Beyond COVID 19: Compendium on Return to Workplace Guide
An ICMR-NIOH Initiative

Health

Worker

Avoid contact with sick people
Wash your hands often
Wear a face mask

ICMR-National Institute of Occupational Health
(Indian Council of Medical Research)
Ahmedabad
Beyond COVID-19: Compendium on Return to Workplace Guide
*An ICMR-NIOH Initiative*

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**Acknowledgement**

The compilation of the guidelines has been made possible with the valuable inputs and suggestions received from all ranks of the ICMR-NIOH family.

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**Disclaimer:** The Institute disclaims that the ICMR-NIOH Return to Workplace Guide is a tool for operational management of the workplace and is complimentary instrument to all national/state regulations and guidance on reopening of workplaces. The authors have taken care to ensure that information compiled in the report is correct. The authors however do not assume and hereby disclaim any liability to any part of errors of omission, sequence due to an inadvertent negligence, accident or any cause.

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Director  
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Prologue

The ICMR-National Institute of Occupational health, Ahmedabad acknowledges and comprehends its role towards prevention of workplace hazards, promotion of safe work environment; comfort, safety and productivity of workers to maintain the occupational health milieu at the work front.

The COVID-19 scenario all-round the globe as well as in India has tremendously affected the world at work. It is further apprehended that there is emerging need in the occupational and environmental health alterations, which shall continue to be new normal for a long time ahead. The intent of this document is to append directions and advices for safe restart of the economic activities in the country. This report is a compilation of NIOH perspective as well as guidelines by various international/national agencies of repute, viz. WHO, ILO, ISHRAE, NDMA. On behalf of the Institute, I thank Dr. TK Joshi, Hon’ble SAC Member of the Institute for his critical comments and constructive suggestions to improve the contents.

(Dr. Kamalesh Sarkar)
Director
Globally, most countries have been undergoing or already undergone severe restrictions on all fronts for a number of months, alike India. The present COVID-19 scenario has caused unprecedented stressful socio-economic disruption among the populace. Now India is slowly easing the restrictions brought in to tackle the COVID-19 pandemic; and initiate to revive the stalled economic activity.

As the employers are planning to stage return to their workplace after a prolonged period, and given circumstances of prevailing COVID-19 cases, a series of guiding principles would need to be strictly followed at the workplace and everywhere which could be termed as a “New Normal” so as to safeguard the health, well-being of the workers, their families as well as restrict the transmission of chain of this disease.

It is well recognized that along with the Govt., Nodal agencies, health departments, labor organizations and employers, workers are also concerned and anxious about being in workplace, working together, traveling to workplace etc. The workforce would strive out to understand and comprehend the retained support of their organization to upkeep the health and safety of the workers. The organization would also be serious towards framing/following guidelines suitable for their workplace, managing with the redundancies, essentials etc.

In the way forward, the ICMR-National Institute of Occupational Health (NIOH), Ahmedabad strongly comprehend that suitable need-based workplace guidelines are to be prepared and implemented whilst rolling out the economic activities. Considering this, an initiative has been taken by the Institute to prepare a “Return to Workplace Guide”. The experts in the field have reviewed the guide, and based on the consensus, the guideline is accepted. Although, the
Institute is widely open to constructive suggestions to enhance the quality of the same.

This document could also assist in deferment or downscaling of non-essential services, so as to maintain a concinnity between initiation of economic activities and safeguard the workers or public from menace of COVID-19. As a measure to roll out the economic wheel post COVID-19 pandemic, a hierarchy of controls towards safeguarding the workforce would be extremely effective. However, the advice provided is a cumulative social responsibility of the employer and the employee to reliably implement and maintain for an effective outcome. Further separate specific guidelines for high risk occupations e.g., hospitals, healthcare and allied workplaces would be required to cater their occupational hazards.

**Workplace category on risk possibilities**

<table>
<thead>
<tr>
<th>Job Risk</th>
<th>Nomenclature</th>
<th>Probable workplaces</th>
<th>Precaution level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low exposure risk</strong></td>
<td>minimal occupational contact among workers</td>
<td>manufacturing lines, construction work</td>
<td>General</td>
</tr>
<tr>
<td><strong>Medium exposure risk</strong></td>
<td>close contact with general public/co-workers</td>
<td>malls, restaurants, food markets, public transport</td>
<td>Enhanced</td>
</tr>
<tr>
<td><strong>High exposure risk</strong></td>
<td>close contact with those known or suspected of COVID-19 cases</td>
<td>health facilities, ambulance drivers, domestic services of COVID-19 people, dead bodies services etc.</td>
<td>Extreme</td>
</tr>
</tbody>
</table>

Recent ICMR-NIOH study has shown that viral load is an important determinant for transmission of COVID 19 infection in an area & most people (84%) are mildly infectious. If anybody develops symptom such as fever, headache, cough, sore throat, shortness of breath, abdominal pain etc., s/he should not be asked to attend the workplace. Most asymptomatic infected persons don’t transmit infection except few having higher viral load as observed while working with COVID at NIOH.
## Hierarchy of controls

<table>
<thead>
<tr>
<th>Hierarchy of controls</th>
<th>Deliverables</th>
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</table>
| **Elimination**       | 1. *Work from home*  
2. Use of electronic platforms (teleconferencing, videoconferencing etc.) |
| **Substitution**      | 1. Mechanize work wherever feasible. |
| **Engineering control** | 1. Restructured workplace (2 yards/6 feet gap between workers).  
2. Floor marking for flow of movements.  
3. Face shields for front desk workers.  
4. Pre and post work body surface temperature checking. |
| **Administrative control** | 1. Maintain duty roaster as per work necessity.  
2. Supervisor for monitoring.  
3. Distributed arrival/departure/lunch timings.  
4. Regular disinfection of common work surface.  
5. Monitored use of canteens / washrooms.  
7. Use of e-platforms for meetings / seminars  
8. Use of online platform for inter/intra office communications.  
9. Mass awareness through re-orientation training on precautions to be taken for COVID-19 transmission. |
| **Personal Protective Equipment (PPE)** | 1. Proper face mask is mandatory.  
2. Gloves, aprons, face cover in case of direct contact with public.  
3. Use of PPE as advised in Govt. guidelines from time to time.  
4. Wash / Change PPE as appropriate. |
It is apprehended that every workplace will have an impact of prolonged period of shutdown. A substantial migrant workforce may also have returned to their hometown from the workplace. In the given circumstances of prevailing COVID-19 situation in the country, a robust planning to stage return to their workplace would be necessary to contain the spread of cases. Prior to planning for re-opening of workplaces, risk assessment of the workplace and all possible hazards for health and safety must be categorically assessed. The employers should take preventive and protective measures, such as engineering and administrative controls before actual initiation of work. It would be a necessity to regain the physical as well as psychological confidence of both workers and customers.
COMMON GUIDELINES AT WORKPLACE

Safe reopen planning team

1. A joint team of employer, workers and occupational health expert should take a call on the reopening.

2. Risk assessment of the workplace and all preventive and protective measures should be ensured, such as engineering and administrative controls before actual initiation of work.

3. Training of the managers and surveillance team with the possible hazards and dealing protocols has to be carried out.

4. Develop a work plan and display at the work site along with requisite team details, in addition to verbal communication to all workers.

5. The joint team should develop an Emergency Contingency Plan incorporating exigencies of COVID-19. The plan should invariably contain new work paradigms, work distribution with reduced staff, duty roaster, evacuation route maps, and congestion free assembly areas during emergency.

6. The joint team should periodically review the plan as well as the preventive and protective measures for their adequacy and/or any needful corrective measures. Accordingly, the revised plan must be immediately implemented and updated.
Workplace management

1. Workers residing in containment zones or hotspot areas should not be asked to attend the workplace. If it is necessary to attend the workplace, it may be ensured that s/he is COVID-19 symptom free.

2. Workers having pre-existing medical ailments, pregnant women and/or older workers (>60 years) may be avoided at workplace, unless extremely necessary.

3. Emphasis should be on minimum number of staff to be called for work (30% to 50%). Give preference to WORK FROM HOME concept as much as possible.

4. Companies should ensure transportation for their workers. The vehicles should be sanitized & drivers must be tested before they are allotted duties. Transport facilities may work with 30-40% passenger capacity, maintaining best possible physical distancing.

5. Owners must ensure that there are sufficient masks, sanitizers, soap and water available for the entire staff.

6. Thermal screening and hand sanitization of all persons entering the work premises must be carried out as well as while leaving, and maintained in a register.

7. Avoid finger/thumb punch system for attendance marking.

8. Minimize the need for physical meetings, instead maximize the teleconferencing facilities.

9. Spitting in premises should be penalized. Strict ban should be implemented for use of gutkha and tobacco within the premises.

10. Entry of non-essential visitors should be restricted.

11. Advise employees and contractors to consult national travel advice before going on personal trip.

12. Cancel or postpone all non-essential official tours.

13. Promote smart payments as preferred method, encourage digital payment transactions for customer convenience.
14. The action plan and preventive measures put in place should be monitored and updated.

15. Provision of personal protective equipment and clothing for occupational safety and health and infection prevention and control has to be ensured by the management. Such measures at the workplace must not involve any expenditure on the part of workers.

16. Emphasis may be given on *My Work-My Tools* during the shift. The multi-worker handling tools/machineries should be appropriately sterilized/sanitized before another worker is allotted to use it.

17. Every workplace should have a COVID-19 monitoring/response team to deal/report/maintain the prescribed measures with the issues on reopening of the workplaces.

18. Quarterly audit of the workplace by an independent agency (time line may be earlier in case of any outbreak/case of COVID-19).

**Training and education**

1. Regular re-orientation training explaining personal hygiene, do’s and don’ts, safe individual practices as well as management of suspected COVID-19 cases should be planned.

2. Mandatory training to workers must be ensured on proper handwashing techniques, covering of face while coughing and sneezing, avoid face touching and use of PPEs, respiratory etiquettes etc.

3. Display electronic/physical posters promoting hand-washing, mask wearing protocols, use of PPEs.

4. Training must be given towards personal item-use etiquettes (phones, pen, lunch box, desks, work tools etc.) and not sharing them with co-workers.

5. Highlight the efficacy of adopting protective measures and train all workers to avoid rumors and misinformation.
Healthcare facilities at workplace

1. Existing primary health care facility within the working premises should regularly monitor health status of all employees.

2. Medical insurance of workers should be mandatory.

3. All workplaces should display a list of COVID-19 hospitals nearby. Anybody detected having symptom of COVID must be referred promptly to designated healthcare facilities.

4. Isolation room should be identified and kept ready for suspected COVID-19 cases.

Management of suspected cases of COVID-19

1. Any suspected COVID-19 case within the premises should be reported to local administration/ local health authority.

2. In case a worker falls sick at workplace with related COVID-19 symptoms, s/he must be quarantined in the designated isolation room, preventing all other people to have accessibility. The same should be immediately reported to local administration/ local health authority.

3. Worker in close contact with persons with laboratory-confirmed COVID-19 cases should be asked to follow suitable quarantine guidelines of the government. They should be strictly refrained from coming to the workplace.

4. The management should ensure that workers recovered from confirmed COVID-19 should be free from illness as per the local health guidelines before returning to workplace.
Cleaning and disinfection

1. Sanitization of working area to be done between each shifts. The highly trafficked areas may have more frequent sanitization.

2. As ILO recommends, self-cleaning of each one’s workstation may be highly encouraged and use of shared office consumables may be discouraged.

3. Frequent cleaning and disinfection of common used surfaces, door & window latches, kitchen and canteen areas, washroom surfaces and fittings, touchscreen devices, computer keyboards, equipment and other work surfaces should be mandatory between shifts.

4. For effective sterilization, 70% alcohol/ 1% hypochlorite/phenolic disinfectants or Govt. approved disinfectant should be used. MSDS of disinfectant should be followed for its usage method, concentration and contact time. One must be cautious about the use of alcohol based sanitizer due to possibility of fire incident, if they come in contact with fire nearby.

5. Installation of UV light chamber within work premises may be considered for sanitization of personal items and reusable PPEs.

6. Installation of disinfection/sanitization chamber may be considered for decontamination or disposal of used items to prevent further transmission of virus from discarded materials.

7. All goods/supplies/mail/packages received should be disinfected appropriately, before being opened and used.

8. Shoes or leg wearing may be a source of contamination. It should be disinfected by proper washing, aerosol disinfectant, wiping it properly with a disinfectant, and/or use of disposable shoe cover.

9. Chemical industries should carefully consider use of alcohol / hypochlorite based sanitizers as it may react with hazardous chemicals resulting in ill health effects. Soap & water use may be an alternative.

10. Provide sanitization points for PPE kits for its reuse.
11. As WHO recommends, frequently disinfecting indoor workplaces (spraying/fogging) is not recommended as it can cause eye, respiratory, and skin irritation and other toxic effects.

12. Spraying on people with disinfectants is not recommended as per WHO guidelines.

**Fomite based transmission**

Transmission of infection through inanimate objects contaminated with infected materials may spread the disease. Hence touching outside surfaces of packing materials, furniture, other items and use of same hand for removing/adjusting mask may transmit the disease. This should be avoided as already said. Similarly, shoe/leg wearing may be taken care of as indicated. NIOH recent study indicates that infectivity of fomites remain for prolonged period if viral load of contaminated surface is high but not so with low load.

**Ergonomic controls**

1. At workplace, particularly for the front desk jobs, the seated posture should be 90-90-90 Position (elbows bent at 90-degree angle, hips at 90-degree angle, and knees at 90-degree angle) with feet flat on the floor beneath chair.

2. Design and implementation of proper work-rest schedule so as to restrict overcrowding of workers at one time, may be done.

3. Prolonged sitting at workplace should be avoided, which may initiate musculoskeletal disorders. Use of standing workstation, change in working posture, physical stretching between work may be adopted.

4. Avoiding contact between workers by installing physical barriers such as clear plastic partitions, sneeze guard assembly, transparent face shield etc.
Work environment [Air conditioning & ventilation]

1. Increase ventilation rate of indoor environment through natural aeration or artificial ventilation, preferably with outdoor fresh air as much as possible.

2. Re-circulation of the air should be avoided within indoor environment.

3. Provide adequate mechanical ventilation like use of exhaust fan, roof ventilation fan etc.

4. Set the ambient temperature at 24°C to 30°C at relative humidity between 40% to 70%.

5. To meet the above criteria, thermal microclimate monitoring (ambient temperature/air velocity/relative humidity) of working environment is necessary.

6. Routine cleaning of filters in air handling unit (AHU) must be ensured. Fresh air may be provided by an inlet duct and fan.

7. Ultraviolet germicidal irradiation (UVGI) may be installed for larger ducted units and AHUs, to keep the filters clean constantly.

8. Non-operational air conditioning develops chances of fungal and bacterial growth inside the duct of AC. The system should be thoroughly cleaned before use.

9. Routine preventive maintenance and sanitization of the air conditioning system (Indoor as well as outdoor unit parts) as per manufacturers guideline must be followed.

10. Toilet and kitchen exhaust fan must be kept in operational mode.
Personal hygiene

1. Maintenance of Personal Hygiene: Wash hands with soap & water (min 20 sec) before touching eyes, nose and mouth etc. Too much use of hand sanitizers may damage skin & hence be avoided.

2. Workers must ensure that they use masks, sanitizers, soap and water for hand wash.

3. Employer may provide touch free hand washing facilities at workplace and air jet hand dryers, if feasible.

4. Staff at the entrance must do temperature screening as well as hand sanitizing of all employees and visitors.

5. All staff & consumers/customers must wear masks, within the premises.

6. All workers should wear requisite PPEs (gloves, goggles, face shields, face masks etc.) during the work, which is essential to prevent potential exposures.

7. Disposable mask must be replaced at regular interval and must be discarded in designated bins.

8. Reusable mask must be washed with designated disinfectants, sodium hypochlorite or hydrogen peroxide and soap & water daily before reusing it.

9. In case of coughing/sneezing, paper tissue may be used and disposed properly.

10. If an infected person coughs or shouts or sings within a closed room, fine aerosol containing virus may remain suspended for prolonged time within the room. So, one must take care of that by suitably protecting himself/herself.

11. While working in closed chambers, the continuous use of mask for prolonged period may reduce entry of oxygen in body and may be avoided. Whenever possible and staying alone, take fresh air removing mask intermittently.
Guidance for use of face masks

It may be ensured that each worker should wear the face masks properly while working in closed spaces with co-workers. Wearing face masks are mandatory and may not be considered as alternative to other personal hygiene practices like hand washing, physical distancing, cough and respiratory etiquette, avoiding face touching etc.

Salient features of wearing face masks:

1. It should cover the entire face from bridge of nose to chin (cover nose and mouth completely).
2. Wear it with clean and washed hands.
3. Frequent touching to mask should be avoided. Use ONLY its elastic cord while removing or adjusting it, as it may be highly infectious.
4. Disposable face masks should be discarded appropriately.
5. Reusable masks avoid environmental pollution. However, it should be properly washed with detergent and hot water immediately after removing it.
6. Pore size of face masks gets distorted with each washing which may result in breathing discomfort. In such case, masks should be replaced.
7. As mentioned earlier, use of facemask for longer duration may reduce oxygen level in the body causing some health illness like hypoxia, weakness, drowsiness etc. Hence, mask should be removed occasionally to take fresh air, provided the worker is alone at his workplace/open place.
Physical distancing

1. Practice physical distancing to protect & promote healthy workplace strictly. Maintain “Do Gaz ki Doorī” at workplace.
2. Workplaces should have a gap of one hour between shifts, lunch breaks, attendance to ensure social distancing.
3. Work units should encourage the use of staircases instead of passenger lift.
4. Large meeting gathering should be avoided.
5. Sitting arrangement in canteen should be appropriately distanced e.g. alternate seats.
6. Use and feeding of personal health information in AROGYA SETU application, which would indicate as no or low risk.
7. Entertainment/promotional activities in common areas should be restricted to prevent large gathering.
8. Limited number of people should be allowed inside washrooms with alternate use of urinals.
9. Restricted parking with use of only 50 percent of total parking capacity to avoid large gatherings. Designating alternate parking space for use may be adopted.

Preventive measures

1. Mandatory installation and use of AROGYA SETU application should be ensured for all employees.
2. Follow the guidelines of Ministry of AYUSH for enhancing the immunity.
3. Rejuvenate the physical and mental health through Yogasana, Pranayama, Meditation and regular exercise.
Mental health Perspective

During the Covid-19 crisis, the anxiety experienced by employees has heightened due to issues such as job/salary insecurity, uncertainties about future scenario and fear of family members becoming ill. Eventually, the employee may feel anxiety, sadness, irritability, poor sleep patterns, impulsivity or loneliness. In addition, work-from-home employees may also find the situation hard to deal with and admit that the pandemic has evoked many forms of fears and uncertainties in their work and personal life.

In most cases, the employee does not discuss the situation with either their co-workers or at home. Thus, keeping concerns within self often makes the struggle appear catastrophic and impacts ones’ ability to deal with it.

Employee DO’s

1. Employees should be encouraged to discuss their own psycho-social issues and acknowledge the fact that they all may be finding the situation around COVID-19 hard to deal with.

2. Employee should engage with their colleagues at work on non-work related matters to support their own and others’ mental wellbeing.

3. Employee may have healthy and regular diet, sufficient sleep schedule, exercise, listen to music to relax body and mind, engage in hobbies, stay socially connected through tele communication, spend quality time with family and practice self-care.

4. Employee working from home should develop a work-rest schedule and adhere to it. This should include a fixed workstation; fixed working hours; lunch and tea/coffee breaks.
5. Repetitive news on the pandemics as well as news/information that induces anxiety/stress may be avoided.

6. Intoxicating substances may be avoided.

7. Do not panic if infected with corona virus, remember most people get better. Practice self-isolation and take medications that are advised.

**Employer DO’s**

1. The occupational health physician with the organization may be trained to counsel employees in need, on mental health issues.

2. The employer should support their workers for any physical & mental health problem arising in such difficult time, and routinely organize focus group discussion among themselves.

3. The employer needs to establish an EAP (employee assistance programme) in the organization. An employee facing such work related stress could get in touch with the appointed EAP counselor. The employer must ensure confidentiality in such cases. For employees working from home, electronic platforms like webinar, video/tele conferencing may be arranged.

4. The employer should promote relaxation exercises like deep breathing, Yogasana, Pranayama, Meditation, stress-buster sessions etc. as per the guidelines of Ministry of AYUSH.

5. Make duty roster such that workers are swapped between higher stress to lower stress workstations.

6. Towards healthy work-life balance, employer should promote employee participation in decision-making in organizational practices.
WAY FORWARD

In addition, no workplace is similar and every workplace is unique in its functioning (e.g., front desk, back office etc.), therefore, customized risk assessment of each workplace is essential. For example, particularly for food chain workplace, helmets, vehicle, boarding people on vehicle has to be strictly avoided. However, additional protective measures may be needed for specialized workplaces. The Govt. Labour Department may initiate free phone counselling facility for dealing with the psychosocial issues among the workers.

This document may be a tool to support and advice on the preparations and considerations for the reopening of economic activities by various organizations.

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<thead>
<tr>
<th>Immunity boosting tips</th>
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<tbody>
<tr>
<td>Sound sleep (more than 8 hours)</td>
</tr>
<tr>
<td>Remain frequently and well hydrated</td>
</tr>
<tr>
<td>Consume Vit C, zinc and Vit D enriched food</td>
</tr>
<tr>
<td>(lemon, orange, sweet lime, kiwi, amla, onion, garlic, milk, papaya, nuts, tulsi, turmeric, ginger etc.)</td>
</tr>
<tr>
<td>Mild exercise, Yoga, Pranayama, Meditation, deep breathing,</td>
</tr>
<tr>
<td>Elevated mood (laughter)</td>
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</tbody>
</table>
REFERENCES

Important Note

It should be underlined that this ICMR-National Institute of Occupational Health document (Beyond COVID-19: Compendium on Return to Workplace Guide - An ICMR-NIOH Initiative) may be considered as a complimentary tool to all international/national/state regulations and guidance on reopening of workplaces. This guide does not replace any of the international/national/state regulations and guidance in this regard. Further, this document may not be considered as any legal advice.

The preventive, promotive and protective measures mentioned in this guide are based on the current knowledge on the topic. The Institute is open towards suggestions to improve and update this guide to make return to workplace safer and productive.