, and Specimen Collection
 - (a) Blood drawing and handling of blood or other potentially infectious materials shall occur in designated areas in each office, clinic, or other facility. If blood must be processed in large quantities (as in the case of a population survey or disease outbreak), an area may be temporarily designated as a handling area for the collection or packaging of samples.
 - (b) Mouth palpating/suctioning of blood or other potentially infectious materials will not be done under any circumstances.
 - (c) Specimens of blood or other potentially infectious materials shall be placed in labeled containers that prevent leakage during collection, handling, processing, and storage. Laboratory samples of potentially infectious materials shall be placed in labeled coolers or mailing packages immediately or as soon as feasible in order to prevent leakage or breakage.
 - (d) Specimens for transport shall be placed in a double container if a container is leaking or is contaminated on the outside. Specimens for transport must conform to U.S. Postal Regulation 124.383a, which defines packaging requirements for etiologic agents.
 - (e) Unfixed slides from cancer detection activities shall be treated as potentially infectious materials.
 - (f) Equipment which becomes contaminated with blood or other potentially infectious materials shall be decontaminated prior to shipping or repair. Portions that remain potentially contaminated must be identified by a readily observable label or tag.
 - (g) If equipment cannot be decontaminated, biomedical technicians and equipment repair personnel will be advised when equipment requiring repair may be contaminated.
 - (h) Broken glass that may be contaminated with blood or other potentially infectious materials must not be picked up by hand, even when wearing

gloves. A broom, dustpan, tongs, or other mechanical means are to be used. Equipment used must be disinfected afterwards with a detergent washing followed by a soak in a sodium hypochlorite (household bleach) solution for at least five minutes, or in another EPA approved intermediate level disinfectant.

7.6 Personal Protective Equipment

A. General Protective Equipment

- 1. Each supervisor is responsible for ensuring that staff is using Universal Precautions when exposed to blood or other potentially infectious materials.
- 2. The following items are considered personal protective equipment:
 - (a) disposable vinyl or latex gloves;
 - (b) non-disposable utility gloves used in housekeeping tasks;
 - (c) masks, eye protection devices, and face shields;
 - (d) disposable gowns or aprons; and
 - (e) mouth pieces or resuscitation bags. Uniforms are not considered personal protective equipment, but clothing.
- 3. Each shift or unit supervisor is responsible for assuring the easy accessibility of personal protective equipment in the proper sizes for use by occupationally exposed employees.
- 4. Personal protective equipment is provided, maintained, cleaned and repaired at no cost to the employee.
- 5. Each instance in which an employee is performing an activity that results in occupational exposure without the use of proper protective equipment must be documented. If the non-use of appropriate protective equipment resulted from an employee's decision to temporarily and briefly decline the use of personal protective equipment because of rare and extraordinary circumstances, which would have prevented the delivery of appropriate care to a patient or client or would have posed an increased hazard to the safety of the worker or coworkers, the supervisor will document those circumstances.

The employee's supervisor is responsible for assuring this documentation in the form of a memo to the record, in addition to following procedures described in the section of this document on post exposure evaluation and follow-up. The supervisor will retain one copy of the memo to the record on file and forward one copy to the Safety Officer in Juneau. Documentation on exposures in which personal protective equipment was not used will be reviewed and evaluated every six months by supervisors and the Safety Officer to determine methods for improving compliance with Universal Precautions as recommended by the Centers for Disease Control and to determine if safer measures can be developed to eliminate preventable occupational exposure.

- 6. Instances in which an employee is found to be negligent in following universal precautions will be reflected in the employee's performance evaluations.
- 7. Defective protective equipment will be reported to the immediate supervisor who will procure replacement items.

B. Clothing

- 1. Clothing that becomes visibly soiled with blood or other potentially infectious materials must be changed immediately. Soiled clothing must be placed immediately into a red or labeled biohazard bag that is leak proof. Universal precautions must be used for processing the laundry unless it is decontaminated before being laundered.
- 2. Personal protective equipment must be removed before the employee leaves the work area. Personal protective equipment such as gloves soiled with blood or other potentially infectious materials must be disposed of in a labeled biohazard bag or color coded red plastic bag.

C. Gloves

- 1. Disposable, FDA-approved latex or vinyl gloves, such as surgical or examination gloves, shall be worn when drawing blood or in other circumstances in which it is reasonably anticipated that the employee may have hand contact with blood, other potentially infectious materials, mucous membranes, or non-intact skin, as specified in site-specific procedures.
- 2. Disposable gloves shall be replaced as soon as feasible if they become torn or punctured.
- 3. Disposable gloves shall be changed between patients with hand washing after removal of gloves. If hand washing facilities are not available, antiseptic towelettes or cleansers must be used.
- 4. Disposable gloves shall not be washed or reused.
- 5. Employees carrying out housekeeping/cleaning activities involving blood or other potentially infectious materials shall use non-disposable utility gloves.

D. Housekeeping

- 1. All equipment and environmental and working surfaces shall be cleaned and disinfected after direct contact with blood or other potentially infectious materials.
- 2. Tables that are used for clinics shall be cleaned with disinfectants. A disposable protective covering shall be used for protection of the work surface

when blood or other potentially infectious materials are being collected or processed. If at any time a work surface becomes grossly contaminated, the protective covering shall be removed and the surface shall be cleaned and disinfected immediately.

- (a) Protective coverings will be changed on patient examining tables between patients. Liners of tables for blood drawing only need to be changed if the surface becomes visibly contaminated.
- (b) If there is a potential for blood or other potentially infectious materials to drop or flake off the disposable protective covering, the covering shall be considered to be regulated waste and must be disposed of accordingly. For example, a spot of blood on a disposable table covering is not considered regulated waste. However, if a sufficient quantity of blood is spilled so that it would drip if the covering is compressed or wrung out, it would be regulated waste.
- 3. Spills of blood or other potentially infectious materials must be promptly cleaned up while wearing gloves. Visible materials must first be removed with disposable towels or other appropriate means and disposed of according to approved biohazard methods. A detergent should be used to clean the surface followed by a fresh 1:100 sodium hypochlorite (household bleach) solution or other EPA approved intermediate level disinfectant. The surface should be kept wet with the bleach and water solution for five minutes and then allowed to air dry.
- 4. Biohazard plastic bags, either labeled or color coded, shall be used for the disposal of all paper and non-sharp waste that is grossly contaminated with blood or other potentially infectious materials and is considered to be regulated waste. For instance, plastic biohazard bags are to be used to line all trash receptacles for articles saturated with blood or other potentially infectious materials.
- 5. A second biohazard bag or container must be used if outside contamination of the first waste container occurs, or if there is a possibility the first bag may leak.
- 6. Garbage cans lined with biohazard bags are to be checked each time the biohazard liner is removed to ensure that there is no gross contamination of the garbage can. If there is, the can is to be cleaned with a detergent solution and then disinfected with a 1:100 household bleach solution.
- 7. Broken glass that may be contaminated with blood or other potentially infectious materials shall not be picked up directly with hands. Instead, tongs, brooms, and dust pans are to be used. Implements used to pick up contaminated glass are to be decontaminated after use.

- 8. Broken glass that may be contaminated shall be deposited in a sharps container. If the quantity or size of the glass debris is too large to fit into a sharps container, another, suitably sized, hard-sided container shall be used to contain the debris. This container shall be suitably labeled as described in the section of this document on Biohazard Labeling and Color Coding and disposed of in the same manner as a sharps container.
 - (a) Sharps containers are adequate when:
 - (i) closeable (with both temporary and permanent lids so that the container can be secured when filled or closed when not in active use or during transportation);
 - (ii) puncture resistant;
 - (iii) leak proof on sides and bottom; and
 - (iv) labeled with a biohazard sign or color coded red;
- 9. Sharps containers shall be:
 - (a) available for immediate disposal of sharps in locations where sharps are used;
 - (b) maintained in an upright position;
 - (c) kept closed when transported or when not in active use; and
 - (d) replaced when three-quarters fall.
- 10. Sharps containers shall not be emptied, cleaned manually, or handled in any manner which would expose employees to the risk of puncture, abrasion, or other skin injury.
- 11. Wastes
 - (a) Regulated wastes include liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood and are capable of releasing infectious materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood and other potentially infectious materials.
 - (b) Regulated waste must be placed in containers that are closeable, constructed to contain all contents and prevent leakage of fluids during handling, storage, transportation or shipping.

- (c) Liquid blood or other potentially infectious liquid materials may be flushed down drains or commodes served by a central sewage treatment plant.
- (d) Regulated wastes generated at field clinics or in locations away from permanent facility shall be transported back to a facility where proper disposal can occur.
- (e) Disposal of regulated waste shall occur in conformity with applicable laws and regulations of the Alaska Department of Environmental Conservation.
- 12. Laundry
 - (a) Laundry contaminated with blood or other potentially infectious materials will be handled as little as possible. Such laundry will be placed in appropriately marked (biohazard labeled or color coded red bag) bags at the location where it is used. Such laundry will not be sorted or rinsed in the area of use.
 - (b) Alternatively, if all soiled laundry is handled using universal precautions, an alternative color or label for laundry bags/containers may be used as long as employees are trained to recognize them as containing soiled laundry that requires the use of universal precautions.

7.7 Biohazard Labeling and Color Coding

- A. Shift or unit supervisors are responsible for ensuring that biohazard labels are affixed to containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious materials, and other containers used to store, or ship blood or other potentially infectious waste.
- B. The universal biohazard symbol shall be used. The label must be fluorescent orange or orange-red. Labels must be secured to the package or container by string, wire, adhesive or other method to prevent the unintentional loss or removal of the label.
- C. Red bags or containers may be substituted for labels.
- D. Regulated wastes that have been decontaminated, such as wastes that have been properly autoclaved, are exempted from the labeling/color coding requirement.
- E. Supervisors in work areas that may generate regulated wastes are responsible for obtaining appropriate labels, sharps containers, and color coded red bags.

7.8 Employee Training

A. All full- and part-time employees judged subject to occupational exposure must participate in all components of a training program, which is to be provided during working hours and at no cost to the employee.

- B. Training as specified in Section F, below, will be provided:
 - 1. before immunization and within 10 working days of initial assignment to tasks where occupational exposure may occur;
 - 2. after the effective date of the Alaska Administrative Code regulations governing occupational exposure to blood-borne pathogens; and
 - 3. at least annually thereafter.
- C. For employees who have received training on blood-borne pathogens in the year preceding the effective date of the regulations, only training with respect to the provisions of the regulations that were not included needs to be provided.
- D. Additional training must be provided to employees when there are any changes in tasks or procedures affecting the employee's occupational exposure. Arrangements for such training will be assured and documented by the employee's supervisor within 10 working days of new task/ procedure initiation.
- E. Material appropriate in content and vocabulary to educational level, literacy, and language of employees must be used.
- F. The training course, which will be developed and reviewed at least annually, must contain at a minimum the following elements:
 - 1. a copy of the state regulations and an explanation of their contents;
 - 2. an explanation of the facility's Blood-borne Pathogen Exposure Control Plan;
 - 3. a general explanation of the epidemiology and symptoms of blood-borne diseases;
 - 4. an explanation of the modes of transmission of blood-borne pathogens;
 - 5. the recognition of tasks that may involve exposure;
 - 6. an explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment;
 - 7. an explanation of the types, use, location, removal, handling, decontamination, and disposal of personal protective equipment;
 - 8. an explanation of the basis for selection of personal protective equipment;
 - 9. information on Hepatitis B immunization, including efficacy, safety, method of administration, benefits, and that it will be ordered free;

- 10. an explanation of the procedure to follow if an exposure incident occurs, including the appropriate actions to take, the method of reporting the incident including whom to contact, and the medical follow-up that will be made available;
- 11. information on post exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident; and
- 12. an explanation of the signs and labels and color coding required for hazards or regulated waste.
- G. A copy of your facility's Exposure Control Plan will be made available when requested by an employee or a member of the public.
- H. While various types of training aides may be used in training courses, training must provide opportunity for interaction between trainees and instructors.

7.9 Hepatitis B Vaccine

- A. Hepatitis B vaccine is available free of charge to all full- and part-time employees with occupational exposure to blood or potentially infectious materials. Vaccination will be made available during duty hours and at a reasonable time and place.
- B. All employees with occupational exposure are encouraged to receive Hepatitis B vaccine.
- C. Vaccines will be administered under the direction of a licensed medical professional. Unit supervisors are responsible for providing a written authorization for the health care practitioner to provide vaccination at no cost to the employee and for assuring vaccine administration.
- D. Employees may receive or refuse vaccination only after attending the required training course on blood-borne pathogens.
- E. The first dose of vaccine must be given within 10 days of an employee's assignment to a position involving occupational exposure unless the employee signs a declination form (Hepatitis B Declination Form found in Appendix B). Signing the declination form does not preclude the employee from receiving the vaccine at a later date if he/she changes his/her mind.
- F. In the case of employees who were already in positions with occupational exposure on the effective date of the Alaska regulations on blood-borne pathogens and who have not previously received the Hepatitis B vaccine, the first dose of vaccine must be offered within 10 days of completion of the required employee training unless the employee signs a declination form.

- G. Screening for antibody to Hepatitis B virus is not routinely offered before or after vaccination and cannot be required.
- H. The following types of proof of immunity to Hepatitis B are acceptable: (a) a provider verification of immunization with dates; (b) physician documentation and laboratory confirmation of current or prior infection; or (c) documentation of laboratory confirmed immunity. The laboratory referenced in (b) and (c) above, must be licensed or certified to provide this service in the state or territory in which it is located.
- I. Unit supervisors are responsible for employee compliance in obtaining the vaccine or signing a declination form within 10 working days of assignment and for assuring timely compliance with dates for completing the series.
- J. Booster doses will be provided if recommended by the U.S. Public Health Service.
- K. If an employee terminates employment prior to completing the vaccination series, the employer is not responsible for completion of the series.
- L. Accurate records of immunization status will be forwarded to and maintained in the employee's permanent personnel file and the contracted medical records holding facility.

8.0 Interim Tuberculosis Exposure Control Plan

8.1 Purpose

To outline responsibilities and establish guidelines for DHSS employees who may reasonably come in contact with tuberculosis (TB) germs while performing their jobs.

8.2 Scope

Applies to all employees who must work in environments where there exists a moderate level of risk of exposure to tuberculosis.

8.3 Objective

To reduce the level of exposure risk to employees by implementing changes in work procedures and potentially providing annual TB tests. In addition, in-service and other types of educational efforts will be utilized to provide pertinent information regarding the disease to DHSS employees.

8.4 Facts Concerning Tuberculosis

Tuberculosis is a disease caused by a tiny germ called Mycobacterium tuberculosis. M. tuberculosis is carried in airborne particles, or droplet nuclei, that can be generated when people who have pulmonary or laryngeal TB sneeze, cough, speak, or sing. The

infectious particles are very tiny, and normal air currents can keep them airborne for a long time period and spread them throughout a room. Infection occurs when a person inhales droplet nuclei containing M. tuberculosis and these nuclei traverse the mouth or nose and reach the lungs. Once in the lungs, the organisms are spread throughout the body. Usually from 2-10 weeks after initial infection with M. tuberculosis, the immune response limits further multiplication and spread of the germ; however, some of the germs remain dormant and viable for many years. This condition is referred to as latent TB infection. Persons with latent TB infection usually have positive TB skin test results, but they do not have symptoms of active TB, and they are not infectious. In general, people who have latent TB infection have approximately a 10% risk of developing active TB disease during their lifetimes. This risk is greatest during the first two years after infection. Immuno-compromised persons have a greater risk for the progression of latent TB infection to active TB disease; HIV infection is the strongest known risk factor for this progression.

TB infection is not spread on dishes, drinking glasses, eating utensils, toilet seats, or other objects, including food. The probability that a person who is exposed to M. tuberculosis will become infected depends primarily in the concentration of infectious droplet nuclei in the air and the duration of exposure. Environmental factors that enhance the likelihood of transmission include: a) exposure in relatively small, enclosed spaces; b) inadequate local or general ventilation which results in insufficient dilution or removal of infectious droplet nuclei; and c) recirculation of air containing infectious droplet nuclei.

8.5 **Program Requirements**

It is of utmost concern to our department that our employees be protected from exposure to tuberculosis while on the job. Therefore, it is important that the following program requirements be met:

- A. Each division conduct a self-inspection to identify which of their employees might be at risk of infection. It should be remembered that infection is spread through repeated exposure indoors from a diseased person. It would normally take twenty hours of exposure to a TB infected person for an individual to become infected with the disease. Employees who work in residential work environments are considered "at risk."
- B. The more difficult determinations must be made in relation to all other employees. The Epidemiology Section of the Division of Public Health monitors the status of TB throughout the state. Certain geographical areas have higher rates of infection. This information should be considered when identifying specific positions in locations which are at risk. The following steps must then be taken as follows:
 - 1. All identified employees will receive initial training, which recognizes job situations in which exposure may occur and explains fundamental information regarding the disease.

- 2. Efforts should be made to alter work procedures or processes to reduce the level of risk. Special emphasis should be directed at increasing the level of fresh air flow through indoor work environments. For instance, opening an exterior window, which might be adjacent to a tightly cramped client waiting room, would help dissipate potential TB germs. The type of work procedure alteration will be dictated by the level of the perceived risk.
- C. The great majority of DHSS positions will not be identified as "at risk." However, employees may still express concern that they could become infected with TB. If this occurs, the location manager should:
 - 1. Attempt to assess the true level of risk involved.
 - 2. Based on the true level of risk, make necessary alterations to work procedures or processes. Again, special emphasis should be given to the issue of ventilation.
 - 3. Provide training to concerned employees which recognizes job situations in which exposure may occur and explains information relating to TB.

If it is determined by the Division Director after training activities have occurred that a substantial risk of infection exists for employees, then these individuals will be offered TB tests at no cost.

9.0 Safety and Health Inspections

Risk assessment and control are very important elements of a successful safety program. Safety and health inspections help identify existing or potential dangers in the workplace. They focus primarily on unsafe acts and unsafe conditions and help provide corrective measures before these acts or conditions become serious enough to cause an accident.

Safety inspections provide valuable information such as:

- 1. The level of compliance to safety legislation and organizational safety standards.
- 2. The level of management commitment and participation.
- 3. Evaluating the effectiveness of safety program practices and procedures.
- 4. The effects of change (i.e., technology) on safety performance.
- 5. Identification of improper employee actions (i.e., unsafe acts).
- 6. Deficiencies in equipment

- 7. Providing a communications system to keep all participating personnel informed.
- 8. Identification of hazardous situations.
- 9. Serving as a barometer of worker safety awareness and morale.

9.1 Annual Inspections

At least once annually a safety inspection should be conducted at each department location. Each division director will be responsible for ensuring that this occurs within his or her division. The Department Safety Officer is available to perform these inspections. Division Managers should contact the Safety Officer and arrange for an inspection.

9.2 OSHA Consultation Inspections

The Alaska Department of Labor provides consultation inspections at the request of employers. These inspections help safety and health programs comply with state statutes without penalties imposed for deficiencies. These inspections are helpful when a state OSHA standard needs to be adapted for a specific site or situation. All deficiencies noted on these inspections must be corrected according to OSHA guidelines. Divisions are encouraged to utilize consultation inspections and these can be scheduled through the DHSS Safety Officer.

9.3 OSHA Compliance Inspections

The State of Alaska Department of Labor can visit a DHSS establishment on a "no notice" basis. If a violation of a safety standard is documented by an inspection officer, a citation will be issued against DHSS by mail to the affected location or to the division director.

State inspection compliance officers generally concern themselves with safe working practices, use of prescribed protective equipment, adequacy of protective equipment, guarding of machines, equipment configurations with respect to operation protection, and written safety and health programs.

9.3.1 Responsibilities of Division Compliance Inspections

- 1. If in Juneau, notify the Safety Officer and invite him/her to accompany the State Inspector when any DHSS facility is inspected.
- 2. Record violations detected by the inspector. Include the Safety Officer as part of the closing conference session with the DOL inspector.
- 3. In the event of a citation, ensure it is posted on the bulletin board nearest to the violation until it has been abated or vacated.

- 4. If the citation is questionable or should be aggrieved, the Division Director should request an informal hearing with the Department of Labor.
- 5. Ensure correction of a violation within the abatement period or file (in writing) for an extension. If an extension is filed, a copy should be sent to the Safety Officer.
- 6. Upon completion of corrective action, certify by date and signature at the bottom of the citation form that each violation has been abated. Mail form to the State Department of Labor with a copy to the Safety Officer.

9.4 Hazard Classification Rating System

One of the largest benefits of hazard classification is the establishment of priorities. The hazard posing the greatest risk should be given priority in the correction process. These hazard classifications can be used to describe the potential severity of loss in the event of an accident.

Hazard classification rating is intended to give supervisors and inspection teams guidance as they attempt to discover root causes of problems they note. This effort to identify the basic causes of the items uncovered on inspections is a key to permanent remedy.

The hazard classification rating system is as follows:

1. Class A Hazard

A condition or practice likely to cause permanent disability, loss of life or body part, or extensive loss of structure, equipment or material.

2. Class B Hazard

A condition or practice likely to cause serious injury or illness, resulting in temporary disability or property damage that is disruptive but not extensive.

3. Class C Hazard

A condition or practice likely to cause minor (non-disabling) injury or illness or non disruptive property damage.

4. Class D Hazard

A condition that could cause minor injury or is a minor housekeeping problem that can be easily corrected.

For clarification purposes, the following examples of hazard classification ratings are provided:

1. Class A Hazard

- Example 1. A backhoe is performing a trenching procedure at a DHSS location. The swing radius of the machine extends directly over a walkway which is used by employees.
- Example 2. Guards are missing on rotating equipment.

2. Class B Hazard

- Example 1. The sidewalk outside a DHSS clinic is missing a large piece of concrete. The area has not been blocked off.
- Example 2. A maintenance employee has mixed two hazardous chemicals in an unmarked container.

3. Class C Hazard

- Example 1. Office employees work at a leased facility in which there is no fresh air ventilation.
- Example 2. Poor lighting conditions exist at night in the facility repair shop.

4. Class D Hazard

- Example 1. Clients have tracked snow and ice on top of the linoleum hallway.
- Example 2. A Social Worker in a remote location fails to place a winter survival suit in his/her automobile during a home visit. Temperatures are -30°

Supervisors are encouraged to perform informal safety inspections often. All employees are responsible for reporting hazardous conditions

10.0 Hazardous Material Management Program

10.1 Purpose

To outline responsibilities, establish procedures, guidelines, and proper practices for handling, storing, redistributing and/or disposing of surplus hazardous materials and hazardous waste.

10.2 Scope

Applies to all DHSS employees who may come in contact with hazardous materials as a part of their employment.

10.3 Objective

- 1. To prevent accidents and loss to the State of Alaska, its employees and the public.
- 2. To reduce risks associated with handling, storing and/or disposal of hazardous materials.
- 3. To assure compliance with all applicable laws concerning hazardous materials.

10.4 Definitions

1. Accumulation Area

An area where surplus hazardous materials or waste is collected and temporarily stored prior to redistribution, treatment or disposal.

2. CFR

Code of Federal Regulations.

3. Disposal

The disposition of contained, hazardous waste.

4. Waste Producer

Any person whose act or process produces hazardous waste.

5. Hazardous Material

Material that poses physical or health hazards. It includes infectious agents, laboratory, janitorial and other chemicals.

6. Hazardous Waste

Any material intended to be discarded which is either toxic, ignitable, corrosive, or reactive. Refer to 40 CFR 261 for complete definitions. Listed wastes include spent/used solvents and discarded commercial chemical products.

7. Redistribution

Part of the Hazardous Material Minimization Program. Provides method for tracking and redistribution of surplus chemicals.

10.5 Hazard Communication

10.5.1 Responsibilities

A. Management — Division Directors

Must ensure that all employees who come in contact with hazardous materials as part of their employment are:

- 1. Provided necessary tools, equipment, training and information concerning safe work practices; and
- 2. In compliance with safety policies, procedures and regulations pertaining to hazardous materials.

10.5.2 Program Requirements

- A. Division Directors will ensure that the following program features be present:
 - 1. Development and maintenance of an up-to date inventory of chemicals used by division employees in the workplace.
 - 2. Collection of Material Safety Data Sheets (MSDS) on all chemicals and materials used in the workplace, and make them readily available to supervisors and employees in the work areas.
 - 3. Assurance that containers have identification labels applied to them.
 - 4. Training for employees who work with chemicals and toxic materials in the hazards of those chemicals and in emergency procedures.
- B. Employee training will include:
 - 1. Methods and observations that may be used to detect the presence of hazardous chemicals in the work area such as continuous monitoring devices, odors, visual appearance of hazardous chemicals, etc.

- 2. Physical and health hazards of the chemicals in the work area.
- 3. Measures employees can take to protect themselves from these hazards, including changes in work procedures and the wearing of personal protective equipment.
- 4. Details of the hazard communication program developed by DHSS, including an explanation of how employees can obtain and use the appropriate hazard information.
- 5. Inform contractors who will be working regularly in areas where hazardous substances will be used. Also, hazardous substances used by contractors on DHSS property need to be identified and material safety data sheets generated for employee review.

10.6 Hazardous Material Users of Hazardous Waste

DHSS management should always try to substitute existing hazardous materials with biodegradable or less toxic products. This is a key element in hazardous waste stream reduction. Surplus hazardous materials must be removed from work areas pending redistribution. In compliance with local, state and federal requirements, materials deemed to be hazardous waste must be shipped off site promptly.

To help facilitate compliance with these requirements, surplus hazardous materials and suspected hazardous waste should be properly identified, containerized and promptly moved to designated hazardous material accumulation and collection areas.

Staff (hazardous material users) responsibilities are outlined below.

- 1. Hazardous material users are responsible for identifying and designating:
 - (a) Surplus hazardous materials that are no longer needed by them and may possibly be used by others;
 - (b) Hazardous materials where there is no apparent future use (i.e., expired shelf use, chemical make-up is unknown or unidentifiable, spent fuels and solvents, etc.); and
 - (c) Quantities of hazardous materials that exceed the allowable limits for safe storage.
- 2. Surplus hazardous materials and suspected hazardous waste should be properly containerized and prepared for storage in the approved designated hazardous material collection areas (i.e., fume hoods, appropriate storage cabinets, etc.).

- Hazardous material must be properly containerized in its original container, DOT specified containers, or other containers identified for hazardous material type.
- 4. Fill out and affix required hazardous material labels on containers. At the time when the accumulation of a material begins, the date should be clearly marked and visible for inspection on each container.
- 5. Participate in required training programs involving hazardous material handling, management, hazard communication, safety training programs, etc.
- 6. General rules for proper management of surplus hazardous materials and suspected wastes include, but are not limited to:
 - (a) Accumulation of materials in containers larger than 55 gallons must meet DOT specifications;
 - (b) If accumulating ignitable materials, care must be taken to store the material in accordance with applicable fire safety codes and procedures;
 - (c) Hazardous materials should never be simply abandoned at hazardous material collection sites;
 - (d) Depending on the chemical hazard presented, hazardous material users must receive proper training and utilize personal protective clothing and equipment as required (i.e., indicated on Material Safety Data Sheets, container labels or mandated by law); and
 - (e) Attach to the container any special hazard information gained as a result of a known incompatible mixture or a chemical test, such as:

10.7 Labeling Of Hazardous Material Containers

- 1. Procedures for hazardous material labeling apply to all DHSS employees who work with hazardous materials.
- 2. Labeling: To help ensure the correct storage compatibilities of chemicals and other hazardous materials, efficient hazardous material management and safety operations, hazardous materials in use, stored for future use, or disposal must be labeled in accordance with local, state and federal law. Labeling should include:
 - (a) Hazardous chemical or component in a container will be identified;
 - (b) Display appropriate hazard warnings; and

- (c) When known, include the name and address of the manufacturer, importer or responsible party.
- 3. The hazard warning system that has been adopted by DHSS is the NFPA 704 (National Fire Protection Association) hazard marking and color coding system.
- 4. To maintain consistency of labeling and coding systems for disposal and safety purposes, the NFPA numerical rating (0-4), representing the degree of hazard, must be displayed on all hazardous material container labels. Household or commercial cleaners, solvents and paints in containers in quantities of less than five gallons are exempt from this provision.
- 5. The NFPA 704 system is designed to communicate health (toxicity), fire (flammability), corrosiveness and reactivity (stability) information to individuals working with hazardous materials. An example of an NFPA label (704M diamond) is illustrated below. The numbers 0-4 are NFPA ratings representing the degree of hazard. A "0" represents a low, or no hazard rating condition.

A "4" represents an extreme hazard. Color coding identifies the nature of hazard and the required storage locale and atmosphere. Blue (left) represents Health; Red (top) Flammability;

Yellow (right) Stability; and White (bottom) represents "Special Information" which is followed with hazard symbols. The NFPA 704 M labeling systems provide a simple mechanism for easy identification, separation and storage of hazardous materials based on chemical compatibility and for safety and emergency response.

- 6. Containers that are to be shipped must be labeled with the Department of Transportation labeling system on the outside of the container.
- 7. Hazardous material labels are not intended to be a complete or only source of safety hazard information. Material Safety Data Sheets (MSDS) should be used in addition to the label information. MSDSs are probably the best source of safety information available and should be requested, maintained, and made available to all employees who may come in contact with hazardous materials. MSDSs provide detailed information such as:

Material Identification Hazardous Ingredients/Identity Physical/Chemical Characteristics Fire and Explosive Hazard Data Reactivity Data Health Hazard Data Precautions for Safe Handling Control Measures Material Safety Data Sheets must be maintained by all divisions working with or around hazardous materials.

10.8 Chemical Spills

- A. Any leaks or spills must be promptly reported to the Fire Department in your locality by calling 911. The caller must provide a detailed description of the spill and chemical(s) involved. Advise whether the chemical is flammable or whether there is a threat of fire or asphyxiation.
- B. Divisions and laboratories using, generating and/or possessing hazardous chemicals should maintain a well stocked chemical spill kit (accessible location) at all times.
- C. General rules and precautions include:
 - 1. Provide immediate attention and care for anyone who may have been contaminated by the spill.
 - 2. Determine chemical nature of spill.
 - 3. Notify responsible parties such as division director, supervisors, General Services (if spill occurred in leased facility), etc.
 - 4. If the chemical nature of the spill is unknown, treat the spill as you would a highly toxic hazardous material and take all safety precautions.
 - 5. Ventilate area of spill.
 - 6. Consider the possibility of evacuation of non-essential personnel from the spill area.
 - 7. Consult reference materials, including but not limited to, the Material Safety Data Sheets for the item or items spilled. The MSDS will provide information on the potential hazard involved (Sections 1-6); spill and disposal procedures (Section 7); protective equipment and measures (Section 8); storage and handling data (Section 9); and transportation data (Section 10). Utilize this information in the management of the spill.
 - 8. After the appropriate safety measures have been taken, including but not limited to, the recommendations set forth in the MSDS, initiate a location spill plan. Non-ignitable, low toxicity liquids or solids not generating dangerous gases can be handled by responsible and knowledgeable division personnel, if the volume is sufficiently small. In all other instances, assistance in managing chemical spills must be requested by your local fire department or emergency response team. Contact the Department of Environmental Conservation/Division of Spill Prevention and Response at:

•	Central (Anchorage)	269-3063	269-7648
•	Northern (Fairbanks)	451-2121	451-2362
•	Southeast (Juneau)	465-5340	465-2237

11.0 <u>Hearing Conservation Program</u>

11.1 Purpose

To outline responsibilities and establish guidelines for employees who work in environments containing excessive noise.

11.2 Scope

Applies to all DHSS employees who must work in areas that exceed 85 decibels for an eight-hour time period.

11.3 Objective

Hearing loss is a common workplace injury, all too often ignored because it usually happens gradually over a period of time. A hearing conservation program has been established to protect employees from excessive work related noise exposure through changes in work procedures, engineering controls and personal protective equipment.

11.4 **Program Requirements**

In all cases, where sound levels exceed 85 decibels over a time-weighted eight-hour average, a hearing conservation program must be initiated.

The hearing conservation program should contain the following features:

1. Noise Monitoring

When information indicates that any employee's exposure may equal or exceed an eight-hour time-weighted average of 85 decibels, a monitoring program shall be implemented. A dosimeter may be used to measure noise levels over a period of time while a sound level meter can measure the intensity of sound at a given moment. Both are very useful devices for determining noise levels.

2. Audiograms

An audiometric testing program needs to be implemented, which makes audiometric testing available to employees whose exposures equal or exceed an eight-hour time-weighted average of 85 decibels. The program shall be provided at no cost to the employee. Within six months of an employee's first exposure at or above the action level, DHSS is required to ensure that a baseline audiogram is established, against which subsequent audiograms can be prepared. At least annually, thereafter, a new audiogram for each exposed employee must be obtained.

3. Constructive Action

When it is known that excessive noise exists in the workplace it is important for our department to take constructive action. First, there may be changes in work procedures that can be implemented which reduce noise levels. Second, engineering controls can sometimes help. For instance, say a maintenance employee at one of our residential facilities uses a chainsaw to trim trees that are located on DHSS property. The saw he/she normally uses has a decibel level of 117 decibels. By placing an attachable muffler on the saw he/she can reduce the decibel level by I0 decibels. Third, when changes in work procedures or engineering controls are not possible or affordable, personal protective equipment can be used. Using the example above, this employee would also want to wear ear protection while operating the chainsaw because the addition of the muffler would not eliminate the hazard (i.e., excessive noise).

The wearing of ear plugs is a cheap and effective means of reducing noise exposure. Employees should be encouraged to use them when they work with loud equipment.

12.0 Emergency Action Plans

12.1 Purpose

To establish a uniform policy that will ensure the safe evacuation of DHSS employees in the event of fire or other emergencies.

12.2 Scope

Applies to all department locations.

12.3 Objective

To reduce the risk of injury to DHSS employees in the event of fire or other emergencies by establishing site-specific procedures that serve as a guide for the evacuation process.

12.4 Program Requirements

An emergency action plan (EAP) is a written document required by particular OSHA standards. The purpose of an EAP is to facilitate and organize employer and employee actions during workplace emergencies. The elements of the plan must include, but are not limited to:

1. evacuation procedures and emergency escape route assignments;

- 2. procedures to be followed by employees who remain to operate critical plant operations before they evacuate;
- 3. procedures to account for all employees after an emergency evacuation have been completed;
- 4. rescue and medical duties for those employees who are to perform them;
- 5. means of reporting fires and other emergencies; and
- 6. names or job titles of persons who can be contacted for further information or explanation of duties under the plan.

Employee training in relation to the emergency plan must occur when the plan is developed, whenever an employee's designated actions under the plan change or whenever the plan is changed. For all locations with fewer than <u>10</u> employees the plan may be communicated orally to employees and it will not be necessary to maintain a written plan. Escape routes must be drawn up and posted prominently at each facility.

GLOSSARY

<u>A</u>

Acute Exposure — A short-term exposure, usually occurring at high concentration.

Acute Health Effect — An effect that develops either immediately or a short term after exposure.

Auto ignition Temperature — The minimum temperature required to initiate or cause self-sustained combustion, in the absence of a spark or flame.

B

Biohazardous Infectious Material — A material that contains organisms and the toxins produced by these organisms that have been shown to cause disease or are believed to cause disease in either humans or animals.

Boiling Point — The temperature at which a liquid changes from a liquid to a gas, at normal atmospheric pressure.

<u>C</u>

Carcinogens — Agents/compounds that may induce cancer in humans.

CAS Registry Number — A number assigned to a material by the Chemical Abstracts Service (CAS) to provide a single unique identifier.

Chemical Formula — Sometimes called the molecular formula, indicates the elements that make up a chemical.

Chemical Name — A proper scientific name for the active ingredient of a product.

Chronic Exposure — A long-term exposure, usually occurring at low concentration.

Chronic Health Effect — An effect that appears a long time after exposure.

Coefficient of Oil/Water Distribution — The ratio of the solubility of the chemical in an oil to its solubility in water.

Combustible Liquid — A liquid which has a flash point above 37.8°C.

Compressed Gas — A material that is a gas at normal room temperature (20°C) and pressure but is packaged as a pressurized gas, dissolved gas or gas liquefied by compression or refrigeration.

Condensation — The process of reducing from one form to another denser form such as steam to water.

Controlled Products — Under the Controlled Products Regulation, a controlled product is defined as a material, product or substance that is imported or sold in Canada and meets the criteria for one or more of the following classes:

- Class A Compressed Gas
- Class B Flammable and Combustible Material
- Class C Oxidizing Material
- Class D Poisonous and Infectious Material
- Class E Corrosive Material
- Class F Dangerously Reactive Material

Corrosive Material — A material that can attack (corrode) metals or cause permanent damage to human tissues such as skin and eyes on contact.

Cryogenics — Materials that exist at extremely low temperatures, such as liquid nitrogen.

<u>D</u>

Dangerously Reactive Materials — Materials that may undergo vigorous condensation, decomposition or polymerization. They may react violently under conditions of shock or increase in pressure or temperature. They may also react vigorously with water or water vapor to release a toxic gas.

Decomposition — The breakdown of a substance, often due to heat, decay, or other effect, with the release of other compounds such as vapors or gases that may be flammable or toxic.

Density — The weight of a material in a given volume. It is usually given in grams per milliliter (gm/ml).

Dilution Ventilation — Dilution of contaminated air with uncontaminated air in a general area, room or building for the purposes of health hazard or nuisance control, and/or for heating and cooling.

Dose — Amount of the agent that has entered the body through the various routes of entry.

<u>E</u>

Evaporation Rate — The rate at which a liquid changes to vapor at normal room temperature.

Explosive (Flammable) Limits — The lower explosive (flammable) limit (LEL) is the lowest concentration of vapor in air that will burn or explode upon contact with a source of ignition. The upper explosive (flammable) limit (fuel) is the highest concentration of vapor in air that will burn or explode upon contact with a source of ignition.

Explosive (Flammable) Range — The range between the lower explosive limit (LEL) and the upper explosive limit (UEL).

Exposure Limits — Established concentrations which, if not exceeded, will not generally cause adverse effects to the worker exposed. Exposure limits differ in name and meaning depending on origin. For example:

- The exposure levels for the hazardous chemicals that are included in the Regulation respecting the Control of Exposure to Biological or Chemical Agents made under the Occupational Health and Safety Act of Ontario, are expressed as follows:
 - TWAEV— Time Weighted Average Exposure Value: The average airborne concentration of a biological or chemical agent to which a worker may be exposed in a workday or a workweek.
 - STEV— Short-Term Exposure Value: The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15-minute period, provided that the TWAEV is not exceeded.
 - CEV— Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
 - SKIN— This notation indicates that direct or airborne contact with the product through the skin, mucous membranes or eyes. Inclusion of this notation is intended to suggest that preventative action be taken against absorption of the agent through these routes of entry.
- 2. Threshold Limit Values (TLVs) are exposure guidelines developed by the American Conference of Governmental Hygienists (ACGIH). They have been adopted by several Canadian governments and others as their legal limits. They are expressed as follows:
 - TLV-TWA Threshold Limit Value Time Weighted Average: Time-weighted average concentration for a normal eight-hour workday and a 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse affect.

- TLV-STEL Threshold Limit Value Short Term Exposure Limit: A 15-minute time-weighted average exposure which should not be exceeded at any time during a workday even if the eight-hour TWA is within the TLV
- TLV Exposures at the STEK should not be repeated more than 4 times a day and there should be at least 60 minutes between successive exposures at the STEL.

TLV-C —Threshold Limit Value — Ceiling: The concentration that should not be exceeded during any part of the working exposure.

<u>F</u>

Flammable Limits — See "Explosive Limits"

Flammable Substance — One that will readily catch fire and continue to burn in air if exposed to a source of ignition.

- 1. Flammable Aerosol A material that is packaged in an aerosol container which can release a flammable material.
- 2. Flammable Gas A gas that can readily catch fire and continue to burn.
- 3. Flammable Liquid A material that gives off a vapor that can readily catch fire and continue to burn. A flammable liquid has a flashpoint below 37.8°C.
- 4. Flammable Solid A material that can readily catch fire and continue to burn vigorously and persistently. This may occur from friction, absorbing moisture, from spontaneous chemical change, or by retaining heat from manufacturing or processing.
- 5. Reactive Flammable Material A material that is a dangerous fire risk because it can react readily with air or water.

Flashback — This occurs when a trail of flammable material is ignited by a distant source of ignition. The flame then travels back along the trail of gas, vapor or aerosol to its source.

Flash Point — The lowest temperature of a liquid at which it gives off enough vapor to form an ignitable mixture of vapor and air immediately above the surface of the liquid.

Freezing Point — The temperature at which a liquid becomes a solid, at normal atmospheric pressure.

<u>H</u>

Hazard — the potential for harmful effects.

Hazardous Combustion Products — Chemicals that may be formed when a material burns. These chemicals may be flammable, toxic or have other hazards.

Hazardous Decomposition Products — Formed when a material decomposes (breaks down) because it is unstable, or reacts with materials such as water or oxygen in air.

Hazardous Ingredient — Under the Hazardous Products Act, a chemical must be listed in the Hazardous Ingredients section of an MSDS if:

- it meets the criteria for a controlled product;
- it is on the ingredient disclosure list;
- there is no toxicological information available; or
- the supplier has reason to believe it might be hazardous.

Hazardous Polymerization — Polymerization is a process of forming a polymer by combining large numbers of chemical units or monomers into long chains (polyethylene from ethylene or polystyrene from styrene). Uncontrolled polymerization can be extremely hazardous. Some polymerization processes can release considerable heat or can be explosive.

Ī

Ingestion — Means taking a material into the body by mouth (swallowing).

Inhalation — Means taking a material into the body by breathing it in.

Irritant — Some sort of aggravation of whatever tissue the material comes in contact with.

L

LC50 — The concentration that causes the death of 50% of a group of test animals. The material is inhaled over a set period of time, usually four hours. LC stands for lethal concentration.

LD50 — The weight of material that causes the death of 50% of a group of test animals. It is usually expressed in weight of material per weight of test animal. LD stands for lethal dose.

LEL (Lower Explosive Limit) - See "Explosive Limits."

Local Exhaust Ventilation — Involves the capture of pollutants at the source.

Μ

Material Causing Immediate and Serious Toxic Effects — Classified under "Poisonous and Infectious Material" as toxic or very toxic based on information such as the LD50 or LC50.

Material Causing Other Toxic Effects — Classified under "Poisonous and Infectious Material" as a material causing toxic effects such as skin or respiratory sensitization, carcinogenicity, etc.

Melting Point — The temperature at which a solid material becomes a liquid.

Mutagen — An agent that affects the genes or cells of the exposed people in such a way that it may cause cancer in the exposed individual or an undesired mutation to occur in some later generation.

<u>N</u>

NA Number — See "UN Number."

<u>0</u>

Odor Threshold — The airborne concentration, usually in parts per million, at which an odor becomes detectable.

Oxidizing Material — Gives up oxygen easily or can readily oxidize other material.

<u>P</u>

Permissible Exposure Limits (PEL) — Legal limits in the U.S.A. set by the Occupational Safety and Health Administration (OSHA).

pH — a measure of the acidity or alkalinity of a material when dissolved in water.

Polymer — A natural or man-made material formed by combining large numbers of chemical units or monomers into long chains.

Part Per Million (PPM) — Represents the concentration of gases or vapor in air. For example, 1 ppm of a gas means that 1 unit of the gas is present for every 1 million units of air.

<u>S</u>

Sensitization — The development, over time, of an allergic reaction to a chemical.

Solubility -The ability of a material to dissolve in water or another liquid.

Stability — The ability of a material to remain unchanged in the presence of heat, moisture or air.

T

Teratogen — Agents or compounds that a pregnant woman takes into her body that generates defects in the fetus.

TLV — See "Exposure Limits."

Toxicity — Ability of a substance to cause harmful effects.

TWA — See "Exposure Limits."

<u>U</u>

UEL (Upper Explosive Limits) - See "Explosive Limits".

UN Number — A four digit number assigned to a potentially hazardous material or class of materials. UN (United Nations) numbers are internationally recognized and are used by firefighters and other emergency response personnel for identification of materials during transportation emergencies. NA (North American) numbers are assigned by Transport Canada and the U.S. Department of Transport to materials they consider hazardous and to which a UN number has not been assigned.

<u>v</u>

Vapor — A gaseous form of a material which is normally solid or liquid at room temperature and pressure.

Vapor Density — The density of a vapor compared to the density of an equal amount of air.

Vapor Pressure — The pressure of a vapor in equilibrium with its liquid or solid form.

W

WHMIS Toxicity Categories — The adverse (acute) effects resulting from a single dose of or exposure to a material. Ordinarily used to denote effects observed in experimental animals. WHMIS categorizes chemicals as "toxic" or "very toxic."

APPENDIX A (SAFETY PRACTICES AND PROCEDURES)

A. Preface

Appendix A was compiled to help DHSS in its efforts toward achieving voluntary compliance with AKOSH standards.

The appendix covers many General Industry Safety and Health Standards. It also contains some specific standards that are unique to DHSS operations (i. e., training for those who work with combative clients, extreme weather travel policy). Further, it must be remembered that these are minimum requirements.

B. Accident Prevention Program

- 1. An employer must adopt and maintain an accident prevention program.
- 2. As part of this program, a code of safe practices and procedures shall be developed and adopted. This code will apply to the operations being performed at the job site and will be posted in a conspicuous location.
- 3. Supervisory personnel shall be involved in the accident prevention program.

C. Accident Record Keeping Requirements (OSHA 300a Log)

- 1. Each employer shall maintain in its establishment a log and summary (OSHA Form No. 300a) of all recordable injuries and illnesses (resulting in a fatality, hospitalization, lost workdays, medical treatment, job transfer or termination, or loss of consciousness) for that establishment, and enter each recordable event no later than six working days after receiving the information.
- 2. All DHSS locations with 10 or more employees are required to keep a separate OSHA 300a log. This log can be obtained from the EEO Service Office, 240 Main Street, Suite 501, Juneau, AK 99801-1230. They can fax it or send a PDF of it.
- 3. Each employer shall post an annual summary of occupational injuries and illnesses for each establishment, compiled from the collected Form 300a, and including the year's totals, calendar year covered, company name, establishment, name and address, certification signature title, and date. A Form OSHA No. 300a shall be used in presenting the summary. The summary shall be posted by February 1 (of each year), and shall remain in place until April 31st. It must be archived on site.

 The EEO Services office at EEO Service Office, 240 Main Street, Suite 501, Juneau, AK 99801-1230 maintains the 300a log master files and they are required to send them to work locations for posting by February 1st.

D. Aisles and Passageways

- 1. Where mechanical handling equipment is used, sufficient safe clearance shall be allowed for aisles at loading docks, through doorways, and whenever turns or passage must be made.
- 2. Aisles and passageways shall be kept clear and in good repair with no obstructions across or in aisles that could create hazards.
- 3. Permanent aisles and passageways shall be appropriately marked.
- 4. Covers and guardrails shall be provided to protect personnel from the hazards of open pits, tanks, vats, ditches, etc.

E. Asbestos

- 1. To help reduce worker exposure to airborne fibers, asbestos must be handled, mixed, applied, removed, and cut in a wet state. This "wet" method must also be used when products containing asbestos are removed from bags, cartons and containers. If this is not possible, removal must be done in an enclosed or well-ventilated area.
- Respirators must be used (1) while feasible engineering and work practice controls are being installed or implemented; (2) during maintenance and repair activities or other activities where work practice controls are not feasible; (3) if feasible engineering and work practice controls are insufficient to reduce employee exposure; and (4) in emergencies.

F. Back Safety Training

A study of DHSS workers' compensation claims for FY06 was conducted. Injuries to backs caused by lifting accounted for approximately 10% of all injuries. However, the cost of these back injuries averaged over \$22,000 per incident. This was four times higher than any other accident type. Many DHSS employees must lift objects, patients, etc., during the course of their employment. Divisions are strongly encouraged to implement preventative back injury programs which educate employees on proper lifting techniques. Workplace redesign and mechanical lifting devices can, at times, help reduce the risk of back injury.

G. Caution-Abnormal Condition Tag

At times, equipment of various kinds will break down and become inoperable or only marginally operable. This can create an unsafe situation for a fellow employee who may use the equipment without knowing of its defects. For instance, say a maintenance worker at a DHSS residential facility has used a portable saw which has had a loose saw blade. Rather than placing a Caution-Abnormal Condition Tag on the equipment prior to it being repaired the employee just returns the saw to the equipment room. This obviously could put the safety of the next person who uses the equipment in jeopardy. These tags provide warning information to others while equipment is being repaired.

H. Chemical Hygiene Plan

All DHSS laboratories must develop and maintain chemical hygiene plans which contain the following components:

- (a) Basic rules and procedures;
- (b) Chemical procurement, distribution and storage;
- (c) Environmental monitoring;
- (d) Housekeeping, maintenance and inspections;
- (e) Medical program;
- (f) Personal protective apparel and equipment;
- (g) Records;
- (h) Signs and labels;
- (i) Spills and accidents;
- (j) Training and information;
- (k) Waste disposal.

I. Combative Clients, Guidelines for Handling (Office)

- 1. Reschedule services with or ask clients to leave the office if they are obviously intoxicated, disruptive or incapable of conducting business.
- 2. Give verbally abusive individuals one warning and opportunity to stop. If this doesn't correct the problem, a supervisor or designee will be contacted for further action.
- 3. DO's for dealing with verbally abusive individuals:
 - (a) Do use a calm, controlled, and evenly-toned voice. If you raise your voice or become argumentative, you defeat your purpose and may lose control of or escalate the situation.
 - (b) Do be repetitive in the point you are trying to verbalize. If you repeat the sentence over and over again in an assertive but calm tone an individual will usually lose interest in continuing verbally aggressive activity.

- (c) Do leave a silent break in between repetitive statements. Once the other party realizes that anger is futile and having no effect, he or she will usually calm down.
- (d) If available and there is no threat of physical violence, find a vacant room or area to meet with an irate client Moving an upset individual away from an audience may help defuse the situation. Ensure that another employee has been notified to stand by in case the situation escalates.
- (e) Repeated incidents of verbal abuse by the same individual should be documented and reported to an appropriate supervisor.
- 4. DON'T'S when dealing with verbally abusive individuals
 - (a) Don't follow an irate client. Some individuals will want privacy and a little room to cool off.
 - (b) Don't involve co-workers in a verbally hostile situation. This will usually escalate the problem.
 - (c) Don't send an irate client in to see a supervisor or co-worker unannounced. Let co-workers and supervisors know about the situation to allow for preparation and a cooling off period.
 - (d) Don't engage in an argument or bait an irate individual. This could escalate a verbal situation into a physical one.
- 5. Dealing with physical assault
 - (a) If you are attacked:
 - (i) Protect yourself and try to get away from the attacker.
 - (ii) Yell out for help. Be LOUD. This could help stop the attack.
 - (iii) Do Not retaliate and Do refrain from striking back. This will escalate the situation.
 - (b) If you witness an attack in progress:
 - (i) Contact a co-worker to get help and to notify a supervisor, then,
 - (ii) Intervene by getting the attacker's attention. *DO NOT MAKE THREATS*. Try to reason with the individual using a controlled voice tone.

- (iii) If the attack continues, intervention may be necessary to stop the attack and to restrain the attacker.
- (c) On an as needed basis, each office with over 10 employees should prepare an intervention plan. The plan should include a method for sounding an alarm that will serve two purposes:
 - (i) To signal that an attack is in progress; and
 - (ii) To alert an intervention team/co-workers to where the incident is occurring.
- (d) If possible, a supervisor should make the decision on whether or not authorities will be called. This choice will be made on an individual case basis.
- (e) Move employees and clients out of the danger area and keep it clear until the situation is under control.
- (f) Once the situation has been brought under control, a written documentation of the event should be performed and sent to the Division Director and Safety Officer in Juneau for review.
- 6. Supervisors are encouraged to schedule annual training relating to crisis diffusion and management.

J. Combative Clients, How To Deal With On Home Visits

- 1. It is a very common occurrence for DFYS, DPA, DPH and other department employees to conduct business in the homes of clients. This usually has the tendency of putting the client at ease. However, for clients with an aggressive nature, they may feel more comfortable committing a violent act while in their own homes as opposed to a public place. The purpose of this section is to establish procedures of conduct for those who must perform home visits and to give employees the tools to deal more effectively with potentially violent clients. The safety of DHSS employees will depend on their abilities to become proficient in the following areas:
 - (a) Assessment

The staff member first needs to gain as much information concerning the client and the client's home environment as possible. A thorough review of the client's file is critical. File notes can often indicate if a person has exhibited aggressive behavior on past occasions. Discussions with other staff members concerning a client's background and present environment can often be helpful. It is worth the time and effort to find out what kind of

situation a person may be entering. Special precautions should be considered when a worker is making an initial contact with an allegedly abusing parent, when a child is likely to be removed or arrested, when a parent is likely under the influence of alcohol or drugs and any other known high risk situation. These procedures should include:

- "Buddy System" for home visits. A fellow staff member should accompany the primary caseworker whenever possible when there are known potential hazards.
- (ii) If there is a circumstance where department business has to be carried out with an individual who has been convicted of a weapon offense, or who is known to have exhibited past violent behavior, then police assistance will be necessary. At the local level, written agreements between the DHSS location and law enforcement agencies should describe in detail how and when workers are to call for emergency assistance or back-up.
- (iii) When police assistance does not occur, the use of portable radio/walkie-talkies or cellular phones can keep staff in close touch with assistance if it should become necessary.
- (iv) When selecting a time to meet, it is generally recommended that home visits be scheduled in the morning. There is a greater chance of the client being home, less chance of disrupting the client's plans for the day and less time for extraneous others (friends, neighbors, etc.) to gather.

From a procedural standpoint, it is far superior to error on the safe side. A staff member needs to do his/her homework regarding the clients' history and ensure that the proper back-up support is in place if necessary

Once inside a client's home there are certain things for a caseworker to remember. Personal space is a key issue. The invasion of an individual's personal space can trigger an aggressive response. This is especially true during home visits since staff is entering the client's "turf' or "territory." The following apply to personal space:

- (v) Intimate distance is 6 to 18 inches.
- (vi) Personal distance is 2 to 4 feet around a person.
- (vii) Social distance is 4 to 12 feet
- (viii) Public distance is 12 feet and beyond.

If a person goes into a situation in which he or she feels that hostility could occur, it is a good idea to perform a brief initial survey once in the house. While performing this inspection it is important to stay near the door. Assess the situation for objects that could become dangerous weapons: brooms, lamps, tables, chairs, canes, pool cues, etc. It is a good idea to keep a clipboard or similar object in hand to deflect sudden oncoming weapons. An employee should know the quickest and safest route to the door and maintain an easy route of escape.

The worker's ability to assess the client's non-verbal cues can help him/her understand the current emotional state of the client. Recognition of the following signs can be helpful in determining the level of the perceived threat:

K. Skeletal Muscular System

- 1. General tightening of body muscle;
- 2. Jaw and fist clenching;
- 3. Rapid head movement;
- 4. Rapid eye movement;
- 5. Facial contortions;
- 6. Tics.

L. Respiratory and Circulatory Systems

- 1. Rapid or shallow breathing;
- 2. Excessive perspiration;
- 3. Presence of red spots;
- 4. Hand wringing.

M. Language Patterns

- 1. Rapid or slow speech;
- 2. Use of profanity;
- 3. Incomplete sentences;
- 4. Repeating self;

- 5. Verbal threats;
- 6. Inappropriate voice tone;
- 7. Not making sense.

N. Thought Patterns

- 1. Linear thinking;
- 2. Excessive thoughts (not being able to concentrate);
- 3. Circular thought patterns (blaming you or others for problems;
- 4. Blaming self;
- 5. Sense of hopelessness.

The use of firearms by DHSS staff personnel is prohibited. Divisions who have staff working in areas such as welfare fraud investigations, juvenile corrections or family services should perform assessments to determine if they are properly protecting the personal safety of their employees.

O. De-escalation Techniques

Because of the potential conflict producing nature of the work DHSS staff must perform, it is essential that these employees possess the appropriate verbal skills to defuse problem situations. Following are two excellent techniques which can be used:

1. Empathy

Empathy is the ability to share in another's emotions or feelings. This can be done by utilizing the following techniques:

- (a) Allow the individual the opportunity to "get it off their chest."
- (b) Identify the person's emotion.
- (c) Use "paraphrasing" to help demonstrate a professional concern.

The format for utilizing this technique is:

"You feel _____, because _____

(emotion) (paraphrase what was expressed)

,,

EXAMPLE Staff to client, "You feel angry because it was found that you are no longer eligible for food stamps."

2. Listening Skills

The development of sound listening skills can help diffuse a client's anger. Some suggestions for improving listening skills include:

- (a) Try to understand the other person's point of view;
- (b) Don't be judgmental;
- (c) Clarify other party's distortions;
- (d) Avoid temptation to be competitive;
- (e) Discover points of agreement;
- (f) Control your ego;
- (g) Observe other person's non-verbal communications.

P. Combative Clients, Training For Those Who Work With

 A study of workers' compensation claims indicated that many DHSS workrelated injuries occurred to staff who were dealing with combative clients. All staff who work directly with clients in DHSS residential facilities should have initial training on dealing with combative clients as part of their new hire orientations. Thereafter, residential treatment staff will be required to participate in extensive training in this area at least once every other year. Training facilitation can be performed by in-house staff or outside contractors

The training course must contain at a minimum the following elements:

- (a) The identification of warning signs and triggers that may be indicative of impending aggression;
- (b) The importance of body language and body positioning. Understanding non-verbal clues;
- (c) Alteration of client's physical setting;
- (d) Dealing effectively with the emotional person;
- (e) The role of staff in the prevention of acting-cut behavior;

- (f) Verbal intervention techniques;
- (g) Personal safety (physical) techniques;
- (h) Team intervention strategies.
- 2. Dealing with potentially combative clients is a concern that extends to many other DHSS employees who don't work in residential facilities. Divisions are encouraged to provide training in this area to their employees.

Q. Compressed Air, Use Of

Compressed air used for cleaning purposes shall not exceed 30 psi static pressure and then only with effective chip guarding and personal protective equipment.

R. Drains for Flammable and Combustible Liquids

- 1. Emergency drainage systems shall be provided to direct flammable liquid leakage and fire protection water to a safe location.
- 2. Emergency drainage systems for flammable liquids, if connected to public sewers or discharged into public waterways, shall be equipped with traps or separators.

S. Drinking Water

- 1. Potable water shall be provided for purposes of drinking, preparation of foods and cooking. Only potable water shall be used in kitchens, food preparation and personal service rooms except nonpotable water may be used for the flushing of water closets and urinals.
- Potable drinking water dispensers shall be designed, constructed, and serviced so that sanitary conditions are maintained, capable of being closed and equipped with a tap. Common drinking utensils are prohibited. Reference 02.106 (b) (1) (D) and (H)

T. Emergency Flushing, Eyes and Body

Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

U. Ergonomics

1. Ergonomics is the science that seeks to adapt work or working conditions to suit the worker. There are times when changes can be made in a person's work environment that make it healthier or safer. For instance, an office worker may be positioned so that he/she must constantly look down at his/her personal computer screen to operate the equipment. Over a period of time, this causes the tightening of muscles in his/her neck which ends up causing physical discomfort. By lowering the employee's chair eight inches, it causes the employee to be at eye level with his/her personal computer screen. This, in turn, causes less stress on the employee's neck. It demonstrates an example of an ergonomic adjustment. DHSS employees are encouraged to look at ways in which work or working conditions can be adapted to make a healthier workplace.

- 2. Since nearly all DHSS employees use video display terminals (i.e., personal computers) to carry out their daily business, it is important that they understand the need to protect themselves. The following serves as a list of important recommendations relating to:
 - (a) Workstation Design
 - (i) Both the terminal and keyboard should be placed on platforms of adjustable height. The heights of the terminal, keyboard, and chair should be arranged so that the operator's forearms are parallel to the floor when keying.
 - (ii) The distance between the eyes and the screen should be between 18 and 30 inches. The top edge of the terminal should be even with eye level and the screen should be capable of tilting backwards to provide a viewing angle of between 5 and 20 degrees. The character height should be between 1/8 and 3/16 inch high and the character width should be approximately 75% of the character height. The space between words should be about a character width and the space between lines should range from 1/2 to 1 and 1/2 the character height.
 - (iii) The object in proper keyboard design is to keep the hands and arms in a straight line. The most basic requirement of a keyboard is that it should be detachable so that its placement for height and angle can be adjusted by the operator. The slope of the keys should be between 5 and 25 degrees.
 - (iv) Padded wrist rests help provide support necessary to keep wrists straight during keying. They are also available for those who perform extensive 10-key work.
 - (v) Chairs should be adjustable for height. The backrest should provide support for the lower back.

 (vi) Inappropriate office lighting is probably the most widespread environmental problem of personal computer users. Lighting levels for VDT work must be substantially lower than for tasks using printed materials. Illumination is measured in units called lux, or foot-candles.

While the lighting in offices is usually 750 lux and higher, the lighting level where VDTs are used should be in a range of 200-500 lux and should be toward the lower limit if intensive screen work is performed. Screens should be placed at a 90-degree angle to windows. They should never be placed with a window directly in front or behind the terminal. Naked overhead fluorescent tubes create harsh glare and reflections on display screens. Light fixtures should be covered to shield the light.

V. Exits

- 1. Every building designed for human occupancy shall be provided with exits sufficient to permit prompt escape of occupants in case of emergency.
- 2. In hazardous areas, or where occupants may be endangered by the blocking of any single egress due to fire or smoke, there shall be at least two means of egress remote from each other.
- 3. Exits and the way of approach and travel from exits shall be maintained so that they are unobstructed and are accessible at all times.
- 4. All exits shall discharge directly to the street or other open spaces that provide safe access to a public way.
- 5. Exit doors serving more than 50 people, or a hazard area, shall swing in the direction of travel.
- Exits shall be marked by readily visible, suitably illuminated exit signs. Exit signs shall be distinctive in color and provide contrast with surroundings. The word "EXIT" shall be of plainly legible letters, not less than six inches high.
- 7. Any door, passage or stairway which is neither an exit nor a way of exit access, and which is so located or arranged as to be likely to be mistaken for an exit, shall be identified by a sign reading "Not an Exit" or similar designation.

W. Extreme Weather Travel Policy

1. The weather conditions in Alaska can often be adverse. On the other hand, our department has many employees who must perform work away from their offices or locations. Never should an employee place his or her personal safety

in jeopardy when weather conditions are highly extreme. The following items need to be adhered to:

- (a) Travel away from the main office to outlying areas should not occur when temperatures reach -35 Fahrenheit or lower. If temperatures are between 0 and -35 Fahrenheit great caution should be used. It is strongly encouraged that an employee possess a "survival suit" that would protect him/her if he/she should suffer vehicle breakdown. At times, the Public Safety Department will issue travel advisories that may limit air and ground travel. These advisories should be strictly followed.
- (b) Each vehicle should contain the proper tire traction devices as would be appropriate for conditions.
- (c) Vehicle breakdown under adverse conditions can cause personal injury. Whether an employee uses a state owned or private vehicle, he/she is responsible for:
 - (i) Checking engine oil level and fuel. Adjust as required.
 - (ii) Checking cooling system for sufficient water or antifreeze to meet weather conditions.
 - (iii) Checking tire inflation, condition and tread depth.
 - (iv) Checking and cleaning lighting equipment. After or during a snowstorm, taillights, headlights and braking lights need to have snow cleaned off of them.
 - Documenting all unusual conditions as soon as practical to supervisor.
 - Assuring that brakes are in good working order.

X. Eye and Face Protection

- 1. Protective eye and face equipment shall be required where there is a reasonable probability of injury that can be prevented by such equipment.
- 2. Eye and face protection equipment shall be in compliance with ANSI Z87.1-1968, Practice for Occupational Eye and Face Protection.

Y. Fire Protection

1. Portable fire extinguishers suitable to the conditions and hazards involved shall be provided and maintained in an effective operating condition.

- 2. Portable fire extinguishers shall be conspicuously located and mounted where they will be readily accessible. Extinguishers shall not be obstructed from view.
- 3. Portable fire extinguishers shall be given maintenance service at least once a year with a durable tag securely attached to show the maintenance or recharge date. A record shall be maintained of the service.
- 4. In storage areas, clearance between sprinkler system deflectors and top storage varies with the type of storage. For combustible material stored over 15 feet but no more than 21 feet high in solid piles, or over 12 feet but no more than 21 feet high in piles that contain horizontal channels, the minimum clearance shall be 36 inches. The minimum clearance for smaller piles or for noncombustible materials shall be 18 inches.
- 5. Where the employer has provided portable fire extinguishers for employee use in the workplace, the employer shall also provide an educational program to familiarize employees with the general principles of fire extinguisher use and the hazards involved with incipient stage fire fighting.
- 6. The employer may use uniformly spaced stand pipe systems or hose stations connected to a sprinkler system installed for emergency use by employees instead of Class A portable fire extinguishers, provided that such systems provide total coverage of the area to be protected, and that employees are trained at least annually in their use.

Z. First Aid

- 1. A first aid kit shall be readily available at the worksite. A first aid kit shall also be located in every vehicle used to transport employees.
- 2. People trained in first aid and CPR shall be readily available if a workplace is not reasonably accessible in terms of time and distance to infirmary, clinic, hospital or physician.
- 3. A first aid kit containing approved materials shall be readily available at the worksite. The contents of the first aid kit shall be checked by the employer before being sent out on each job to ensure that the expended items are replaced.
- 4. Isolated worksites must have an oral means of communication with the nearest town or settlement where medical care is obtainable.
- 5. Emergency telephone numbers must be conspicuously posted.

A1. Flammable Liquids

- 1. Flammable liquids shall be kept in covered containers when not actually in use.
- 2. The quantity of flammable or combustible liquid that may be located outside of an inside storage room or storage cabinet in any one fire area of a building shall not exceed:
 - (a) 25 gallons of Class LA liquids in containers;
 - (b) 120 gallons of Class IB 1C, II, or HI liquids in containers;
 - (c) 660 gallons of Class IB, 1C, n, or HI liquids in a single, portable tank.
- 3. Inside storage rooms for flammable and combustible liquids shall be of fireresistive construction; have self-closing fire doors at all openings; four-inch sills or depressed floors; a ventilation system that provides at least six air changes within the room per hour; and in areas used for storage of Class I liquids, electrical wiring approved for use in hazardous locations.
- 4. Gasoline is not to be used for cleaning purposes.
- 5. Adequate precautions shall be taken to prevent the ignition of flammable vapors. Sources of ignition include but are not limited to open flames, lighting, smoking, cutting, and welding, hot surfaces, frictional heat, static, electrical, and mechanical sparks, spontaneous ignition, including heat-producing chemical reactions, and radiant heat.

B1. Floors, General Conditions

- 1. All floor surfaces shall be kept clean, dry, and free from protruding nails, splinters, loose boards, holes, or projections.
- 2. Where wet processes are used, drainage shall be maintained, and false floors, platforms, mats, or other dry standing places should be provided where practicable.

C1. Floor Openings

Every floor hole into which people can accidentally walk shall be guarded by either a standard railing with standard toe board on all exposed sides, or a floor hole cover that should be hinged in place. While the cover is not in place, the floor hole shall be attended or shall be protected by a removable standard railing.

D1. Food Handling

All employee food service facilities and operations shall be carried out in accordance with sound hygienic principles.

E1. Foot Protection

Foot protection equipment shall be worn when there is reasonable probability that injury can be prevented by wearing such equipment.

F1. Hand Tools

- 1. Each employer shall be responsible for the safe condition of tools and equipment used by employees, including tools and equipment that may be furnished by employees.
- All hand tools shall be kept in safe condition. Handles of tools shall be kept tight in the tool, and wooden handles shall be free of splinters or cracks. Wedges, chisels, etc., shall be free of mushroomed heads. Wrenches shall not be used when sprung to the point that slippage occurs.
- 3. The frames of portable electrical tools and equipment, except when U.L. approved double insulated construction, shall be properly grounded.

G1. Hand Protection

- 1. Employees must wear hand protection and/or use protective creams and lotions during work that presents potential hazards to the hands.
- 2. Hand protection is mandatory for the following exposures:
 - (a) Using harmful corrosive substances and processes.
 - (b) Having a high probability of hand injuries of a crushing nature (materials handling, barrels, cylinders, etc.)
 - (c) Performing regular assembly or disassembly of heavy system components.
 - (d) Using snow blowers.
 - (e) Abnormal wet conditions (rubber gloves).
 - (f) Working with serum in the laboratory. Gloves are also encouraged to be worn when employees work with any type of biological product in the lab or clinic.

H1. Head Protection

- 1. Head protection equipment (helmets) shall be worn when there is a possible danger of head injuries from the impact, flying or falling objects, or electrical shock or bums.
- 2. Helmets for protection against impact and penetration of falling objects shall meet the requirements of ANSI Z89. 1-1969.

I1. Housekeeping

- 2. All places of employment, passageways, storerooms, and service rooms shall be kept clean and orderly and in a sanitary condition.
- 3. It takes a continual and concerted effort to maintain good housekeeping in the workplace. The advantages of doing so can contribute greatly to the safety effort. Cluttered and messy environments cause numerous tripping hazards and reflect poorly upon the organization.

J1. Ladders, Fixed

- 1. All fixed ladders shall be designed for a minimum concentrated live load of 200 pounds.
- 2. All rungs shall have a minimum diameter of 3/4 inch, if metal, or if the ladder is constructed of metal rungs embedded in concrete and exposed to a corrosive atmosphere, the rungs shall have a minimum diameter of 1-1/8 inch. All rungs shall be spaced uniformly, not more than twelve inches apart, and shall have a minimum clear length of 16 inches.
- 3. Metal ladders shall be painted or treated to resist corrosion or rusting when the location demands.
- 4. Cages, wells or ladder safety devices for ladders affixed to towers, water tanks, or chimneys shall be provided on all ladders more than 20 feet long. Landing platforms shall be provided each 30 feet of length, except where no cage is provided, landing platforms shall be provided for every 20 feet of length.

K1. Ladders, Portable

- 1. The maximum length for portable wood ladders shall be:
 - (a) Step ladders 20 feet;
 - (b) Single straight ladders 30 feet;
 - (c) Two section extension ladders 60 feet;

- (d) Sectional ladders 60 feet;
- (e) Trestle ladders 20 feet;
- (f) Painter's step ladders 12 feet;
- (g) Mason's ladders 40 feet.
- 2. The maximum length for portable metal ladders shall be:
 - (a) Single straight ladders 30 feet
 - (b) Two section extension ladders 48 feet
 - (c) Over two section extension ladders 60 feet
 - (d) Step ladders 20 feet
 - (e) Trestle ladders 20 feet
 - (f) Platform step ladders 20 feet
 - 3. Step ladders shall be equipped with a metal spreader or locking device of sufficient size and strength to securely hold the front and back sections in open position.
 - 4. Ladders shall be maintained in good condition and defective ladders shall be withdrawn from service.
 - 5. *Employees must use the proper ladder for the job.* Every year there are state employees who are seriously injured because they use improper ladders. Office employees have, at times, tried to climb up on wheeled chairs in order to reach for items. This practice has resulted in injuries.

L1. Lighting

- All places of employment shall be provided natural or artificial illumination in accordance with the American National Standard Practice for Industrial Lighting (RP-7, A 11.1-1973 and with the Practice of Office Lighting DES RP-1, ANSI 1321-1973 as applicable).
- 2. Every employee shall be responsible to see that his/her own desk and work area is clean and orderly. Pick up items such as pencils or paper clips. Good housekeeping is the key to a safe office environment.

- 3. Keep an eye for loose or threadbare floor coverings.
- 4. Be extra cautious when you come up to a door that can be opened in your direction. Take it easy when pushing open such a door and slow down when coming to a "blind" comer.
- 5. Haste when walking between desks can result in bruises and falls. Keep electrical cords out of aisle ways.
- 6. All file, desk and table drawers shall be kept closed when not in use. As soon as you leave them, close them. Never open more than one file drawer at a time.
- 7. Overloading the top drawer of unsecured file cabinets has caused many injuries. If unfamiliar with file cabinets, test the drawers and be careful not to pull them out to full extension. There may be no locking-in device on older models.
- 8. Office tables, desks and chairs must be maintained in good condition and free from sharp corners, projecting edges, wobbly legs, etc.
- 9. Tilting chairs can be hazardous when improperly used and care should be taken to assure that they are in good working condition.
- 10. Never use chairs, desks, or other office furniture as a makeshift ladder. Always use a step ladder. Don't overreach and lose your balance.
- 11. Keep the blades of paper cutters closed when not in use.
- 12. Scissors, paper cutters and similar office devices can easily cause minor, but painful injuries. Report such injuries at once and take precautions to avoid infection.
- 13. Paper can cut and it hurts. Use a sponge or other wetting devices for envelopes.
- 14. Be sure all electrical equipment is grounded and the cord is in good condition. If a machine gives you a shock, unplug it and report the defective device immediately to the office manager.

M1. Personal Protective Equipment

1. Proper personal protective equipment, including shields and barriers, shall be provided, used and maintained in a sanitary and reliable condition where there is a hazard from processes or environment that may cause injury or illness to the employee.

2. Where employees furnish their own personal protective equipment, the employer shall be responsible to assure its adequacy and to ensure that the equipment is properly maintained and in a sanitary condition.

N1. Radiation

- 1. There are some key definitions relating to radiation exposure which include:
 - (a) Radiation Includes alpha rays, beta rays, gamma rays, X-rays, neutrons, high speed electrons, high speed protons, and other atomic particles. Does not include sound or radio waves, or visible light, or infrared or ultraviolet light.
 - (b) Restricted area Any access to which is controlled by the employer for purposes of protection of individuals from exposure to radiation or radioactive materials.
 - (c) Dose Quantity of ionizing radiation absorbed, per unit of mass by the body.
 - (d) Radiation area Any area accessible to personnel, in which there exists radiation at such levels that a major portion of the body could receive in any one hour a dose in excess of five millirem or in any five consecutive days a dose in excess of 100 millirem.
- 2. Employers shall be responsible for proper controls to prevent any employee from being exposed to ionizing radiation in excess of acceptable limits.
- 3. Each radiation area shall be conspicuously posted with appropriate signs.
- 4. 4. Every employer shall maintain records of the radiation exposure of all employees for whom personnel monitoring is required and notify employees of their exposure status on at least an annual basis.
- 5. Radiation exposure records should be kept for a minimum of thirty years.

O1. Railings

- 1. A standard railing shall consist of top rail, intermediate rail and posts, and shall have a vertical height of 42 inches from upper surface of top rail to floor, platform, etc.
- 2. A railing for open-sided floors, platforms and runways shall have a toe board whenever beneath the open side, where people can pass, where there is

moving machinery, or there is equipment with which failing materials could cause a hazard.

- 3. Railings shall be of such construction that the complete structure shall be capable of withstanding a load of at least 200 pounds in any direction on any point on the top rail.
- 4. A stair railing shall be of construction similar to a standard railing, but the vertical height shall be no more than 34 inches nor less than 30 inches from upper surface of the top rail to surface of tread in line with face of riser at forward edge of tread.

P1. Respiratory Protection

- 1. Suitable respirators selected on the basis of the hazard to which the worker is exposed shall be provided by the employer as necessary to protect the health of the workers.
- 2. The employer shall establish and maintain a written respiratory program. The program shall be regularly evaluated to determine its continued effectiveness.
- 3. Both the supervisors and the workers shall be properly instructed in the selection, use, and maintenance of respirators.
- 4. Respirators shall be regularly cleaned and disinfected, and shall be inspected during cleaning. Deteriorating parts shall be replaced. Respirators for emergency use shall be inspected at least once a month and after each use. When not in use, respirators shall be stored in a convenient, clean and sanitary location.
- 5. Individuals shall not be assigned to tasks requiring use of respirators unless it has been determined that they are physically able to perform the work and use the equipment.
- 6. Respirators shall not be worn when conditions prevent a mask-to-skin seal. Conditions that could prevent a mask-to-skin seal may be the growth of a beard, sideburns, a skull cap that projects under the face piece, or temple pieces on glasses.

Q1. Safety Markings

- 1. The purpose of this section is to provide instructions for the uniform marking of physical hazards.
- 2. Pipe Line Identification Bands

- (a) Lines containing liquids or gases other than corrosive or toxic materials should be identified by the use of an aluminum band with black lettering on black lines, or by a black band with aluminum lettering on aluminum lines.
- (b) Lines containing CORROSIVE OR TOXIC materials should be identified by a yellow band with black lettering.
- 3. Colors
 - (a) **RED** shall be the color for:
 - (i) Fire protection equipment and apparatus.
 - (ii) Safety cans or other portable containers of flammable liquids shall be painted red with additional clearly visible identification in the form of a yellow band around can or name of contents in yellow.
 - (iii) RED lights shall be provided at barricades and at temporary obstructions, as specified in ANSI Safety Code for Building Construction, A-10.2. Danger signs shall be painted red.
 - (b) **ORANGE** Orange shall be used as the basic color for designating dangerous parts of machines, machine guards, or energized equipment.
 - (c) YELLOW Yellow shall be the basic color for designating caution, for marking stationary objects that would present tripping or striking hazards. Solid yellow, yellow with black stripes, yellow and black checkers, or yellow with suitable contrasting background should be used interchangeably, using the combination that will attract the most attention in a given environment.
 - (d) **GREEN** Green shall be used as the basic color for designating "safety" and the location of first aid or safety related equipment.
 - (e) **BLUE** Blue shall designate caution, limited to warning against the starting, the use of or the movement of equipment under repair or being worked on.
 - (f) **BLACK** and **WHITE** Black, white or a combination of black and white shall be used for traffic and housekeeping.
 - (g) **PURPLE** Purple shall designate radiation hazards. Yellow should be used in combination with purple for markers such as tags, labels, signs, and floor markers.

R1. Saws, Radial (Woodworking)

- 1. Radial saws shall be constructed so that the upper hood shall completely enclose the upper portion of the blade down to a point that will include the end of the saw arbor. The upper hood shall be constructed in such a manner and of such material that it will protect the operator from flying splinters, broken saw teeth, etc., and will deflect sawdust away from the operator. The sides of the lower exposed portion of the blade shall be guarded to the full diameter of the blade by a device that will automatically adjust itself to the thickness of the stock and remain in contact with stock being cut to give maximum protection possible for the operation being performed.
- 2. Radial saws used for ripping shall have non-kickback fingers or dogs.
- 3. Radial saws shall be installed so that the cutting head will return to the starting position when released by the operator.
- 4. An adjustable stop shall be provided to prevent the forward travel of the blade beyond the position necessary to complete the cut in repetitive operations.

S1. Saws, Swing or Sliding Cut-Off (Woodworking)

- 1. All swing or sliding cut-off saws shall be provided with a hood that will completely enclose the upper half of the saw.
- 2. Limit stops shall be provided to prevent swing or sliding type cut-off saws from extending beyond the front or back edges of the table.
- 3. Each swing or sliding cut-off saw shall be provided with an effective device to return the saw automatically to the back of the table when released at any point of its travel
- 4. Inverted sawing or sliding cut-off saws shall be provided with a hood that will cover the part of the saw that protrudes above the top of the table or material to be cut.

T1. Saws, Table (Woodworking)

- 1. Circular table saws shall have a hood over the portion of the saw above the table, so mounted that the hood will automatically adjust itself to the thickness of and remain in contact with the material being cut.
- 2. Circular table saws shall have a spreader aligned with the blade, spaced no more than 1/2 inch behind the largest blade mounted in the saw.
- 3. Circular table saws used for ripping shall have non-kickback fingers or dogs.

4. Feed rolls and blades 01 self-feed circular saws shall be protected by a hood or guard to prevent the hands of the operator from coming in contact with the in-running rolls at any point.

U1. Scaffolds

- 1. All scaffolds and their supports shall be capable of supporting the load they are designed to carry with a factor of at least four.
- 2. All planking shall be Scaffold Grade, as recognized by grading rules for the species of wood used. The maximum permissible spans for 2 x 9 inch or wider planks are shown in the following table:
- 3. The maximum permissible span for $1 \frac{1}{4} \times 9$ inch or wider plank of full thickness is four feet, with medium loading of 50 psf.
- 4. Scaffold planks shall extend over their end supports not less than six inches nor more than 12 inches.
- 5. Scaffold planking shall be overlapped a minimum of 12 inches or secured from movement.
- 6. Divisions using scaffolding should designate in a written plan the type of scaffolding being used on this project and the designated competent person who will perform scaffolding inspections.

V1. Seatbelt Use

- 1. All department employees, members of its boards, commissions and offices, and others authorized to operate or ride in motor vehicles in the conduct of State business must comply with the following:
 - (a) Each passenger vehicle owned by the State, on assignment from the State Equipment Fleet, leased by the State, or any privately owned motor vehicle authorized for use on official State business shall be equipped with occupant restraint systems which meet the requirements of the Federal Motor Vehicle Safety Standards.
 - (b) Each vehicle occupant shall properly utilize the complete occupant restraint system provided.
 - (c) Each driver shall assure that approved child safety devices, as required by AS 28.05.095, are utilized when children under the age of four are transported.

- (d) Each driver shall assure all other vehicle occupants are properly using restraint devices.
- 2. Passenger motor vehicles used for State business are defined as passenger cars, vans, trucks or any other passenger vehicles equipped for legal use on highways and roads open to the traveling public. In addition to officially licensed State vehicles, it includes leased vehicles, rental vehicles, and personal vehicles when they are specifically authorized for use in connection with official business.
- All employees are encouraged to voluntarily wear safety belts and use approved child safety devices during operation of any motor vehicle for their own private use.

W1. Stairs, Fixed Industrial

- 1. Standard railings shall be provided on the open sides of all exposed stairways. Handrails shall be provided on at least one side of closed stairways, preferably on the right side descending. Reference 01.1104 (h).
- 2. Stairs shall be constructed so that the rise height and tread width is uniform throughout. Reference 01.1104 (f).
- 3. Fixed stairways shall have a minimum width of 22 inches.
- 4. Fixed stairways shall be provided for access from one structure to another where operations necessitate regular travel between levels and for access to operating platforms at any equipment that requires attention routinely during operations. Fixed stairs shall also be provided where access to elevations is daily or at each shift where such work may expose employees to harmful substances, or for which purposes the carrying of tools or equipment by hand is normally required. Reference OJL1104 (b)

X1. Stationary Electrical Devices

All stationary electrically powered equipment, tools, and devices, located within reach of a person who can make contact with any grounded surface or object, shall be grounded.

- 1. All storage shall be stacked, blocked, interlocked, and limited in height so that it is secure against sliding or collapse.
- 2. Storage areas shall be kept free from accumulation of materials that constitute hazards or pest harborage. Vegetation control will be exercised when necessary.

3. Where mechanical handling equipment is used, sufficient safe clearance shall be allowed for aisles, at loading docks, through doorways, etc.

Y1. Toilets

Every place of employment shall be provided with adequate toilet facilities that are separate for each sex. Water closets shall be provided according to the following: 1–15 persons, one facility; 16–35 persons, two facilities; 36–55 persons, three facilities; 56–80 persons, four facilities; 81–110 persons, five facilities; 111–150 persons, six facilities; over 150 persons, one for each additional 40 persons.

Z1. Toxic Vapors, Gases, Mists and Dusts

- 1. Exposure to toxic vapors, gases, mists, or dusts at a concentration above the Threshold Limit Values, contained or referred to in Safety and Health Standards, shall be avoided.
- 2. To achieve compliance with paragraph (a), administrative or engineering controls must first be determined and implemented whenever feasible. When such controls are not feasible to achieve full compliance, protective equipment or any other protective measures shall be used to keep the exposure of employees to air contaminants within the limits prescribed. Any equipment and/or technical measures used for this purpose must be approved for each particular use by a competent industrial hygienist or other technically qualified person. Whenever percussion drilling is performed, the drilling apparatus shall be provided with engineering controls that suppress the drilling dust.

A2. Trash

Trash and rubbish shall be collected and removed in such a manner as to avoid creating a menace to health and as often as necessary to maintain good sanitary conditions.

B2. Ventilation

Ventilation for industrial and occupational structures shall be in accordance with the provisions of the Uniform Building Code applicable for the structure and consideration.

C2. Welding

- 1. Arc welding equipment shall be chosen for safe application to the work and shall be installed properly. Workers designated to operate welding equipment shall have been properly instructed and qualified to operate it.
- 2. Mechanical ventilation shall be provided when welding or cutting.

- 3. Proper precautions (isolating welding and cutting, removing fire hazards from the vicinity, providing a fire watch, etc.) for fire prevention shall be taken in areas where welding or other hot work is being done.
- 4. Work and electrode lead cables shall be frequently inspected. Cables with damaged insulation or exposed bare conductors shall be replaced.
- 5. The welder shall be enclosed in a booth or non-combustible screening with a finish of low reflectivity with respect to visible and ultra-violet radiation.

D2. Welding In Confined Spaces

- 1. All welding and cutting operations carried on in confined spaces shall be adequately ventilated to prevent the accumulation of toxic materials or possible oxygen deficiency.
- 2. In such circumstances where it is impossible to provide such ventilation, airline respirators or hose masks approved by the U.S. Bureau of Mines for this purpose shall be used.
- 3. Where welding operations are carried on in confined spaces and where welders and helpers are provided with hose masks, hose masks with blowers or selfcontained breathing equipment, a worker shall be stationed on the outside of such confined space to ensure the safety of those working within.
- 4. Oxygen shall never be used for ventilation.

_ V	oor	

APPENDIX	B
-----------------	---

DEPARTMENT OF HEALTH AND SOCIAL SERVICES SAFETY ORIENTATION CHECKLIST

Employee's Name: Transfer		Permanent Temp.			
Supervisor:		Orientation Date:	Day	Month	Year
ltei 1.	ns Reviewed with the Employee Has the employee been advised that working safely is a condition of employment?		_	Yes	No
2.	Has a review of the emergency action plan taken place?		_		
3.	Have the accident/incident reporting procedures been reviewed? (See Chapter 5.0 of the Safety Plan for details)		_		
4.	Have the following steps been reviewed with the worker? Recognizing potential hazards? Eliminating potential hazards? Controlling potential hazards? Minimizing exposure to potential hazards?				
5.	Has the employee been made aware of the location of the Department Safety Plan?		_		
6.	Has the location of a fire alarm been told to the employee?		_		
7.	7. Have housekeeping requirements been reviewed?				
8.	Has employee (if residential treatment staff member) been advised of procedures to be used in dealing with combative clients	s?	_		
9.	Has the site-specific Blood-borne Pathogens Exposure Control Plan been reviewed? (If applicable)		_		
10.	Has any worker been advised of the procedures to be used in working with hazardous chemicals? (If applicable)				
11.	Have any other items or directives been given?				
	Describe this information:				

THIS FORM WILL BE RETAINED ON FILE AT THE WORKSITE LOCATION

EMPLOYEE SIGNATURE:

SUPERVISOR SIGNATURE:

APPENDIX B (continued) DEPARTMENT OF HEALTH AND SOCIAL SERVICES SAFETY MEETING LESSON PLAN

Page 2 of 2

1.	Course Title:	Date:
2.	Course Objective:	Time: to Instructor: Division:
3.	Training Aids / Course Materials Video Name of Video: Charts Equipment / Tools	
4.	Introduction	
5.	Body Point 1 — Example / Application Point 2 — Example / Application Point 3 — Example / Application	
6.	Discussion:	
7.	Summary:	
8.	Follow-up Safety Topics:	

