



# POLICY & PROCEDURE MANUAL

## North Dakota State College of Science

### Safety Risk Management Policy

Source: NDSCS President

Applies to: All Employees

Purpose: The North Dakota State College of Science places the safety and wellbeing of its students, faculty, staff and visitors above all other considerations. It is the policy of the North Dakota State College of Science to provide and maintain safe and healthy working conditions. All faculty, supervisors, staff and other persons in authority are enjoined in the prevention of accidents and reduction of claims in the environment and operations under our control. NDSCS subscribes to the recognized national standards of safety as defined in published materials of the North Dakota Workforce Safety & Insurance, North Dakota State Department of Health and the State Fire Laws. The Director of Safety located in Haverty Hall has been assigned the responsibility of administering the College's Safety Risk Management Program.

### Policy

#### General

#### Designated Medical Provider

We are participating in the North Dakota Workforce Safety & Insurance (WSI) Risk Management Program. This allows us to designate health care providers to treat your workplace injuries and illnesses. These providers can be individuals, clinics, hospitals or any combination thereof. They can be medical doctors, chiropractors, osteopaths, dentists, optometrists, podiatrists, psychologists or any combination of these providers. *WSI may not pay for medical treatment* to another provider unless you are referred by our designated provider or unless you notify us in writing prior to an injury that you want to be treated by a different medical provider. You must also name your different medical provider. *Emergency care* is exempt from this designated provider requirement.

The *Designated Medical Providers* for the North Dakota State College of Science are:

Essentia Health  
Sanford Clinic  
St Francis Healthcare Campus

## Ergonomics

### Making the job fit the person

Ergonomics is the science of workplace design that tries to make the job fit the person rather than the person fit the job. *Ergo* means Work and *Nomos* means Rules. The premise of Ergonomics is to reduce physical strain by designing or modifying the work station. At its simplest, and often most effective, ergonomics reduces strain by cutting back on the stress and number of repetitive motions done on the job.

### Early Identification

The earlier you identify a repetitive motion problem, the more likely you are to be able to do something about it. Pay attention to any warning signs such as pain or soreness. Be especially alert to symptoms like numbness, tingling and apparent loss of strength of muscles. Cumulative Trauma Disorders (CTD's) are becoming more commonplace in the work world and are caused by repetitive movements over long periods of time, vibration from machinery and improper arm or body support. Even standing still for long periods or moving in awkward ways can be damaging. These often overlooked habits can result in disorders such as Carpal Tunnel Syndrome, Tenosynovitis, Tendonitis and various back problems. Cumulative Trauma Disorders: *Defined as those disorders that are caused, or aggravated by repeated exertions or movements of the body. They can occur in any parts of the body but appear most frequently in the muscles and tendons of the upper limbs, and results in conditions of fatigue and inflammation.* These can sometimes be misdiagnosed as the same symptoms can be caused by elbow and neck pressure. Other health problems that can be avoided are eye strain and discomfort. When any of these symptoms appear, it is time to evaluate the job and look for ways to limit repetitive motions. If the problem persists or recurs, medical attention may be needed.

### Repetitive Motion Injuries

Fatigue or tiredness in muscles and/or joints is your body's way of telling you to change your pattern of working. Doing the same motion over and over or using certain types of positions or grips can cause pain and inflammation. Some of the common inflammations are:

- ❖ *Tendonitis* -inflammation of the tendons. Can be caused by performing repeated motions incorrectly or in an awkward position.
- ❖ *Tenosynovitis* -a condition in which both the tendons and its covering become inflamed. Can be caused by improper or repetitive bending of the wrist.
- ❖ *Carpal Tunnel Syndrome* -painful squeezing of the median nerve in the wrist. Causes loss of grip, muscle pain, weakness and numbness in the thumb and first two fingers. If after an appropriate period of time, test and medication do not work, surgery may be necessary.

### Limit Repetitive Motions

The best form of prevention is to limit the time anyone spends doing the same motion over and over, whether it is packing, using a keyboard, using a hand or power tool, etc. To reduce your risks of Cumulative Trauma Disorders, avoid or minimize these physically straining activities:

- ✓ Repetitive twisting movements, usually in combination with poor body position
- ✓ Exposure to cold, combined with repetitive motions
- ✓ Excessive standing with no chance to lean, sit or comfortably reposition body
- ✓ Holding arms with no support

- ✓ Hand operations of vibrating machinery
- ✓ Repetitive physical force using shoulders, arms, legs and back
- ✓ Repetitive motions using a bent wrist

It is up to everyone to help identify poor ergonomic practices in the workplace. Managers, supervisors, employees, engineers and health professionals should work as a team to correct existing ergonomic problems. When analyzing a specific job for ergonomic problems, the following points must be considered:

- ☆ Weight of object being handled
- ☆ Body positions
- ☆ Repetitions of certain movements or tasks
- ☆ How workers grip objects

To eliminate the ergonomic hazards, a procedure is in place to correct or control the identified hazards through engineering, work practices and/or administrative controls.

**Engineering Controls** is the preferred method of control. This will be accomplished through the following procedures:

Work Station Design: Work stations will be made easily adjustable and either designed or selected to fit the task, so they are comfortable for the worker using them.

Design for Work Methods: Work methods will be designed to reduce static, extreme and awkward postures, repetitive motion and excessive force.

Tool and Handle Design: A variety of sizes will be available to achieve proper fit and reduce ergonomic risk. The appropriate tool will be used to do a specific job.

**Work Practices** will include a program with key elements such as proper work techniques, employee conditioning, inspections, feedback and maintenance.

Proper work techniques include training on the correct lifting procedures and correct use of ergonomically designed work stations, fixtures and tools.

Employee conditioning will include employees gradually being worked into a full workload as appropriate for their specific job. Employees reassigned to new jobs shall also have a break-in training period.

Inspections shall be conducted periodically to ensure safe operating procedures are being followed.

Feedback will provide a system for employees to notify management about conditions with potential ergonomic hazards. Employees are instructed to report ergonomically related symptoms to their supervisors immediately. These would include:

- ★ Numbing, burning or tingling in your fingers
- ★ Pain in your wrists
- ★ Loss of grip or muscle weakness
- ★ Fatigue or abnormal tiredness

- ★ Pain in your back, legs, feet, neck or shoulders

Maintenance will be the preventative program for monitoring mechanical equipment and tools to ensure they are in proper working condition.

Administrative Controls will reduce the duration, frequency and severity of exposures to ergonomic hazards. Options to be considered:

Pacing - reducing the number of repetitions per hour;

Breaks - providing short rest periods to relieve fatigue;

Job rotation - rotate periodically to a different task involving different movements.

### **Exercise and techniques or prevention**

Exercise is an important part of the prevention program. Fit people are less likely to experience physical problems and are more likely to recover quickly when they do.

- \* **Body stretch**            Reach Up
- \* **Side bends**                Slow and easy
- \* **Upper Body Twist**        With hands on hips, twist to right and then to left. Repeat 4-6 times.
- \* **Shoulder shrugs**          Inhale and bring shoulders to ears. Exhale and allow shoulders to drop.
- \* **Finger stretch**            Spread your fingers wide. Hold for 5 seconds, relax. Repeat 3-5 times, alternate hands.
- \* **Wrist stretch**             With opposite hand gently pull your fingers back allowing wrist to bend. Hold for 3 seconds. Switch hands. Repeat 3-5 times.
- \* **Thumb stretch**            Extend one hand and with the other hand, gently pull back on your thumb for 3 seconds. Relax. Repeat 3-5 times on each hand.
- \* **Finger squeezes**          Make fist around a firm yet soft ball, then squeeze towards your palm 5-10 times. Following this exercise, repeat finger stretch.
- \* **Shake**                         While standing or sitting, drop your arms to your sides. Gently shake out your arms and hands for a few seconds. Relax and repeat 3 times.

### **REMEMBER**

- \* Adjust your work area to fit your body. A comfortable work environment benefits both you and your employer.
- \* Stretching every 2 hours relieves physical tension and body aches. Stretching increases your productivity.
- \* Change the pattern of your work so you are not doing the same motion over and over.

- \* If you can, lean or sit rather than stand for long periods of time.
- \* Work with your wrists straight.
- \* Lift by using your legs, arms and buttocks. Bend your knees and keep your head, back, and hips in a straight line. Never bend over to pick anything up without first bending your knees. Never twist while lifting.

**Report any physical signs of ergonomic stress to your supervisor or manager immediately.**

### **General Safety Rules**

NDSCS General Safety Rules are considered minimum safety standards for usual work conditions and will be adhered to by all employees who enter the specific job location.

The following General Safety Rules will be posted in a conspicuous manner at fixed work sites and where possible in remote mobile locations. The General Safety Rules will be reviewed periodically and updated as needed.

1. Participate in employee orientation.
2. Participate in continuing education which is conducted on a departmental level.
  - a. All employees will receive information and training in the following areas:
    - i. General safety rules
    - ii. Ergonomic hazards
    - iii. Safe operating procedures
    - iv. Claims management program
  - b. Participate in continuing education of safe operating procedures for unique work environments. The supervisor, in conjunction with the Director of Safety, will identify such employees that require additional training. Examples of unique work environments include the following:
    - i. Hazard Communication Standard "Right to Know Law"
    - ii. Confined space
    - iii. Lockout/tagout
    - iv. Radiation
    - v. Hearing Conservation
    - vi. Biohazard
    - vii. Laser
    - viii. Pesticide Application
    - ix. Forklift/heavy equipment
    - x. Extreme cold/heat
    - xi. Chemical
    - xii. Office Safety
3. Safety belts must be worn when driving any ND State Fleet Vehicle.
4. NDSCS is a tobacco free campus.
5. NDSCS prohibits the unlawful and unauthorized use, possession, storage, manufacture, and distribution or sale of alcoholic beverages and illicit drugs or drug paraphernalia in college buildings, any public campus area, in college housing units, in college vehicles or at any college-sponsored event held on/off campus which is sponsored by students, faculty, and/or staff and their respective campus organization.
6. Horseplay, scuffling and other acts which have an adverse bearing on the safety or well-being of an employee or coworker is prohibited.

7. Immediately report all accidents, injuries, and near misses to your supervisor; seeking medical treatment without delay.
8. Immediately report all faulty electrical equipment to Facilities Management (3-2313).
9. Immediately report any dangerous physical plant situations or equipment to Facilities Management (3-2313).
10. Chemicals and other hazardous substances should be used only by persons familiar and trained in hazardous characteristics. Safety precautions must be followed and include:
  - a. Appropriately labeled storage containers and stock areas.
  - b. Use of all hazardous substances in the appropriate work place/space.
  - c. Correct use of fume hoods, respirators, and exhaust/ventilation systems.
  - d. Use of correct laboratory apparel.
  - e. Consumption of foods and drinks is prohibited in hazardous areas.
11. All related institutional equipment, power tools, buildings, associated vehicles, used in shops and laboratories are to comply with general safety regulations as outlined by the College.
12. Appropriate personal protective equipment and mechanical safety devices are to be worn and used in accordance with job requirements and operation. Each department is responsible for maintaining its equipment in the working condition for which it was designed.
13. Employees are responsible for practicing general safe housekeeping in their individual work areas. Employees are expected to maintain a neat and orderly work area safe from accidents and injury, being in compliance with building and fire codes.
14. All clerical work stations and associated adaptive furniture are to be kept in good working condition and maintained to prevent accidents.
15. All small appliances and hand tools are to be kept in good working order and inspected regularly by the supervisor for signs of wear and inappropriate use.
16. In the event of a fire, sound the alarm and evacuate the building. Each building and department will have a Fire Procedure for review of exits and alarms.
17. Stairways, aisles, and doorways are to be maintained in compliance with building safety and fire code.
18. Ask and insist on sufficient help before lifting heavy objects. Follow proper procedure when lifting—bend knees and keep back erect, lift with weight close to body and do not twist while lifting. Use mechanical aides when needed.
19. Proper height devices, such as ladders, scaffolds or stools, will be used. When appropriate, seek assistance of a second person and wear the appropriate protective devices.

### **First Report of Notice of Injury Law**

The 1995 Legislative Assembly enacted House Bill 1206 to require an employee who is injured on the job to notify the employer of the injury. The notification applies to all injuries that occur after July 31, 1995. This notification must be in written form and must be given to the Safety Office. If the employee fails to notify the employer of an accident within the seven day period, WSI may take that failure to do so into consideration when determining compensability of the claim. Even though our college policy and the Risk Management Program require immediate report of any incident, you will have seven days to report and complete the Company's initial incident report form.

### **Safe Operating Procedures**

NDSCS consists of very diverse work environment with varied job tasks and associated hazards. The following list identifies the CHIEF HAZARDS encountered by NDSCS employees. SAFE OPERATING PROCEDURES (SOP) will be developed for these hazards. SOP will be supplemented as new hazards are

identified or as new procedures are developed for existing SOP. Each department will identify the chief hazards pertinent to their employees and will maintain an SOP manual in the department. The Safety Office will maintain the NDSCS Index of all department SOP.

#### SOP FOR ALL EMPLOYEES:

- Hazards Communication-Chemical Right to Know
- Ergonomics
- Material Handling Procedures
- Fire Protection Evacuation Plan - Emergency Action Plan
- General Safety Rules
- Competent Person
- Bomb Threats
- Housekeeping
- First Aid/CPR
- Blood Born Pathogens
- Slips, Trips & Falls
- Electrical

#### CHIEF HAZARDS:

##### PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Hearing Conservation -Ear Plugs, Hearing Protection Headphones
- Protective Garments (outerwear) coveralls, lab coats, gloves, hard-hats, etc.
- Eye Protection -Safety glasses, goggles, shield, welding shield, etc.
- Protective gear for inclement weather (Winter/Summer)

##### ELECTRICAL SAFETY

- Grounding Devices
- GFI -Ground Fault Interrupter
- Lock Out/Tag Out
- Labeling

#### HEAVY EQUIPMENT OPERATION & MAINTENANCE

- Forklifts
- Tractors
- Trucks
- Cranes
- Farm Equipment
- Snow Removal Equipment
- Grounds Maintenance Equipment (lawn mowers, weed eaters, trimmers, etc.)
- Boiler & HVAC Equipment
- Lifting/Towing apparatus (Hooks, Chains, etc.)
- Man Lifts/Platforms

#### CONSTRUCTION & MECHANICAL SAFETY

- Construction Zone Safety
- Welding, Cutting, etc.
- Jackhammers, Tampers, Sandblasting
- Hydraulic Equipment
- Lifts, Floor etc. (jacks)
- Painting Operations
- Lockout/Tagout
- Scaffolds & Ladder Safety
- Fall Protection
- Trenching & Excavation
- Roofing Repairs
- Passenger Elevators

LABORATORY EQUIPMENT OPERATION & MAINTENANCE

POWER EQUIPMENT (ELECTRICAL OR GAS) OPERATION & MAINTENANCE

- Power Carpenter Tools
- Air Compressors
- Gas Trimmer
- Table Saw
- Drill Press
- Vacuum Cleaner
- Buffers
- Pumps
- General Shop Equipment

CARPENTER TOOLS (MANUAL) FOOD SERVICES, (ovens, grills, fryers, slicers, steamers, micro wave safety, etc.)

ANIMAL HANDLING SAFETY

RESPIRATORY SAFETY BIOHAZARDS

- Virological pathogens
- Biological pathogens
- Blood-borne pathogens
- Carcinogens

WALKING & WORKING SURFACES

- Obstacles
- Inclement Weather Conditions
- Signage/Warnings/Zones (Painted lines)
- Areas Requiring Anti-Slip Protection

CONFINED SPACES PROCEDURE

HAZARDOUS MATERIAL HANDLING

- Right to Know & MSDS requirements for Employee Information Act
- Handling
- Storage
- Waste disposal
- Asbestos
- Laboratory
- Agricultural Environment
- General Environment
- Underground Storage Tanks

FLAMMABLE LIQUIDS & GASES

COMPRESSED GAS CYLINDERS

PESTICIDE HANDLING & APPLICATION

EQUIPMENT/VEHICLE SAFETY

- Driving Operation
- Pre-trip Safety check List

POLICE AND SECURITY WORKERS SAFETY

- Personal Threat/Endangerment
- Firearms Maintenance & Security
- Weapons Control (Lethal & Non-Lethal)

OFFICE SAFETY

- Computer Screen positioning
- Computer Keyboard positioning

WATER SAFETY

- Certification Supervision

Reference to SBHE Governance and Organization 305.1.3g

**Where to Obtain Additional Information**

You may speak to your supervisor, call the Safety Office at 701-671-2906, or email Safety at [ndscs.safety@ndscs.edu](mailto:ndscs.safety@ndscs.edu)

Approved by:

  
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President's Signature

08-14-2020  
Date