



**JANUARY
2021**

World Safety Organization NEWSLETTER

WSO OFFERS VARIOUS MEMBERSHIPS AND CERTIFICATIONS

The World Safety Organization offers a broad selection of accredited professional certifications for Environmental and Occupational Safety and Health professionals worldwide.

The World Safety Organization provides a network system to its members whereby professional assistance may be requested by an individual, organization, state, or country on a personal basis. Members needing assistance may write to the WSO with a specific request, and the WSO, through its membership and other professional resources, will try to link the requestor with a person, organization, or resource which may be of assistance.



This includes local, regional, and international programs. When Continuing Education Units are applicable, an appropriate certificate is issued. The WSO members who attend conferences, seminars, and classes receive a Certificate of Attendance from the WSO. For individuals attending courses sponsored by the WSO, a Certificate of Completion is issued upon completion of the course(s).

The WSO members receive special hotel rates and assistance when attending safety programs, conferences, etc., sponsored by the WSO.

The WSO publishes the "WSO Consultants Directory" as a service to its Certified Members and to the professional community. Only WSO Certified Members may be listed. The WSO collects data on the professional skills, expertise and experience of its members in the WSO Expertise Bank for reference when a request is received for professional expertise, skill, or experience.

The WSO provides all members with a membership certificate for display on their office wall and an identification card.

The WSO awards a Certificate of Honorary Membership to the corporations, companies, and other entities paying the WSO membership and/or WSO certification fees for their employees.

The WSO members (active) receive WSO News-Letters, WSO Tech-Letters, and other membership publications of the WSO. The WSO members are entitled to reduced fees at seminars, conferences, and classes given by the WSO.



from the desk of

DR. CHARLES H. BAKER

Chief Operations Officer



Welcome to the World Safety Organization January Newsletter. The holidays were a very busy time and we got a little behind in our newsletters. Now moving into January and the new year, we are caught up and will continue to send you newsletters full of good information on time.

As always, if anyone has suggestions for material or improvements, please let us know.

Unfortunately, the Corona Virus continues to wreak havoc on the world. We hear new cases every day and how the virus has devastated someone's life or business. Even though the vaccine is becoming more widely available, administration takes time and moves very slowly. I have been told to expect these problems through the end of 2021 and maybe beyond. Hopefully, everyone is taking proper steps to protect themselves.

This year (2020) was not the best year for WSO. As this newsletter goes to press, we are looking at ways to better support our members and recover financially. A major effort will be made to recruit new members and get them certified. We lost several members due to financial or other stresses. 2021 will be the year to regain those members. We ask that everyone think about how they can help in this process. All ideas are welcome.

I wanted to remind everyone that WSO just passed its mid term review of its ICAC accreditation of its certification program. This new extension gives us another 2-3 years before we will need to re-certify. This is an obvious benefit to our membership and you should tell others about this accreditation.

In the meantime, enjoy your holidays and above all be safe!!!!

CHB

WE NEED YOU

Do you blog?

Do you write articles for your company's newsletter?

Do you have relevant information to share?

Did your company or agency sponsor a special safety-focused event?

Does your company or agency have an upcoming safety-focused event you wish to promote?

If so, we would love to feature your content in a future WSO NewsLetter or TechLetter!

Just email your article/ blog, author(s) byline, brief bio, and photo to us: editorialstaff@worldsafety.org

Please request a publication release form if required by your employer or co-author(s). Authors/ Companies will maintain all proprietary rights, and WSO will state where the original content was posted or published, if applicable.

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COVID 19: MANIFESTATION OF CULTURAL CHANGE

The article deals about the general information of COVID 19 and effective management techniques of Nael Group of companies during this pandemic. The organization successfully mitigates the infection risk in employees and effectively manages the stress of employees during this period. A well-developed strategic plan of Nael Management team and the commitment of their employees are the pillars of this success.

*Do you know when humans get divine power?
Before COVID, My answer is "I don't know". But that
energy exists on the planet. Sometimes we can see or
feel, sometimes we can't, and this scenario is very
common in our living territory.*



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In 2019 December, with a bunch of new dreams, I welcomed 2020 as a common being on the planet, but I never expected all human dreams incarcerated by a small transgressor. The biggest tragedy is "even the human brain didn't know exactly how it looked like", and the world didn't know the name of that transgressor.

1. THE HEADS-UP

"Viral pneumonia" the first name given by WHO to this transgressor, on 31 December 2019, an official declaration about this virus attack was confirmed by "Wuhan municipal health commission" and WHO's Country Office in the People's Republic of China picked this media statement and communicated globally. Different health authorities around the world contacted the WHO for seeking additional information. An alert message of WHO was received by their Global Outbreak Alert and Response Network (GOARN)

partners about the cluster of pneumonia cases in the People's Republic of China. WHO shared detailed information about a cluster of cases of pneumonia of unknown cause through the IHR (2005) Event Information System, which is accessible to all Member States. The first relief statement from WHO on 11 Jan 2020, the organization tweeted that "it had received the genetic sequences for the novel coronavirus from the People's Republic of China and expected these to soon be made publicly available". But, On the same day, Chinese media reported the first death from the virus.

On 13 Jan 2020, the Ministry of Public Health in Thailand reported an imported case of a lab-confirmed novel coronavirus from Wuhan, the first recorded case outside of the People's Republic of China. The first case of Covid-19 in the UAE was identified on 29 January 2020.

2. NAMING: AFTER A MONTH

On February 11, 2020, the World Health Organization announced an official name for the disease that is causing the 2019 **novel coronavirus** outbreak. The new name of this disease is coronavirus disease 2019, abbreviated as COVID-19. The other slacken statement heard from WHO is "currently the world doesn't have any medicine, vaccine, treatment protocol", enough to create a panic ripple around the globe. Nevertheless, the public is not much aware of the new name COVID 19, they continued their life as common and did usual things. It became WHO's responsibility to make aware and alert the world's Top leaders about this virus attack. (cont. on pg. 4)

COVID 19: MANIFESTATION OF CULTURAL CHANGE (Continued)

3. QUESTION MARK “?”

No guidelines, No proper feedbacks, No previous experience, No more resources, inadequate awareness materials, No “treatment & medicines”, Absolutely No idea. The world was waiting to hear from WHO for a complete guideline. In between people started to refer similar conditions in history and collect news related to this virus and comparison studies were spread around social Media. Which one is right? Which one is wrong? But one thing is real “The virus spread like a peregrine falcon”. What to do? Confusion on our organization “Top Table”!

4. REALIZING THE WAVE

In mid of February 2020, our organization felt the impacts of COVID 19 in market “unavailability of materials”, especially from China market. For the Middle East and Asia, China acts as a focal point for almost all goods.

My organization is dealing with construction and manufacturing activities. The shortage of raw materials for both sectors are slowly affecting our monthly targets. The indicators and media reports around the globe focused on one point “COVID 19”, Gradually it become hot news in our organization.

In the same week, NGC management organized an awareness training for managers' level, categorizes at Nael Cement Products factory, Constructions projects in association with NMC hospital Alian, Medeor Hospital Alain, LLH hospital Abudhabi. NGC OHS Research & Development team, emergency response team seeks information from the UAE Ministry of Health, DOH Abudhabi about COVID 19 prevention and precaution procedure.

NGC follows the precaution procedures of Middle East respiratory syndrome coronavirus (MERS-CoV) infection based on current knowledge of the situation in China and other countries.

On 11 March 2020 WHO announced COVID-19 outbreak as a pandemic and official guidelines called “**Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected**” are communicated to the public by WHO on 19 March 2020.

5. ACTIONS & REACTIONS

Our organization “Nael General Contracting LLC” also shifted into brim mode after the first positive case in UAE and especially in Abudhabi.

A comprehensive package and plan is essential to conquest the pandemic. A passionate approach is necessary from each employee in the organization as one of the remedies.

In my speculation, “one-man” show is not appropriate to defeat the virus “one army” show is required. It's very simple in writing, in practice it is a big task. Just imagine, to control an organization having a strength of more than 12,000 employees during a pandemic and influencing different people from different cultures and countries. Also, keep in mind to achieve an idiosyncratic objective. If anyone fails, it completely affects the organization. (cont. on pg. 5)

COVID 19: MANIFESTATION OF CULTURAL CHANGE (Continued)

- **Developing a COVID Team**

The unprejudiced approach by Nael management with a clear vision “Developing a COVID team”, this idea came as an output of Nael Top Management and department heads meeting. I developed a COVID management procedure and presented in that meeting.

According to that meeting, I recommended forming a flu management team from each department, projects and factories and flu management procedure in our organization for both projects and camp.

In a wide concept, I split the safety team into four main teams: Medical team enclosed with Registered Nurses & First aiders, Training Team, COVID R&D team, Safety Team for COVID. In addition, each department in Nael Group of companies developed an internal team to coordinate with the safety department. Finally, Management formed a team to monitor and initialize the developed teams of different department. It acts as a hub for COVID 19 fight back. Unfortunately, this meeting is the last face to face group meeting of Nael General Contracting.

- **Identify the strength and realizing the resources**

Recognizing the existing strength and merits of NGC is a vital factor to plan the new objectives to fight against the pandemic. This is actually a big challenge because there is no polished tool in this world to stop COVID 19. The defense is the worldwide recognized tool and I know it's not a smart option. Allocating the basic PPEs to all employees like Masks and Hand gloves is also a challenge at that time.

Firstly I collected details from the store about the PPEs and decided to maintain minimum reserve stock at all times. To maintain the continued supply of these PPE, NGC approached more than 32 suppliers in UAE to fulfil requirements in every day during this period.

Maintaining personal hygiene, keeping working environment and camps hygienic are also ensured by a dedicated team arranged under the camp boss, project engineer. Continued online training and awareness program was ensured by dedicated training team for all employees related to COVID 19 and personal hygiene.

Management is ready to pump money to buy these PPEs, but the value of money is in downslope as compared with product availability & humanity. Ensuring PPE kits for nurses, housekeeping staff and company caretakers have become a day to day challenge for me.

- **Sample Study**

The R&D team of COVID 19 looks around the world to find a sample “how to study an effective COVID management implementation”. UAE government developed an effective management system to tackle and control the widespread of COVID cases. In addition, the R&D team monitors the “Kerala Model”

COVID management effectiveness and its worldwide appreciated system. Our team considered the positive slots of both management system and developed our own structure to tackle the pandemic which fulfils the UAE Crisis & Emergency management requirements. NGC limited access to the company sites and accommodation for visitors and suppliers. The store was opened in an isolated industrial area to control unauthorized entry. *(cont. on pg. 6)*

COVID 19: MANIFESTATION OF CULTURAL CHANGE (Continued)

NGC limited access to the company sites and accommodation for visitors and suppliers. The store was opened in an isolated industrial area to control unauthorized entry. All bus services stopped from camp to Alain City and conducted awareness for net banking and online transactions, stopped all types of gatherings and prayers, conduct mass online awareness programs, arranged PCR test for symptomatic employees, keep safe seat distances, two-time temperature monitoring and disinfection at camps, temperature monitoring at all site security points in projects and factory, tracing contact plan is implemented if someone is positive.

- **Providing Facility**

According to the guidelines and feedbacks from ADPHC and Alain Municipality, NGC management decided to construct and develop 20% of the total room in camps to quarantine and isolation. NGC started to construct new isolation and quarantine wards. In Alsaad camp NGC completed 80 isolation and quarantine rooms, In Alshwaibh camp 32 isolation and quarantine rooms, at Sweihan camp 25 isolation and quarantine rooms, In new industrial area 16 rooms were designated to COVID 19 pandemics and in Liwa camp, 21 rooms were dedicated for isolation and quarantine rooms.

In new industrial area 16 rooms were designated to COVID 19 pandemics and in Liwa camp, 21 rooms were dedicated for isolation and quarantine. A camp is totally changed to COVID ward and developed 350 bed dedicated to company COVID 19 cases, we also made an agreement with Mediore Hospital Alain for a regular visit.

Also NGC allocated Nurses and First aid teams to take care of the patients and quarantined people.

All the vehicles are compartmented and kept disinfected on regular time. NTL team of Nael General contracting modified four buses as per COVID 19 guideline which is used to transfer quarantine people for PCR test. Also, one bus is totally dedicated to shifting positive cases from quarantine and highly symptomatic cases are transferred to the hospital through ambulance facility which was done through mutual coordination between, safety team, nurses and first aider team, NTL team and Medeor & Seha Hospital. A ratio was developed by the R&D team, one employee in one quarantine room and 4 employees in one isolation room with separate toilets and washing area. This is to tackle the widespread infection and arrange a PCR test for quarantined people after 14 days.

Alain & Abudhabi Municipality also supported our management at this critical time. Almost 15 inspections are covered by these municipalities and encouraged and guided as to ensure the COVID Management guidelines. Also, Municipality conducted the online seminar, training to our core members and distributed awareness posters in camps.

- **Developing & Implementing Infrastructure**

Communication system, Transportation system, Guidance centre, Top Table availability for quick decision, these four things were well developed for our COVID management infrastructure. All the members including the top management team and members available 24*7 means they are available at all times. Scheduling vehicle drivers at any time and at any camp helped to have continuous flow of COVID patients and suspected transportation.

(cont. on pg. 7)

COVID 19: MANIFESTATION OF CULTURAL CHANGE (Continued)

- **Communicating Facts**

The communication responsibility was assigned to the safety team. Also, the first positive case in our organization was reported in mid March of 2020 from Abudhabi project. Also, the safety team submitted the first case to the management team, Alian Municipality, Abu Dhabi Municipality, and Police department. An alert passed to all assigned team heads. A wide and common problem is the public doesn't know how to handle it if a person becomes positive. Same problem NGC management faced during this pandemic, employees were afraid to mingle and re-join with previous positive case patients. So, targets again assigned to the training team to provide the psychological support and training to all employees through posters and online platform. Also, Management decided to keep the confidentiality of all positive cases and informed to all department heads to maintain contact on the safety team before any communication.

As a supporting team, the HR department developed an Emergency Operation Centre at Nael Group Head office to ensure all systems were running smoothly, especially the Human Resources.

6. CHALLENGES AND BACKLASHES

We faced a lot of challenges while fighting back against this pandemic. Convincing, encouraging and maintaining morality of our employees was difficult for me and our management. Employees were more sentimental about their families, the predominant manpower in our organization is from India. At that time positive cases in India were shooting-up day by day and travel ban to India magnified the situation. Psychological stress about the family spread all over camps.

Common labors communicated their concerns to site safety team, and some were wishing to leave the job. As a relief, management announced full salary to all employees during this pandemic period and Head office released a message from the Managing Director "Management is with you all".

Other challenges we faced during this period are:

- Fake news through social media.
- Loose talks about "availability of local medicines"
- Lectures from Non-competent people to their colleague.
- Stress management of front line COVID warriors (Nurse, First Aiders, safety professionals etc) of our organization.
- Behavior changes of employees towards early positive colleagues.
- Arrange sufficient COVID 19 PPE in an everyday manner.
- Providing mental support to positive employees.

7. CONCLUSION

The first positive case in the UAE was reported on 29 January 2020, 42 days later our first positive case was reported in our organization. That means our COVID 19 team fought effectively. According to the latest statistics, there are 688 positive cases with Zero death in our company and only 5.7% of our total strength is affected. I reckon, while considering the spread rate of this virus this percentage and number are too low. It's indeed a pleasure, our organization has achieved a status of "success" in this war.

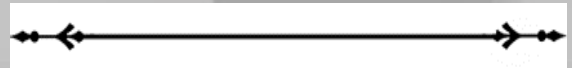
(cont. on pg. 8)

COVID 19: MANIFESTATION OF CULTURAL CHANGE (Continued)

This pandemic makes an impact on health culture of current society especially in personal hygiene. People are aware of their health and conscious about their healthy lifestyle and food choices. A big change was visible in our organization too. The exceptional support and commitment of NGC management, HR Manager, Rev. Fr. Nithin Geevarghese BSc, B.D and Rev. Fr. Arun C Abraham M.A. (Psychology) B.D during this pandemic period is highly appreciated. They sustain and keep the morality of each employee at every moment. In this broad world, the pandemic was not started after a sudden whistle blow and I don't believe in this quick start.

This SARS-COV-2 is already subsisting in this Mother Nature. Even though to an extent, it got the power to break the natural barrier and come in contact with the human race, it may be due to alternative food chain, changes in ecosystem or inhumanity etc.

But one question is still pending without answer "who stirs up the virus? Or what about triggering factors?" At this moment I affirm that millions of macro and microorganisms exist on this planet beyond our knowledge & vision. If anything comes close to our race it means we are involved an activity which might provoke their existence. I know when I am writing this, these organisms are around me sometimes I may breathe them, I may eat or swallow them, but I am not nervous. Hi "demon" in this soggy-time you can hear a pleasant voice, you can see a beautiful smile of our caregivers. We "the human race" call them "deity". In this instance, I can sense the divine power in all healthcare workers and COVID volunteers around the world. Ultimately, everything happens as a part of the universal theory "survival of the fittest". Yes, our race is the fittest.





Scott's safety share OSHA's GUIDE to WORKING in COLD WEATHER



Submitted by Scott Masters, WSO-CSM; Contract Employee, Construction Lead Safety Specialist, Alliant Corporation; Tennessee and South Carolina USA

Winter weather presents hazards including slippery roads/surfaces, strong winds and environmental cold. Employers must prevent illnesses, injuries, or fatalities, by controlling these hazards in workplaces impacted by winter weather. OSHA and National Oceanic and Atmospheric Administration (NOAA) are working together on a public education effort aimed at improving the way people prepare for and respond to severe weather.

Cold stress

It is important for employers to know the wind chill temperature so that they can gauge workers' exposure risk better and plan how to safely do the work. It is also important to monitor workers' physical condition during tasks, especially new workers who may not be used to working in the cold, or workers returning after spending some time away from work.

The NOAA Weather Radio is a nationwide network of radio stations broadcasting continuous weather information from the nearest NWS office. It will give information when wind chill conditions reach critical thresholds. A Wind Chill Warning is issued when wind chill temperatures are life-threatening. A Wind Chill Advisory is issued when wind chill temperatures are potentially hazardous.

Who is affected by environmental cold?

Environmental cold can affect any worker exposed to cold air temperatures and puts workers at risk of cold stress. As wind speed increases, it causes the air temperature to feel even colder, increasing the risk of cold stress to exposed workers, especially those working outdoors, such as recreational workers, snow cleanup crews, construction workers, police officers and firefighters. Other workers who may be affected by exposure to environmental cold conditions include those in transit, baggage handlers, water transportation, landscaping services, and support activities for oil and gas operations.

Risk factors for cold stress include:

- Wetness/dampness, dressing improperly and exhaustion
- Predisposing health conditions such as hypertension, hypothyroidism and diabetes
- Poor physical conditioning

What is cold stress?

What constitutes cold stress and its effects can vary across different areas of the country. In regions that are not used to winter weather, near freezing temperatures are considered factors for "cold stress." Increased wind speed also causes heat to leave the body more rapidly (wind chill effect). Wetness or dampness, even from body sweat, also facilitates heat loss from the body. Cold stress occurs by driving down the skin temperature, and eventually the internal body temperature. When the body is unable to warm itself, serious cold-related illnesses and injuries may occur, and permanent tissue damage and death may result. Types of cold stress include trench foot, frostbite and hypothermia.

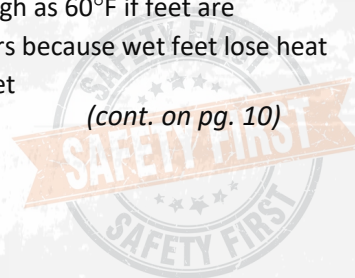
For more information, see OSHA's Cold Stress Safety and Health Guide.

Types of Cold Stress

Immersion/Trench Foot

Trench foot is a non-freezing injury of the feet caused by prolonged exposure to wet and cold conditions. It can occur in temperatures as high as 60°F if feet are constantly wet. Injury occurs because wet feet lose heat 25-times faster than dry feet

(cont. on pg. 10)



OSHA's GUIDE to WORKING in COLD WEATHER (continued)

What are they symptoms of trench foot?

Reddening skin, tingling, pain, swelling, leg cramps, numbness and blisters.

First Aid

- Remove wet shoes/boots and wet socks.
- Dry the feet and avoid working on them.
- Keep affected feet elevated and avoid walking. Get medical attention.

Frostbite

Frostbite is caused by the freezing of the skin and tissues. Frostbite can cause permanent damage to the body, and in severe cases can lead to amputation. The risk of frostbite is increased in people with reduced blood circulation and among people who are not dressed properly for extremely cold temperatures.

What are the symptoms of frostbite?

Reddened skin develops gray/white patches in the fingers, toes, nose, or ear lobes; tingling, aching, a loss of feeling, firm/hard, and blisters may occur in the affected areas.

First Aid

- Follow the recommendations described below for hypothermia.
- Protect the frostbitten area, e.g., by wrapping loosely in a dry cloth and protect the area from contact until medical help arrives.
- DO NOT rub the affected area, because rubbing causes damage to the skin and tissue.
- Do not apply snow or water. Do not break blisters.
- DO NOT try to re-warm the frostbitten area before getting medical help, for example, do not use heating pads or place in warm water. If a frostbitten area is rewarmed and gets frozen again, more tissue damage will occur. It is safer for the frostbitten area to be rewarmed by medical professionals.
- Give warm sweetened drinks if alert (no alcohol).

Hypothermia

Hypothermia occurs when the normal body temperature (98.6°F) drops to less than 95°F. Exposure to cold temperatures causes the body to lose heat faster than it can be produced. Prolonged exposure to cold will eventually use up the body's stored energy. The result is hypothermia, or abnormally low body temperature. Hypothermia is most likely at very cold temperatures, but it can occur even at cool temperatures (above 40°F) if a person becomes chilled from rain, sweat, or immersion in cold water.

What are the symptoms of hypothermia?

An important mild symptom of hypothermia is uncontrollable shivering, which should not be ignored. Although shivering indicates that the body is losing heat, it also helps the body to rewarm itself. Moderate to severe symptoms of hypothermia are loss of coordination, confusion, slurred speech, heart rate/breathing slow, unconsciousness and possibly death. Body temperature that is too low affects the brain, making the victim unable to think clearly or move well. This makes hypothermia particularly dangerous because a person may not know what is happening and won't be able to do anything about it.

First Aid

- Move the worker to a warm, dry area.
- Remove any wet clothing and replace with dry clothing. Wrap the entire body (including the head and neck) in layers of blankets; and with a vapor barrier (e.g. tarp, garbage bag) Do not cover the face.

If medical help is more than 30 minutes away:

- Give warm sweetened drinks if alert (no alcohol), to help increase the body temperature. Never try to give a drink to an unconscious person.
- Place warm bottles or hot packs in armpits, sides of chest, and groin. Call 911 for additional rewarming instructions.

(cont. on pg. 11)



OSHA's GUIDE to WORKING in COLD WEATHER (continued)

Basic Life Support (when necessary)

Co-workers trained in cardiopulmonary resuscitation (CPR) may help a person suffering from hypothermia who has no pulse or is not breathing:

- Treat the worker as per instructions for hypothermia but be very careful and do not try to give an unconscious person fluids.
- Check him/her for signs of breathing and for a pulse. Check for 60 seconds.
- If after 60 seconds the affected worker is not breathing and does not have a pulse, trained workers may start rescue breaths for 3 minutes.
- Recheck for breathing and pulse, check for 60 seconds.
- If the worker is still not breathing and has no pulse, continue rescue breathing.
- Only start chest compressions per the direction of the 911 operator or emergency medical services*
- Reassess patient's physical status periodically.

*Chest compressions are recommended only if the patient will not receive medical care within 3 hours.

Wind Chill Temperature

Outdoor workers exposed to cold and windy conditions are at risk of cold stress, both air temperature and wind speed affect how cold they feel. "Wind chill" is the term used to describe the rate of heat loss from the human body, resulting from the combined effect of low air temperature, and wind speed. The wind chill temperature is a single value that takes both air temperature and wind speed into account. For example, when the air temperature is 40°F, and the wind speed is 35mph, the wind chill temperature is 28°F; this measurement is the actual effect of the environmental cold on the exposed skin.

National Weather Service (NWS) Wind Chill Calculator: With this tool, one may input the air temperature and wind speed, and it will calculate the wind chill temperature.

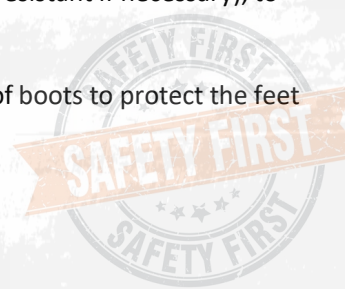
The American Conference of Governmental Industrial Hygienists (ACGIH) developed the following Work/Warm-up Schedule for a 4-hour shift that takes both air temperature and wind speed into account to provide recommendations on scheduling work breaks and ceasing non-emergency work.

Dressing Properly for the Cold

Dressing properly is extremely important to preventing cold stress. When cold environments or temperatures cannot be avoided, the following would help protect workers from cold stress:





- Wear at least three layers of loose-fitting clothing. Layering provides better insulation.
 - An inner layer of wool, silk or synthetic (polypropylene) to keep moisture away from the body. Thermal wear, wool, silk or polypropylene, inner layers of clothing that will hold more body heat than cotton.
 - A middle layer of wool or synthetic to provide insulation even when wet.
 - An outer wind and rain protection layer that allows some ventilation to prevent overheating.
- Tight clothing reduces blood circulation. Warm blood needs to be circulated to the extremities. Insulated coat/jacket (water resistant if necessary)
- Knit mask to cover face and mouth (if needed)
- Hat that will cover your ears as well. A hat will help keep your whole body warmer. Hats reduce the amount of body heat that escapes from your head.
- Insulated gloves (water resistant if necessary), to protect the hands
- Insulated and waterproof boots to protect the feet

(cont. on pg. 12)



OSHA's GUIDE to WORKING in COLD WEATHER (continued)

Work/Warm-up Schedule for a 4-Hour Shift

Air Temperature--Sunny Sky		No Noticeable Wind		5 mph Wind		10 mph Wind		15 mph Wind		20 mph Wind	
°C (approximate)	°F (approximate)	Maximum Work Period	Number of Breaks	Maximum Work Period	Number of Breaks	Maximum Work Period	Number of Breaks	Maximum Work Period	Number of Breaks	Maximum Work Period	Number of Breaks
-26 to -28	-15 to -19	(Normal Breaks) 1		(Normal Breaks) 1		75 min	2	55 min	3	40 min	4
-29 to -31	-20 to -24	(Normal Breaks) 1		75 min	2	55 min	3	40 min	4	30 min	5
-32 to -34	-25 to -29	75 min	2	55 min	3	40 min	4	30 min	5	Non-emergency work should cease 	
-35 to -37	-30 to -34	55 min	3	40 min	4	30 min	5	Non-emergency work should cease 			
-38 to -39	-35 to -39	40 min	4	30 min	5	Non-emergency work should cease 					
-40 to -42	-40 to -44	30 min	5	Non-emergency work should cease 							
-43 & below	-45 & below	Non-emergency work should cease									

Schedule applies to any 4-hour work period with moderate to heavy work activity; with warm-up periods of ten (10) minutes in a warm location and with an extended break (e.g. lunch) at the end of the 4-hour work period in a warm location.

Adapted from ACGIH 2012 TLVs

Safety tips for workers

- Your employer should ensure that you know the symptoms of cold stress
- Monitor your physical condition and that of your coworkers
- Dress appropriately for the cold
- Stay dry in the cold because moisture or dampness, e.g. from sweating, can increase the rate of heat loss from the body
- Keep extra clothing (including underwear) handy in case you get wet and need to change
- Drink warm sweetened fluids (no alcohol)
- Use proper engineering controls, safe work practices, and personal protective equipment (PPE) provided by your employer

Winter driving

Although employers cannot control roadway conditions, they can promote safe driving behavior by ensuring workers recognize the hazards of winter weather driving, for example, driving on snow/ice covered roads; are properly trained for driving in winter weather conditions; and are licensed (as applicable) for the vehicles they operate. For information about driving safely during the winter, visit OSHA's [Safe Winter Driving page](#).

Employers should set and enforce driver safety policies. Employers should also implement an effective maintenance program for all vehicles and mechanized equipment that workers are required to operate. Crashes can be avoided. Learn more at [the Motor Vehicle Safety \(OSHA Safety and Health Topics Page\)](#).

(cont. on pg. 13)



OSHA's GUIDE to WORKING in COLD WEATHER (continued)

Employers should ensure properly trained workers inspect the following vehicle systems to determine if they are working properly:

- **Brakes:** Brakes should provide even and balanced braking. Also check that brake fluid is at the proper level.
- **Cooling system:** Ensure a proper mixture of 50/50 antifreeze and water in the cooling system at the proper level.
- **Electrical system:** Check the ignition system and make sure that the battery is fully charged and that the connections are clean. Check that the alternator belt is in good condition with proper tension.
- **Engine:** Inspect all engine systems.
- **Exhaust system:** Check exhaust for leaks and that all clamps and hangers are snug.
- **Tires:** Check for proper tread depth and no signs of damage or uneven wear. Check for proper tire inflation.
- **Oil:** Check that oil is at proper level.
- **Visibility systems:** Inspect all exterior lights, defrosters (windshield and rear window), and wipers. Install winter windshield wipers.

An emergency kit with the following items is recommended in vehicles:

- Cell phone or two-way radio
- Windshield ice scraper
- Snow brush
- Flashlight with extra batteries
- Shovel
- Tow chain
- Traction aids (bag of sand or cat litter)
- Emergency flares
- Jumper cables
- Snacks
- Water
- Road maps
- Blankets, change of clothes

Preventing slips on snow and ice

To prevent slips, trips, and falls, employers should clear snow and ice from walking surfaces, and spread deicer as quickly as possible after a winter storm. When walking on snow or ice is unavoidable workers should be trained to:

- Wear footwear that has good traction and insulation (e.g. insulated and water-resistant boots or rubber over-shoes with good rubber treads)
- Take short steps and walk at a slower pace to react quickly to changes in traction

EVERYONE, EVERYWHERE, EVERY DAY: **SAFE HOME**



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WSO Board of Directors

Requirements for WSO Professional Membership

WSO Professional Members are safety, hazard, risk, loss and accident prevention professionals performing full time activities in these fields.

WSO Professional Members are safety, hazard, risk, loss and accident prevention professionals performing full time activities in these fields.

Along with the Professional Membership Application, current resume, and WSO Code of Conduct, the following documentation is to be submitted:

- 1) Two Letters of Recommendations as to one's safety abilities on the job.
- 2) Two Candidate Evaluations from colleagues, associates, or peers who know of one's abilities and successes.
- 3) Supporting documentation to include professional memberships, industry certifications and registrations, educational transcripts, etc.

Additionally, a minimum of 15 years of verifiable fulltime experience must be met with annual documentation of status or with the following combination of education and experience:

- 1) An Associate Degree plus 13 years of fulltime experience in safety and / or environmental science field.
- 2) A Bachelor's Degree plus 11 years of fulltime experience in safety and/ or environmental science.
- 3) A Graduate Certificate/ Diploma in Occupational Health and Safety (or similar equivalent postgraduate university qualification) plus 10 years of fulltime experience in safety and/ or environmental science field.
- 4) A Master's Degree plus 9 years of fulltime experience in safety and/ or environmental science field.
- 5) A PhD plus 6 years of fulltime experience in the safety and/ or environmental science field.

Degrees should be in safety, physical sciences, engineering, safety management, security, or other curricula acceptable to the WSO Approval Board. Degrees are to be from approved and accredited colleges or universities.



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