The restrictions that the Government of India has put into place to manage the spread of COVID-19 have severely impacted the food industry. The focus in food factories has rightly been on introducing social distancing and changes in working practices to safeguard the health of their workers. The production and supply of food products is essential at all times; this does not change during this pandemic, therefore, the protection of the health and safety of workers in the food industry must be a priority. The potential for food-borne transmission is a concern with every new emerging infection. However, there are no reports or any evidence of faecal-oral transmission of COVID-19 and no reported case of transmission through food. The main risk involved is human-to-human transmission during food handling. Every food production business, whatever its size, should be encouraged to set up a safety taskforce and to establish a plan to ensure the protection of its personnel and the maintenance of its activities.

Critical steps should be taken at several levels within a food industry to ensure protection against the transmission of COVID-19. The Food Safety and Standards Authority of India (FSSAI) has released detailed guidelines on food safety during the pandemic. The aim of this document is to put forward some effective standards for food businesses to keep their workers safe and prevent a disruption in operations.

A. Management/Owner Level Defence:

1. The industry should have a defined management team with responsibility for the management of the COVID-19 response.

2. Within the team, there needs to be a team leader and members with clear assigned responsibilities.

3. The coordination of activities and progress requires regular management meetings, probably on a daily basis to begin with, on the following aspects:

   - Update on activities such as production, packaging and dispatch from the previous day
   - Resource issues related to raw material, staff, workers, etc.
   - Review of absenteeism levels due to staff sickness and isolation due to COVID-19
   - Any changes to government or industry guidelines

4. Effective communication and updates for employees are particularly important during this period. There should be a designated person with responsibility for reviewing changes to Government guidelines and training the workers for the same.
2. It is quite likely that there will be shortages of raw materials as production shuts down or reduces in parts of the country and supply chains get disrupted. If this happens, alternative sources of supply for raw materials will need to be used to ensure continuity of production.

3. If opting for alternative raw materials, the following points should be considered:

4. It is preferred to order raw material or packaging materials in advance (at least 48-72 hrs). This will provide time to keep products in isolation and avoid the possibility of COVID-19 contamination from the surface of food packets.

5. There is no evidence that food is a vector for COVID-19 transmission. However, as is the case for all potentially infectious agents, preventative actions, including Good Hygiene and Manufacturing Practices (GHP, GMP) and the Hazard Analysis Critical Control Point (HACCP) principles, are essential contributions to food safety.
C. Plant Level Defence:

1. Access to the plant may be restricted during the pandemic. It is important that the site has a clear policy for acceptance of selected employees and visitors, for example, staff on duty, service engineers, vehicle drivers etc.

2. It is useful for the site security to have a record of visitors with complete contact details. This should include health declarations too, if required.

3. Thermal scanning should be performed for each and every visitor.

4. Soap dispensers need to be monitored to ensure that these are regularly re-filled. Wherever possible, soap dispensers should be automated to avoid direct contact.

5. The cleaning schedules will need to be reviewed to account for changes in production scheduling, possible fluctuations in levels of cleaning staff and changing priorities, in order to protect staff.

6. Priority should be given to the identification of hard surfaces with the potential for transfer of the virus between employees, door handles, utensils, re-useable crates, etc.

7. It is possible that shortages of some cleaning materials may occur and it will become necessary to change products being used. If this is the case, it is important to ensure that the new material is appropriate and effective for the intended cleaning activity by reviewing its specifications.

8. It is good to ensure that objects, working tools and surfaces that are touched regularly are frequently cleaned and disinfected using standard cleaning products. These include, but are not restricted to, workbenches, door handles, handrails, keyboards, mouse devices, screens, lockers, etc.

9. It is also necessary to increase the frequency and the intensity of cleaning and disinfection of all areas, including production, warehouse, logistics and offices, as well as all handling areas, control rooms, toilets, dressing rooms, canteens, reception desks, etc.

10. There should be visible notices pasted for staff, promoting hand hygiene and physical distancing.

11. Specific information sessions (in person, through digital means or information brochures) to familiarize workers with the new precautionary measures and the possible changes in the work organization should be provided to all employees accessing the company facilities.
D. Personnel Level Defence:

1. All the workers of the plant should be made aware about COVID-19 symptoms, so that they are able to recognize the symptoms easily and inform management at earliest.

2. There should be a COVID-19 screening protocol in place to screen all personnel entering the premises. All employees/workers/visitors should be screened at entry points for the symptoms of COVID-19, such as high temperature (using a non-contact thermometer), cough, cold, etc.

3. Wearing masks/face covers and protective gear at all times should be ensured. The employer must stock and issue protective gear to all the workers.

4. Social distancing must be implemented in all areas of the facility, ensuring a two-metre (six feet) physical distance between workers wherever possible, and at least a one-metre (three feet) distance at all times. Measures should also be taken to ensure social distancing is respected when entering or leaving the company facilities.

5. If affordable, employees can be issued with reusable Personal Protective Equipment (PPE). If any of the PPE is expected to be reused, then considerations should be made for how this can be effectively cleaned and sanitized after each use.

6. In case of reusable PPEs, it is good to mark the PPEs with the identity of the wearer to avoid use by another person.

7. Used PPEs should be disposed of very carefully in assigned bins only and transported to the incineration plant or waste treatment facility for proper treatment.

8. Hand-washing has always been a high priority in food factories. While the use of additional hand sanitizers may be prudent to provide employee protection, this does not substitute for effective hand washing before starting work.