



END OF SEASON ICE PLANT CLOSING SAFE TIPS AND BEST PRACTICES

MARCH 25, 2019

DON POWELL

Certified Ice Technician Level 4 Curling Canada



The Business of Curling initiative is CurlON's strategy to help guide and support Member Clubs in the successful operations of a curling facility.

Contact:

Laurence Bishop
Business of Curling Coordinator
613-876-8150
lbishop@ontcurl.com

Monday, April 29, 2019 @ 12 noon

Webinar #6

TBD

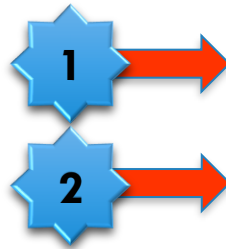
Webinar will be recorded and posted in the Business of Curling Toolbox on the CurlON website, available as an ongoing reference. Attendees will receive an email with information and link to access immediately after the webinar.

PASSWORD: CurlONBOC



All CurlON Member Clubs are entitled to request an annual NO-CHARGE consultation with qualified Senior Ice Makers to assist with any issues they may be experiencing with their ice, equipment or facility. During a two-hour Ice Team visit, clubs can expect a visual inspection of:

1. Ice Shed
2. Plant
3. Equipment
4. Address other club concerns



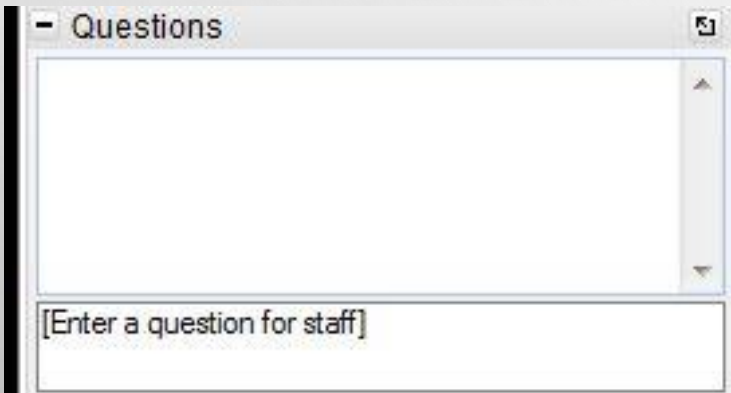
Go to www.ontcurl.com

Select "Ice Team" under
Member Club Services tab

Clubs will receive an Ice Team Visit Report which will address the concerns of the club, contain a professional opinion about the state of equipment, current practices inclusive of recommended actions.

ENGAGING IN THE WEBINAR

Raise your hand ---->




< ----- Ask a question

DON POWELL

- 3RD GENERATION ICE TECHNICIAN
- CERTIFIED ICE TECHNICIAN LEVEL 4 CURLING CANADA
- LEAD COURSE CONDUCTOR - ICE TECHNICIAN PROGRAM - ONTARIO CURLING COUNCIL
- ADVANCED REFRIGERATION OPERATOR
- 34+ YEARS ICE MAKING EXPERIENCE
- EVENTS (ICE CREW)
- 11 CANADIAN CHAMPIONSHIPS
- 20 PROVINCIAL CHAMPIONSHIPS
- 5 GRAND SLAMS
- 5 CASINO RAMA TSN SKINS



END OF SEASON

- FACILITY “OWNERS” RESPONSIBILITIES
 - ICE REMOVAL
 - PAINT DISPOSAL
 - ROCKS, BLADES, NIPPERS
 - MECHANICAL SHUT DOWN
 - PREVENTATIVE MAINTENANCE
 - OFF SEASON INSPECTIONS
- 



RESOURCES AVAILABLE

- CURL ON WWW.ONTCURL.COM
 - ONTARIO CURLING COUNCIL - ICE TECH. PROGRAM
 - CURLING CANADA
 - ONTARIO RECREATIONAL FACILITIES ASSOCIATION
 - MINISTRY OF LABOUR
 - TECHNICAL STANDARDS AND SAFETY AUTHORITY
 - GOOGLE
 - NEIGHBOUR CLUBS - NETWORKING
- 

ORFA

- ONTARIO RECREATIONAL FACILITIES ASSOCIATION
- WWW.ORFA.COM
- ACCESS TO RESOURCE CENTER
- FACILITY ALERTS
- DISCUSSION BOARDS
- MONTHLY PUBLICATIONS
- REGIONAL REFRIGERATION COURSES – BASIC REFRIGERATION, ADVANCED REFRIGERATION, **SAFE REFRIGERATION PLANT OPERATOR**
- 1 DAY COURSE – YOU WILL UNDERSTAND ALL THE COMPONENTS, WHAT THEY ALL DO, ... HOW IT ALL WORKS, ... SAFETY CONTROLS, SET POINTS, ETC.

AGING INFRASTRUCTURE PROBLEM

- LOTS OF OLDER FACILITIES WITH EQUIPMENT READY TO FAIL. PROACTIVE BUDGETING AND REPLACEMENT IS OVERDUE
- SEVERAL FACILITIES HAVE PREMATURELY ENDED THEIR SEASON THIS YEAR DUE TO AMMONIA CHILLER FAILURE
- IN BC, 3 WORKERS WERE KILLED IN A REFRIGERATION ROOM INCIDENT INVOLVING AN AGED CHILLER
- MANY CURLING RINKS ARE USING FREON REFRIGERANTS. THE STOP OF PRODUCTION OF THESE REFRIGERANTS IS RAPIDLY APPROACHING. HAVE THIS CONVERSATION WITH YOUR REFRIGERATION CONTRACTOR REGARDING OPTIONS – SOONER RATHER THAN LATER
- THE AGE AND LIFE CYCLE OF EACH PIECE OF PLANT / RINK EQUIPMENT SHOULD BE KNOWN AND BUDGETED

POLL QUESTION #1


TSSA registered refrigeration plant is applicable to:

- a) hockey rinks
- b) refrigeration plants over 100 horse power
- c) refrigeration plants newer than 10 years
- d) all refrigeration plants



POLL QUESTION #2

Compliance with regulations is the responsibility of:

- a) ice technician
 - b) refrigeration mechanic
 - c) club president
 - d) facility owner
- 

OWNER RESPONSIBILITIES

- COMPLIANCE REMAINS THE SOLE RESPONSIBILITY OF THE OWNER AND/OR THE DESIGNATED OPERATOR
- EVERY REFRIGERATION PLANT IN ONTARIO MUST BE REGISTERED WITH THE TECHNICAL STANDARDS AND SAFETY AUTHORITY (TSSA)
- REGISTRATION MUST BE POSTED AT THE ENTRY TO THE PLANT ROOM, SHOWING THE NAME OF FACILITY AND OWNER AND WHAT CERTIFICATIONS ARE REQUIRED (IF ANY)

OWNER RESPONSIBILITIES

- REGISTERED PLANTS ARE GUIDED BY SEVERAL REGULATIONS
- OPERATING ENGINEERS REGULATION (OER)
- TECHNICAL STANDARDS & SAFETY AUTHORITY (TSSA)
- CSA B-52 MECHANICAL REFRIGERATION CODE – CANADIAN STANDARDS ASSOCIATION
- BOILER & PRESSURE VESSELS REGULATION (BPV) – TSSA
- TSSA DIRECTORS ORDERS
- OCCUPATIONAL HEALTH & SAFETY ACT (OHSA) MINISTRY OF LABOUR
- REGULATION 347 – MINISTRY OF ENVIRONMENT
- ONTARIO ELECTRICAL CODE, BUILDING CODE, FIRE CODE

OWNER RESPONSIBILITIES

- ONTARIO ENGINEERS REGULATION CAN BE FOUND HERE:
- WWW.ONTARIO.CA/LAWS/REGULATION/010219
- THE OWNER CAN DESIGNATE A **“RESPONSIBLE PERSON”** TO ACT IN THE BEST INTEREST OF THE OWNER IN THE ON SITE SAFE OPERATION AND MAINTENANCE OF THE EQUIPMENT

DESIGNATED RESPONSIBLE PERSON

- BECOMING A “RESPONSIBLE PERSON” STARTS WITH BEING A “COMPETENT PERSON”. (OHSA)
- THE OHSA DEFINITION OF A “COMPETENT PERSON” MEANS A PERSON WHO:
- (A) IS QUALIFIED BECAUSE OF KNOWLEDGE, TRAINING AND EXPERIENCE TO ORGANIZE THE WORK AND ITS PERFORMANCE
- (B) IS FAMILIAR WITH THE ACTS AND REGULATIONS THAT APPLY TO THE WORK
- (C) HAS KNOWLEDGE OF ANY POTENTIAL OR ACTUAL DANGER TO HEALTH OR SAFETY IN THE WORKPLACE

DESIGNATED RESPONSIBLE PERSON

- OVERSEES ALL WORKERS WHO ARE GIVEN PRIVILEGE TO ENTER THE PLANT ROOM
- UNDERSTANDING OF RISKS AND HAZARDS WITHIN PLANT ROOM
- ENSURES THAT ALL PLANT SAFETY DEVICES REMAIN IN PROPER ORDER AND ARE CALIBRATED WITHIN SET TIMELINES
- MAINTAINS PLANT LOG BOOK AS SET BY OER
- KEEPS AN UP TO DATE PROCEDURE MANUAL THAT SETS OUT DETAILED OPERATING PROCEDURES, PROCEDURES RELATED TO TRAINING AND OPERATION OF ALL EQUIPMENT AND EMERGENCY PROCEDURES



DESIGNATED RESPONSIBLE PERSON

- DEVELOPS OPERATIONAL AND MAINTENANCE BUDGETS TO ENSURE SAFE PLANT OPERATIONS
 - OVERSEES ALL WORK BY OUTSIDE CONTRACTORS
- 

ROLE OF REFRIGERATION CONTRACTOR

- MANUFACTURERS OR CONTRACTORS HAVE NO LEGAL RESPONSIBILITY TO INFORM THE OWNER ON REGULATIONS OR CODES GOVERNING SAFE OPERATIONS
- SOLE RESPONSIBILITY LIES WITH THE FACILITY OWNER
- IT IS THE RESPONSIBILITY OF THE OWNER TO ENSURE ONGOING COMPLIANCE IS BEING MET AND THAT REQUIRED MAINTENANCE IS BEING PERFORMED ... THIS WOULD INCLUDE FINANCIAL RESOURCES TO ENSURE SAFE PLANT OPERATIONS

ROLE OF REFRIGERATION CONTRACTOR

- A COMPETENT MECHANIC IS GOLD TO A CURLING FACILITY
- ESTABLISH AND MAINTAIN THAT RELATIONSHIP
- FUTURE SITUATIONS MIGHT RELY ON IT
- ICE TECHNICIANS ARE NOT MECHANICS AND SHOULD NOT REPLACE MECHANICS
- START UP, SHUT DOWN, CALIBRATION, SERVICE, ETC.
- SHOULD BE PERFORMED BY COMPETENT, LICENCED MECHANICS

PLANT ROOM LOG BOOK

- OPERATING ENGINEER REGULATION STATES THE FOLLOWING:
- EVERY PLANT SHALL KEEP IN THE PLANT ROOM A LOG BOOK
- LOG BOOKS ARE TO BE HARD COVERED WITH NUMBERED PAGES AND ENTRIES ARE TO MADE IN INK
- MISTAKES ARE NOT TO BE ERASED BUT CROSSED OUT AND CORRECTED
- SHIFT ENTRIES TO INCLUDE: DATE, ENTRY TIMES, SIGNATURE, ALL PLANT READINGS
- ANY CHANGE FROM NORMAL OPERATING PROCEDURES
- ANY UNUSUAL OR ABNORMAL PLANT CONDITIONS AND TIME OBSERVED
- ANY MALFUNCTIONS OF ANY ITEM OR EQUIPMENT, TIME OF OCCURRENCE, AND ACTION TAKEN TO CORRECT

PLANT ROOM COMPLIANCE

- STORING OF ANY EQUIPMENT, CHEMICAL OR OTHER MATTER THAT IS NOT RELATED TO THE PLANTS SAFE OPERATION IS **UNACCEPTABLE AT ANY TIME**
- GRASS CUTTING, GROUND MAINTENANCE TOOLS, SUPPLIES, BARBEQUES ARE NOT TO BE STORED IN THE PLANT ROOM
- A PLANT ROOM IS NOT FOR STORAGE – GO BUY A SHED
- THE DOOR SHOULD BE **KEPT LOCKED** WITH ACCESS TO AUTHORIZED PERSONNEL ONLY

SEASON IS OVER!! WOO HOO!

- GOOD TIME TO CONTINUE DISCUSSING AND PLANNING ALL NECESSARY REPAIRS & IMPROVEMENTS
- DISCUSS AND PLAN COMPRESSOR MAINTENANCE
- REFRIGERATION CONTRACTOR (MECHANIC) SHOULD BE PERFORMING THE SAFE SHUT DOWN OF ICE PLANT ... THIS IS NOT AN ICE TECHNICIAN JOB
- CLEAN CONDENSER – TUBE BUNDLE
- EASIER IN SPRING TO REMOVE SCALE & DEBRIS BEFORE IT GETS BAKED ON
- EMPTY AND CLEAN CONDENSER TANK

HEALTH OF SECONDARY REFRIGERANT


- BRINE – FLOWS THROUGH THE FLOOR – EXCHANGES HEAT WITH PRIMARY REFRIGERANT
- INSTALLED AS A LIQUID – REMAINS A LIQUID. DOES NOT CHANGE STATE
- CAN ONLY PERFORM CORRECTLY IF MAINTAINED TO ORIGINAL CONSISTENCY
- PROPER INHIBITOR LEVELS IS MAINTAINED TO COMBAT CORROSION
- PH IS MEASURED AND BASED ON THE TYPE OF INHIBITOR USED
- ADJUSTMENTS TO THE SPECIFIC GRAVITY AFFECTS THE FREEZING POINT OF THE SOLUTION
- AS CONCENTRATION INCREASES – MORE ENERGY IS REQUIRED TO MOVE IT THROUGH THE SYSTEM

BRINE ADJUSTMENTS

- ADDING BRINE SHOULD HAVE A STANDARD OPERATING PROCEDURE SPECIFIC TO THE DESIGN AND CONFIGURATION OF THE PLANT
- **ONLY TRAINED PERSONS** SHOULD ATTEMPT TO MAKE ADJUSTMENTS
- IF CHILLER FAILURE OCCURS – BRINE IS OFTEN CONTAMINATED AND CANNOT BE REUSED
- **BRINE ANALYSIS – THE REFRIGERATION CONTRACTOR SHOULD BE TAKING AND SENDING A SAMPLE TO A COMPETENT LAB FOR COMPLETE ANALYSIS**
- SECONDARY REFRIGERANT TESTING SHOULD BE INCLUDED IN THE PLANT MAINTENANCE PROGRAM
- DISCUSS THIS WITH YOUR REFRIGERATION SERVICE PROVIDER. KEEP THE ANALYSIS REPORTS



BRINE ANALYSIS REPORT

- ANALYSIS REPORT FINDINGS
 - PRESENCE OF AMMONIA PPM
 - FREEZING POINT
 - VISCOSITY AND DENSITY
 - PH LEVEL / TYPE OF CORROSION INHIBITOR IN USE
 - COLOUR
 - CLARITY
 - SEDIMENT
- 

SECONDARY REFRIGERANT

- BRINE ANALYSIS WILL COST ~\$80.00
- MAINTAINING BRINE IS THE BEST DEFENSE AGAINST COSTLY REPAIRS
- INCORRECT BRINE WILL PREMATURELY DESTROY THE SYSTEM
- AIR IN BRINE WILL DESTROY YOUR SYSTEM – MAKE EVERY EFFORT TO REMOVE ALL AIR
- BE PREPARED FOR A POSSIBLE BRINE LEAK – HOW WILL IT BE REPAIRED? - WHAT WILL BE REQUIRED TO CONDUCT REPAIRS? – WHAT PPE WILL BE NEEDED?
- HAVE THAT ALL ON HAND JUST IN CASE
- ANY ESCAPE FROM THE FACILITY PROPERTY MUST BE REPORTED TO MINISTRY OF ENVIRONMENT

SEASON IS OVER

- ORDER NEXT SEASON ICE SUPPLIES
- PAINT, LOGOS & OTHER ICE PAINTING EQUIPMENT / SUPPLIES
- ARRANGE PICK UP OF RENTAL EQUIPMENT (DE-I TANKS ETC)
- MAKE CERTAIN WATER **PRESSURE IS SHUT OFF** TO DE-I TANKS
- SCRAPER BLADES, SCRAPER MACHINES, NIPPER BLADES – IS SERVICE REQUIRED?
- WHAT'S WRONG WITH DEALING WITH THESE THINGS NOW?

SEASON IS OVER – BUT ...

- CONTINUE TO CONDUCT REFRIGERATION PLANT CHECKS
- THE PLANT MAY BE OFF BUT NEEDS TO BE MONITORED THROUGH-OUT THE OFF SEASON
- REFRIGERANTS ARE IN THE PLANT 365 DAYS/YEAR
- PRESSURES CAN BUILD UP, SAFETY DEVICES CAN RELEASE, LEAKS CAN OCCUR
- MAINTAIN LOG BOOK
- UNDER OPERATING ENGINEERS REGULATION – THERE IS NO STATED EXCEPTION FOR NOT CONDUCTING REGULAR INSPECTIONS

OFF SEASON PLANT INSPECTION

- ORFA RECOMMENDED TIMETABLE FOR PLANT INSPECTIONS AFTER SHUTDOWN:
- 1ST WEEK – NO LESS THAN FULL OPERATION SCHEDULE; IF NO DETECTED ISSUES
- 2ND WEEK – NO LESS THAN ONCE PER DAY; IF NO ISSUES DETECTED
- 3RD WEEK FORWARD – NO LESS THAN EVERY 3 DAYS – IF NO ISSUES

- IF ISSUES ARE DETECTED – SITUATION MUST BE RECTIFIED AND RESUME PLANT INSPECTIONS NO LESS THAN FULL OPERATION SCHEDULE ... REPEAT

ICE REMOVAL PLANNING

- PERSONAL PROTECTION EQUIPMENT IS A MUST!
 - SAFETY STARTS WITH FOOTWEAR AND AN AWARENESS OF DANGERS
 - ICE CLEATS ARE AVAILABLE
 - HEAD PROTECTION SHOULD BE CONSIDERED
-
- HOW MANY STAFF ARE AVAILABLE? WHAT METHOD AND WHAT EQUIPMENT WILL BE USED?
 - SCHEDULE A MEETING WITH ALL TO DISCUSS BEFORE ICE REMOVAL BEGINS


PRIOR TO ICE REMOVAL?

- TIME FOR TRAINING OPPORTUNITY – GREAT TIME TO PRACTICE PAINTING SKILLS – MISTAKES, SPILLS ... NO WORRIES
- TEACH NEW HELP HOW TO PEBBLE ETC,
- LEARN TO HONE THE BLADE AND TEST IT OUT
- BRING A SCISSOR LIFT IN, SCAFFOLD, LIGHTING, BEAM CLEANING ETC?
- SOMETIMES EASIER ON ICE (SAND FLOOR)
- GREAT TIME TO CONSIDER MAINTENANCE REQUIREMENTS, CAPITAL PROJECTS
- DO THIS WHILE THE SEASON'S EXPERIENCES ARE FRESH



POLL QUESTION #3

Ice paint can be disposed:

- a) behind the building
 - b) down the storm sewer
 - c) down a sanitary drain
- 

PAINT REMOVAL GAME PLAN

- PREPARE A PLAN FOR COLLECTION AND DISPOSAL
- THE PAINT LAYER **MUST** BE CAPTURED
- DISPOSAL OF ICE PAINT **MUST** BE CONSIDERED
- FACILITIES **MUST** CLEARLY UNDERSTAND THEIR OBLIGATION TO COLLECT AND DISPOSE
- POTENTIAL FOR LEGAL ACCOUNTABILITY FOR ICE PAINT RESIDUE

PAINT REMOVAL REGULATION

- ENVIRONMENTAL REGULATION 347 – IN EFFECT JANUARY 2002
- GUIDES WORKPLACES IN WASTE MANAGEMENT RESPONSIBILITIES
- OPERATIONAL WASTE MUST BE DISPOSED OF CORRECTLY
- WASTE REFRIGERATION OIL MUST ALSO BE DISPOSED OF IN A RESPONSIBLE MANNER
- THIS IS A GOOD TIME OF YEAR TO DO THAT
- REFRIGERATION CONTRACTORS WILL ASSIST OR ADVISE
- RESPONSIBILITIES OF OWNERS CANNOT BE REDUCED THROUGH CONTRACTUAL ARRANGEMENTS

PAINT REMOVAL PRACTICES

- SOME FACILITIES LEAVE ICE OUTSIDE TO MELT
- POTENTIAL EXISTS FOR CONTAMINATED WATER TO ENTER ENVIRONMENT THROUGH STORM SEWERS AND NATURAL DRAINAGE
- MINISTRY OF ENVIRONMENT STATES: IF ICE HAS BEEN MELTING OUTSIDE WITH PAINT AND ESCAPES THE CONTAINMENT AREA:
- PUMP OUT STORM SEWER CATCH BASINS
- CLEAN THE STREET / PARKING LOT
- ENSURE ICE CONTAMINATED WITH PAINT – TRUCKED TO ACCEPTABLE DISPOSAL – MELTED IN CONTAINED AREA – **DISPOSED VIA SANITARY SEWER SYSTEM**
- REMOVE AND DISPOSE OF ANY PAINT RESIDUE FROM DITCHES

PAINT REMOVAL PRACTICES

- SNOW PITS THAT GO TO SEPTIC SYSTEM SHOULD NOT BE USED FOR PAINT DISPOSAL
- ANY DUMP AREA SHOULD BE INSPECTED PRIOR TO ENSURE ANY MELT WATER (WITH PAINT) CANNOT ENTER NATURAL WATERWAYS
- AREA SHOULD BE PROTECTED WITH WARNING SIGNS AND/OR FENCING
- MELTING ICE (WITH PAINT) MUST BE CONTROLLED

PAINT REMOVAL – DUMP AREA

- BARRIER (PLASTIC, TARP) PLACED ON GROUND
- SAND PLACED ON BARRIER (6 – 12”), SIZE OF AREA IS BASED ON EACH FACILITY
- CONTAINMENT SYSTEM (HAY BALES, WOOD FRAME, MORE SAND) PLACED AT OUTER EDGE OF BARRIER TO PREVENT LEAKING
- DUMPSTER CAN BE USED (WITH SAND) WITH USE OF BOBCAT TYPE VEHICLE
- THE PAINT WASTE AND SAND IS THEN DISPOSED AS PER LOCAL BY-LAWS

The background of the slide is a light gray gradient. It is decorated with several realistic water droplets of various sizes, clustered in the top-left, top-right, and bottom-right corners. The droplets have highlights and shadows, giving them a three-dimensional appearance.

ALL DONE

- CONGRATULATIONS! YOUR ICE IS OUT!

ALL DONE ... **NOPE**

- IMPORTANT TO DRY THE BUILDING ONCE ICE IS OUT
- KEEP HEAT ON, TURN ON CEILING FANS, EXHAUST FANS, OPEN DOORS, RUN DEHUMIDIFIERS
- REDUCE CHANCE FOR MOULD TO BREED
- CLEAN THE FLOOR
- ONCE CLEAN AND DRY – INSPECT FOR DAMAGE – CRACKS ETC ... **DO THIS NOW** TO ALLOW TIME FOR PROFESSIONAL, PERMANENT REPAIRS

ALL DONE ... STILL NOPE

- SAND FLOORS
- REQUIRE ADDITIONAL PLANNING FOR OFF SEASON TO ENSURE NO DAMAGE TO SECONDARY REFRIGERANT PIPING
- SOME PAINT MAY LEECH INTO SAND. ADDRESS THIS BEFORE NEXT SEASON PREP BEGINS
- RAKING AND BLENDING MAY BE REQUIRED
- CONTAMINATED SAND WILL NEED TO BE REMOVED AND REPLACED AT SOME POINT
- CARRY MORE ICE PRIOR TO PAINTING TO ALLOW SUFFICIENT TIME AT SEASON END IN ORDER TO CAPTURE PAINT LAYER
- PROVIDE LOTS OF VENTILATION – LOTS OF MOISTURE -

ALL DONE ... NO, NOT DONE

- FOR THOSE FACILITIES THAT DO NOT HAVE HEALTH & SAFETY PROGRAMS IN PLACE
- USE THE NEXT FEW MONTHS TO DEVELOP – BE READY TO ROLL IN THE FALL
- THOSE THAT DO - IMPROVE
- RESOURCES:
- CURLON WWW.ONTCURL.COM
- MINISTRY OF LABOUR ... GOOGLE MOL

POLL QUESTION #4

Basic Health & Safety training is:

- a) not applicable to volunteer clubs
- b) applicable following an accident
- c) a right of all workers in Ontario
- d) common sense

MINISTRY OF LABOUR

- [HTTPS://WWW.ONTARIO.CA/PAGE/MINISTRY-LABOUR](https://www.ontario.ca/page/ministry-labour)
- ONTARIO HEALTH & SAFETY ACT
- **EVERY WORKER IN ONTARIO HAS CERTAIN BASIC RIGHTS**
- EVERY EMPLOYER IN ONTARIO HAS CERTAIN OBLIGATIONS AND RESPONSIBILITIES

BASIC RIGHTS

- WORKERS HAVE THE RIGHT TO:
- **KNOW** ABOUT WORKPLACE HAZARDS AND WHAT TO DO ABOUT THEM
- **PARTICIPATE** IN SOLVING WORKPLACE HEALTH & SAFETY PROBLEMS
- **REFUSE** WORK THEY BELIEVE IS UNSAFE

- WORKERS MUST:
- FOLLOW THE LAW
- FOLLOW WORKPLACE HEALTH & SAFETY POLICIES AND PROCEDURES
- WEAR & USE PROTECTIVE EQUIPMENT REQUIRED BY EMPLOYER
- WORK AND ACT IN A WAY THAT WILL NOT HARM THEMSELVES OR OTHERS
- REPORT ANY HAZARDS OR INJURIES

OBLIGATION OF EMPLOYER

- **EMPLOYERS MUST:**
- MAKE SURE WORKERS KNOW ABOUT HAZARDS AND RISKS
- MAKE SURE SUPERVISORS KNOW WHAT IS REQUIRED TO PROTECT WORKERS ON THE JOB
- CREATE AND PROVIDE WORKPLACE H/S POLICIES AND PROCEDURES
- MAKE SURE EVERYONE FOLLOWS THE LAW AND THE POLICIES AND PROCEDURES
- MAKE SURE WORKERS WEAR AND USE THE RIGHT PROTECTION EQUIPMENT
- DO EVERYTHING REASONABLE TO PROTECT WORKERS FROM BEING HURT OR GETTING A WORK RELATED ILLNESS

HEALTH AND SAFETY TRAINING

- BASIC AND SPECIFIC **TRAINING MUST BE PROVIDED** FOR ALL TASKS HOWEVER SIMPLE
- TRAINING MUST BE DOCUMENTED
- **IF TRAINING IS NOT DOCUMENTED, IT IS ASSUMED THAT TRAINING DIDN'T HAPPEN**
- CREATE WORKPLACE **SPECIFIC STANDARD OPERATING PROCEDURES**

JOINT HEALTH & SAFETY COMMITTEES

- [HTTPS://ONTCURL.COM/RESOURCES/CURLING-CLUB-RESOURCES/](https://ontcurl.com/resources/curling-club-resources/)

Which workplaces must have joint health and safety committees?

1 to 5	You are not required to have a JHSC or a health and safety representative unless a designated substance regulation applies to your workplace.
6 to 19	You are required to have one health and safety representative who is selected by the workers they represent. If a designated substance regulation applies to your workplace, you are required to have a JHSC.
20 to 49	You are required to have a JHSC. The committee must have at least two (2) members.
50 plus	You are required to have a JHSC. The committee must have at least four (4) members.




HEALTH AND SAFETY BULLETIN BOARD

- MANDATORY POSTERS –
 - PREVENTION STARTS HERE,
 - IN CASE OF INJURY,
 - EMPLOYMENT STANDARDS IN ONTARIO
 - GREEN BOOK – OCCUPATIONAL HEALTH AND SAFETY ACT
 - ANY MOL ORDERS
 - HEALTH AND SAFETY POLICY
 - OTHER STUFF ...
- 



NOW YOU'RE DONE!

- FACILITY “OWNERS” RESPONSIBILITIES
 - ICE REMOVAL
 - PAINT DISPOSAL
 - ROCKS, BLADES, NIPPERS
 - MECHANICAL SHUT DOWN
 - PREVENTATIVE MAINTENANCE
 - OFF SEASON INSPECTIONS
- 



THANK YOU FOR YOUR TIME!

- DON POWELL
 - ICEWORKS30@GMAIL.COM ICEWORKS CURLING SERVICES
 - QUESTION / ANSWER
- 