

WORKPLACE PREPAREDNESS COVID-19

SARAVANAN KASTHURI

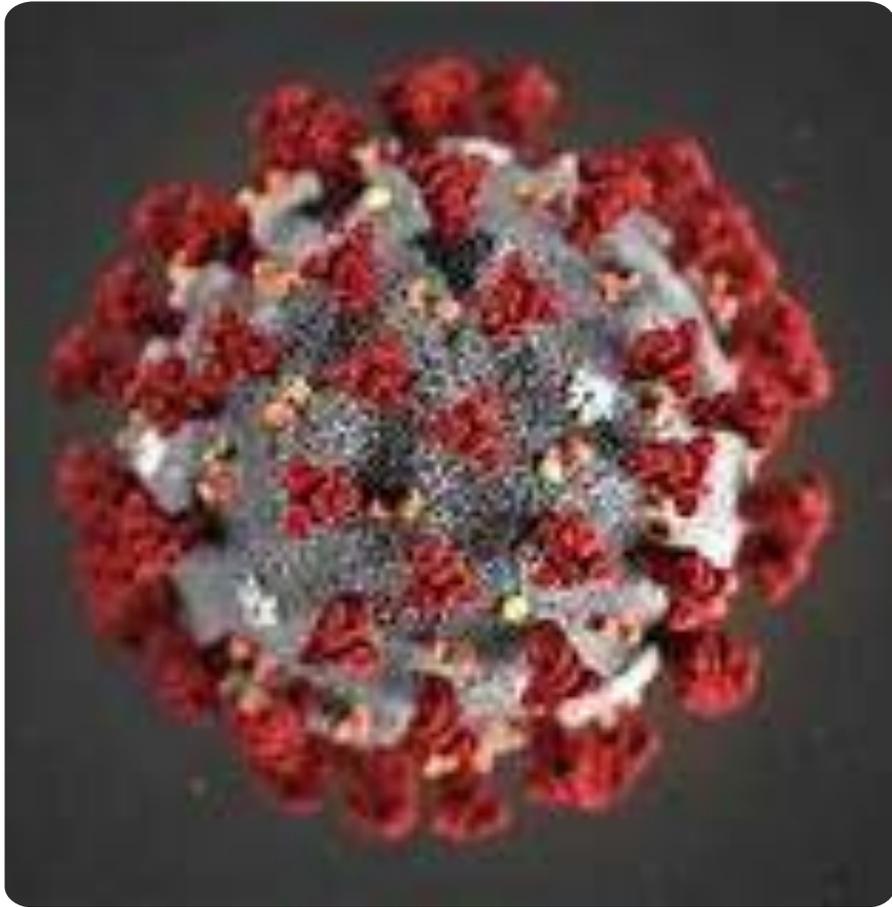
Content

1. Case study
2. World bank report
3. BOW TIE – covid -19 hazard
4. Develop an Infectious Disease Preparedness and Response Plan (IDPRP) - guide protective actions against COVID-19.
5. Conduct worker exposure risk assessment
6. Guidance from central, state, local, health agencies
7. Basic Infection Prevention Measures
8. Develop Policies and Procedures for Prompt Identification and Isolation of Sick People
9. Develop, Implement, and Communicate about Workplace Flexibilities and Protections
10. Implement Workplace Controls

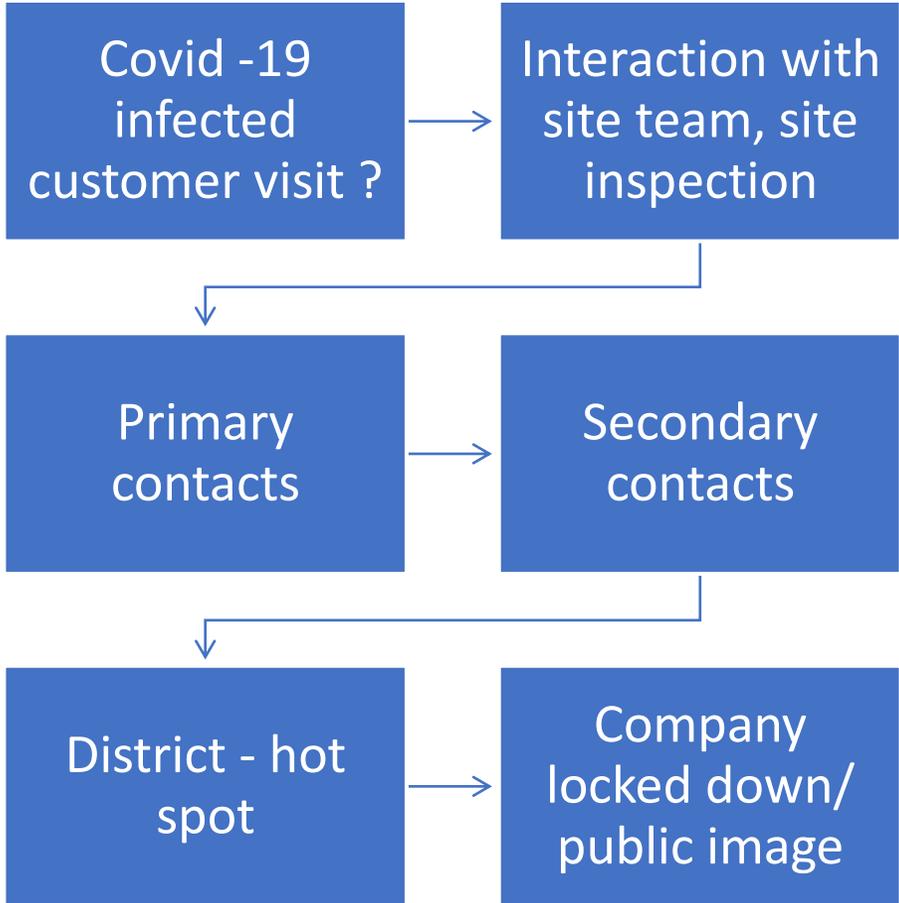


History of Pandemics





Incident- case study



Incident- cluster?

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The curious case of Patient 52 in Karnataka is puzzling authorities in Mysuru district. The 35-year-old patient, an employee of the pharma company Jubilant Generics in Nanjangud, was found to have Covid-19 on March 26. Within 10 days, as many as 24 employees of the company and their relatives had tested positive, qualifying it as a Covid-19 cluster.

How Patient 52 was infected remains a mystery. Since he has no travel or contact history, the main suspect is a consignment of "raw material" from China imported by Jubilant Generics in early March. A sample of the material has been sent to the National Institute of Virology, Pune, and the district administration in Mysuru is anxiously waiting for the result.

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“ The pharma company should come out clean. Why did they not postpone their import from China during this crisis? —B. Harshvardhan, M.T.A ”

Supelco SAFETY INSIDE MERCK

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Remedial measures: Nanjangud M.T.A. B. Harshvardhan (in blue shirt) with V. Somanna, minister in charge of Mysuru district, with officials at the pharmaceutical factory in Nanjangud

You can help slow the spread of COVID-19 virus.

ad

MOST READ

Multi. Shah offered me safe passage

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COVID-19 in raw material imported to its Nanjangud facility

The press statement was issued in the backdrop of 49 cases employees of the pharma facility Jubilant Life Sciences in Nanjangud and their primary and secondary contacts testing positive for Covid-19 in the last couple of weeks.

ET Bureau | Last Updated: Jun 16, 2020, 07:54 PM IST

By Akshatha Rao

Bengaluru: Pharmaceutical firm Jubilant Life Sciences **↑3.5%** issued a press statement today clarifying that no traces of COVID-19 virus was found in the imported raw material from China to its Nanjangud facility in Karnataka - Jubilant Generics Limited.

The press statement was issued in the backdrop of 49 cases employees of the

COVID-19 CASES Confirmed 18,985 Deceased 803

1 Jubilant Life Sciences says no traces of Covid-19 in raw material imported to its Nanjangud facility

2 Availability of masks gets WI classification from USFDA for Hyderabad unit

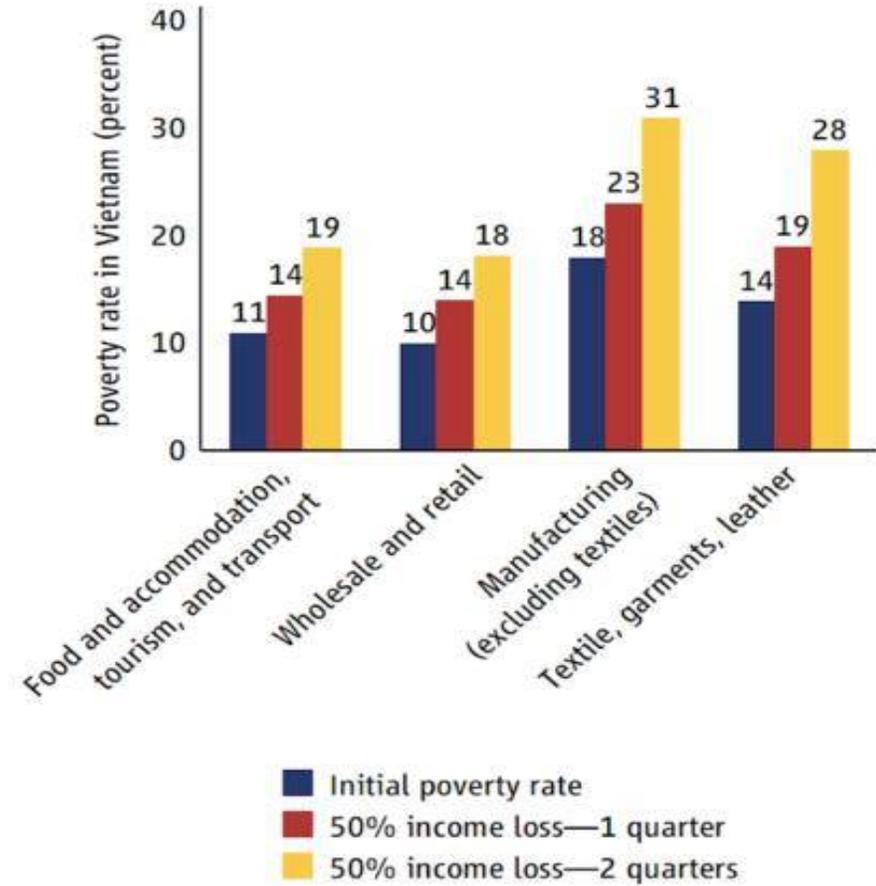
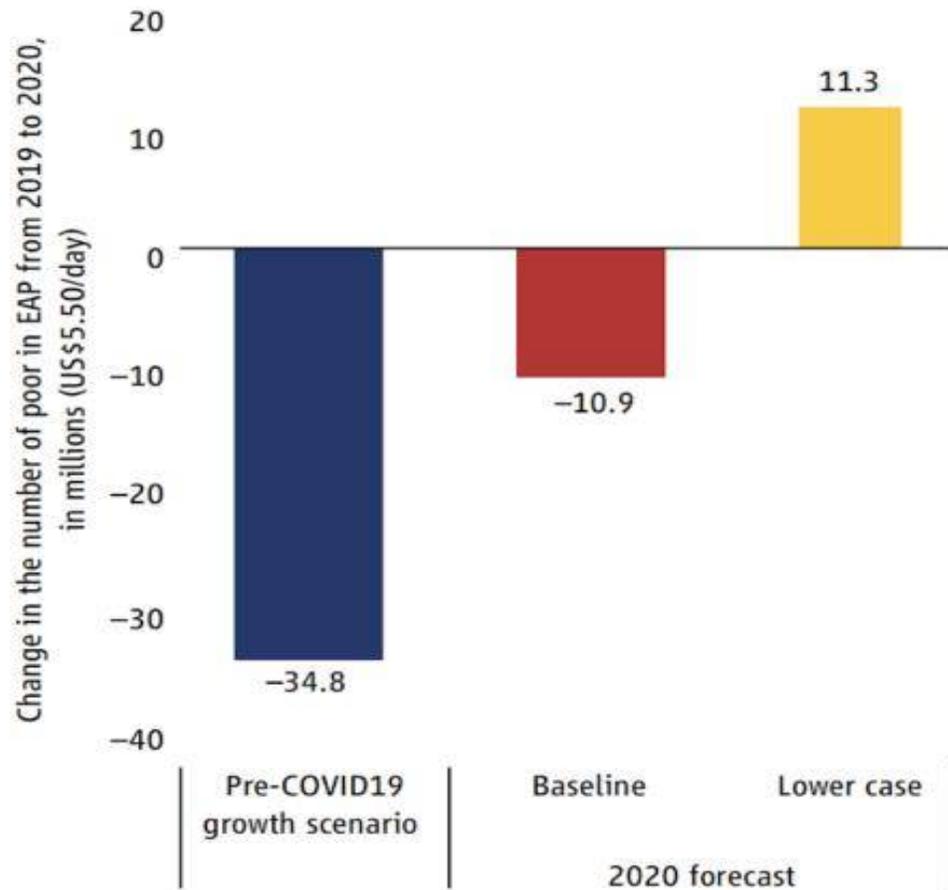
3 Zydus Cadila takes a trial of anti-Hayfe's 2 injection to treat Covid-19

4 Coronavirus: Health care on offer: virus: sales of many drugs fall

5 WhatsApp gets ODP: Instagram from USFDA for its combination antibiotic

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World Bank: Coronavirus Exacerbating Poverty in Southeast Asia



Source: World Bank East Asia and Pacific Team for statistical development.

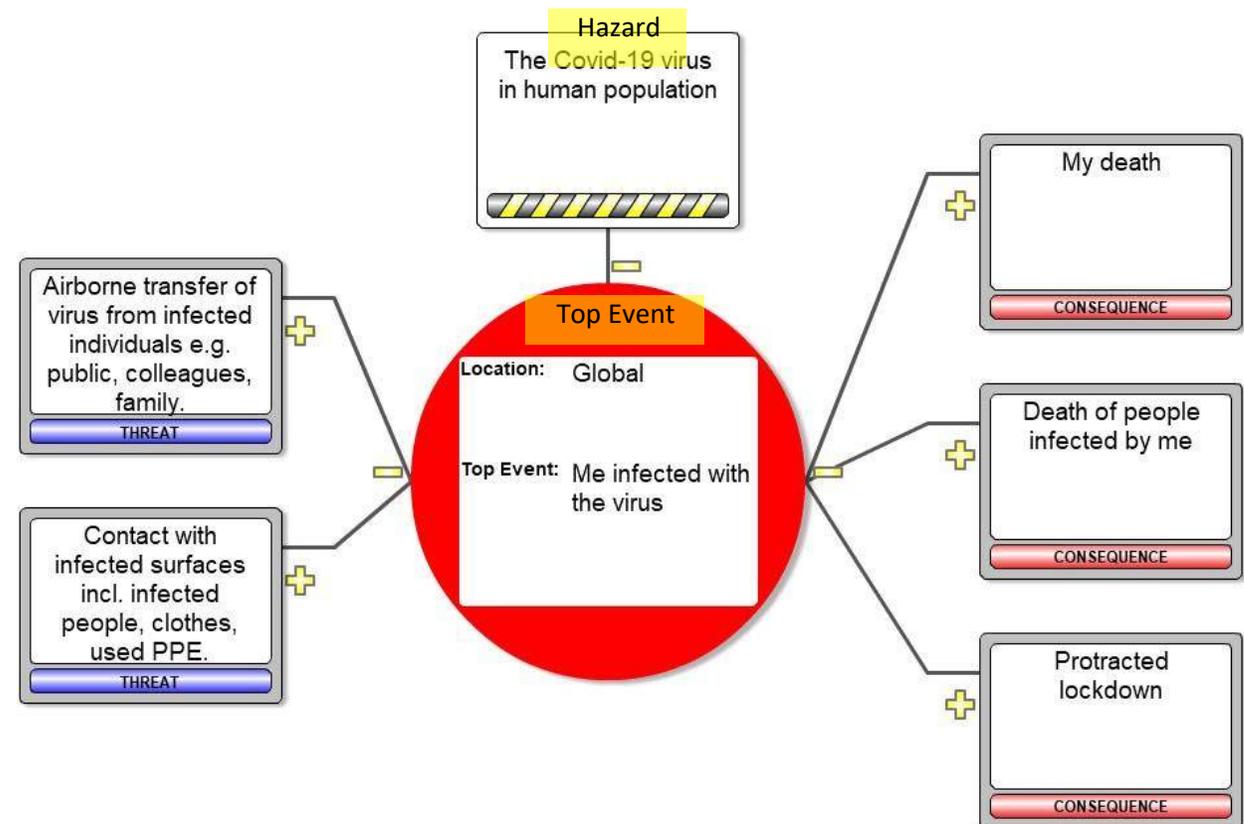
Note: Poverty rate using a poverty line of US\$5.50 per person per day (2011 PPP). Right: Projections based on Vietnam Living Standard Survey (VLSS) data.

Bow Tie for Covid-19 (as per CCPS/EI guidance)

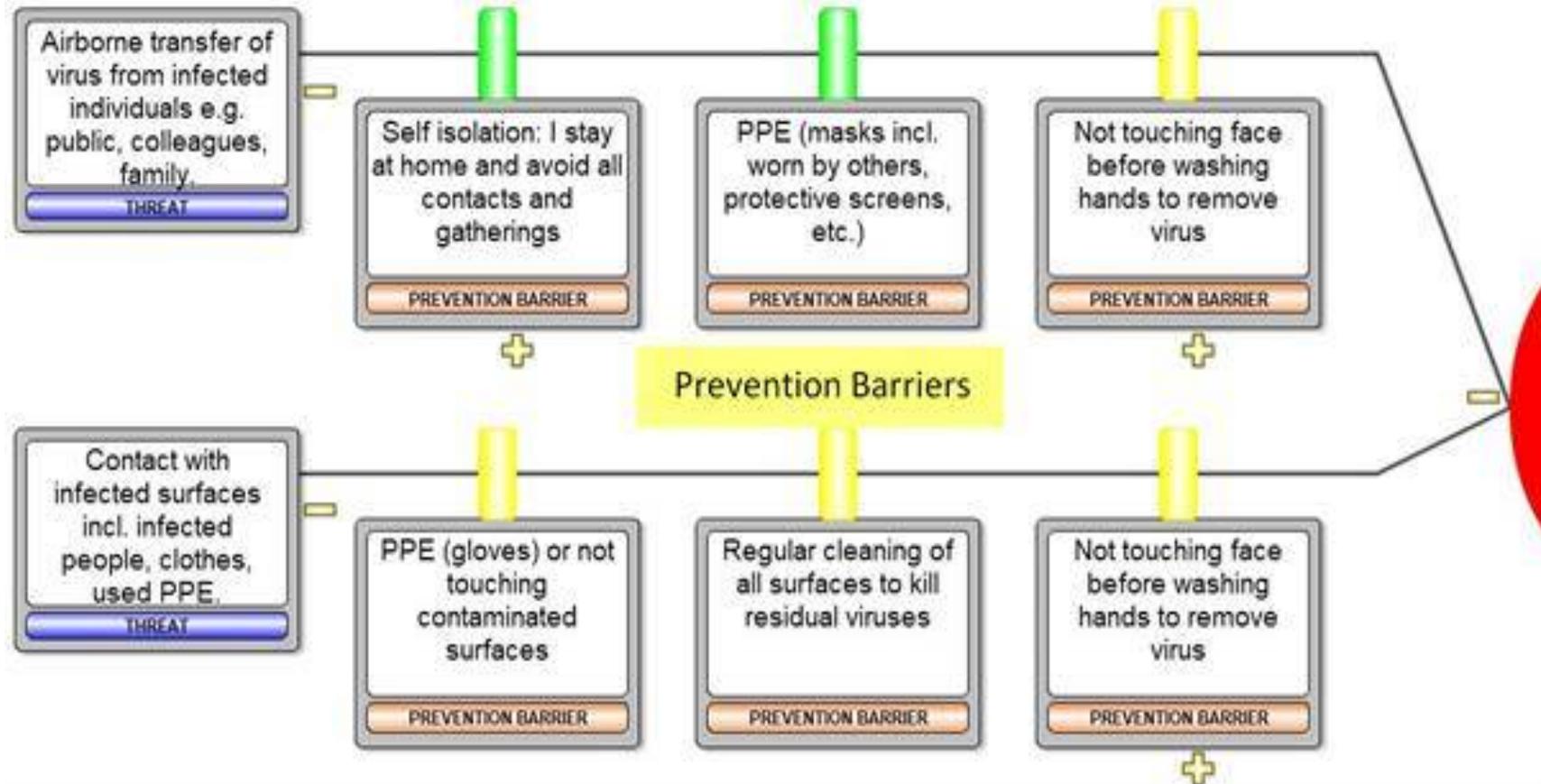
BOW TIE for Covid-19

- 2 threats leading you to catching Covid-19
- 3 possible serious consequences:
 - your death or
 - the death of someone you infect
 - a protracted lockdown

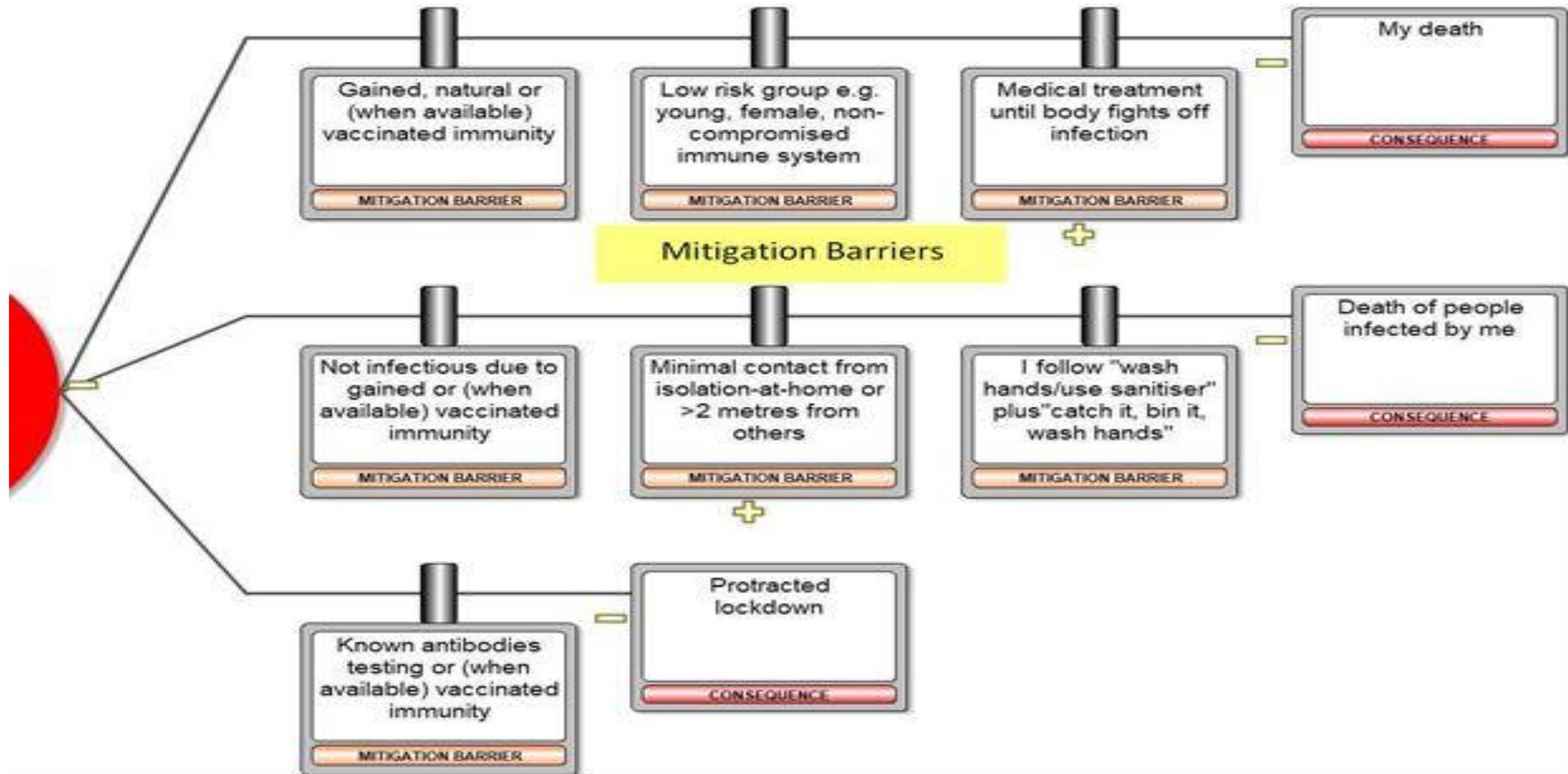
And the Top Event, when things start to go wrong, is when you become infected



Prevention Barriers – to stop happening



Mitigation barriers – if infected



BASIC STEPS

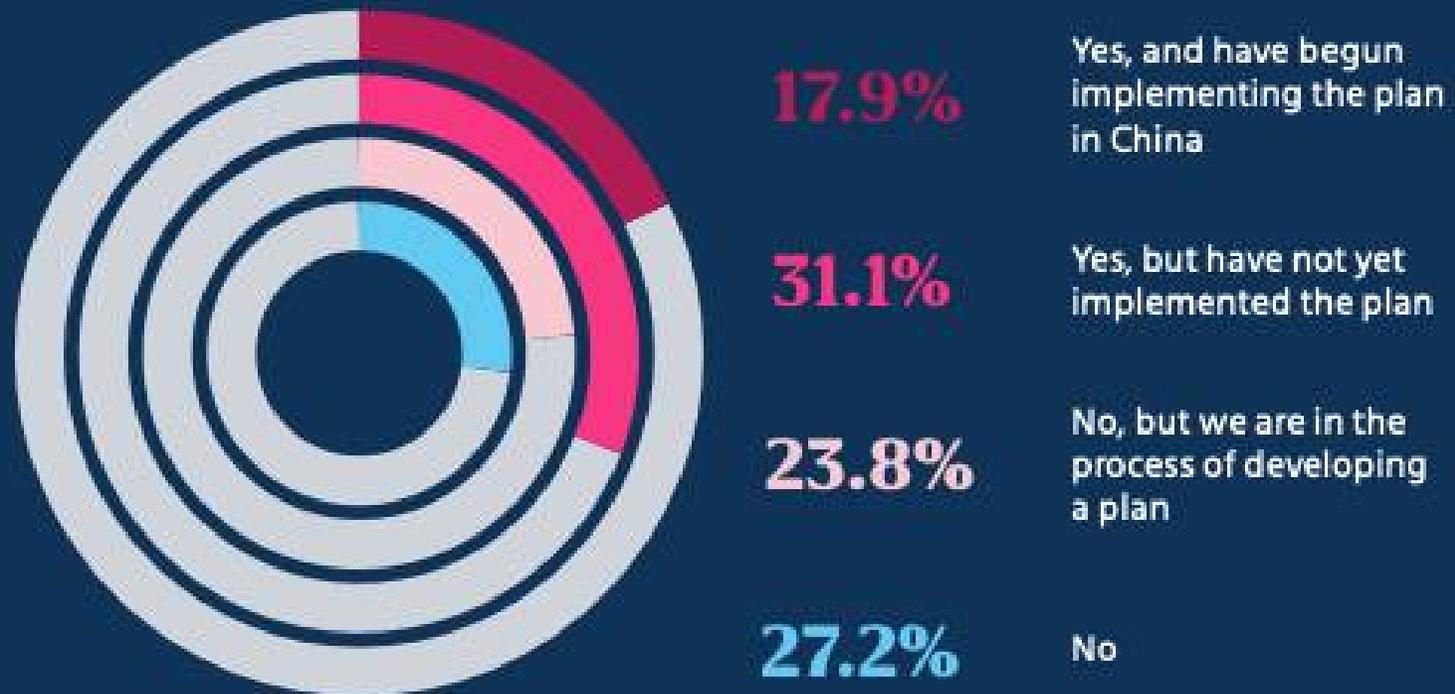


Steps recommended to all Employers to Reduce Workers' Risk of Exposure to SARS-CoV-2 in their workplace.

1. Develop an Infectious Disease Preparedness and Response Plan (IDPRP) - guide protective actions against COVID-19.
2. Conduct worker exposure risk assessment and Classify Worker Exposure to SARS-CoV-2
3. Follow guidance from central, state, local, health agencies, and consider how to incorporate those recommendations and resources into workplace-specific plans.
4. Prepare and Implement Basic Infection Prevention Measures
5. Develop Policies and Procedures for Prompt Identification and Isolation of Sick People, if Appropriate
6. Develop, Implement, and Communicate about Workplace Flexibilities and Protections
7. Implement Workplace Controls



Do companies have a business continuity plan or pandemic preparedness plan in place to handle global outbreaks of pandemics?



BCP-Pandemic preparedness plan

Source: Mercer, Business Responses to the COVID-19 Outbreak — Survey Findings, 2020

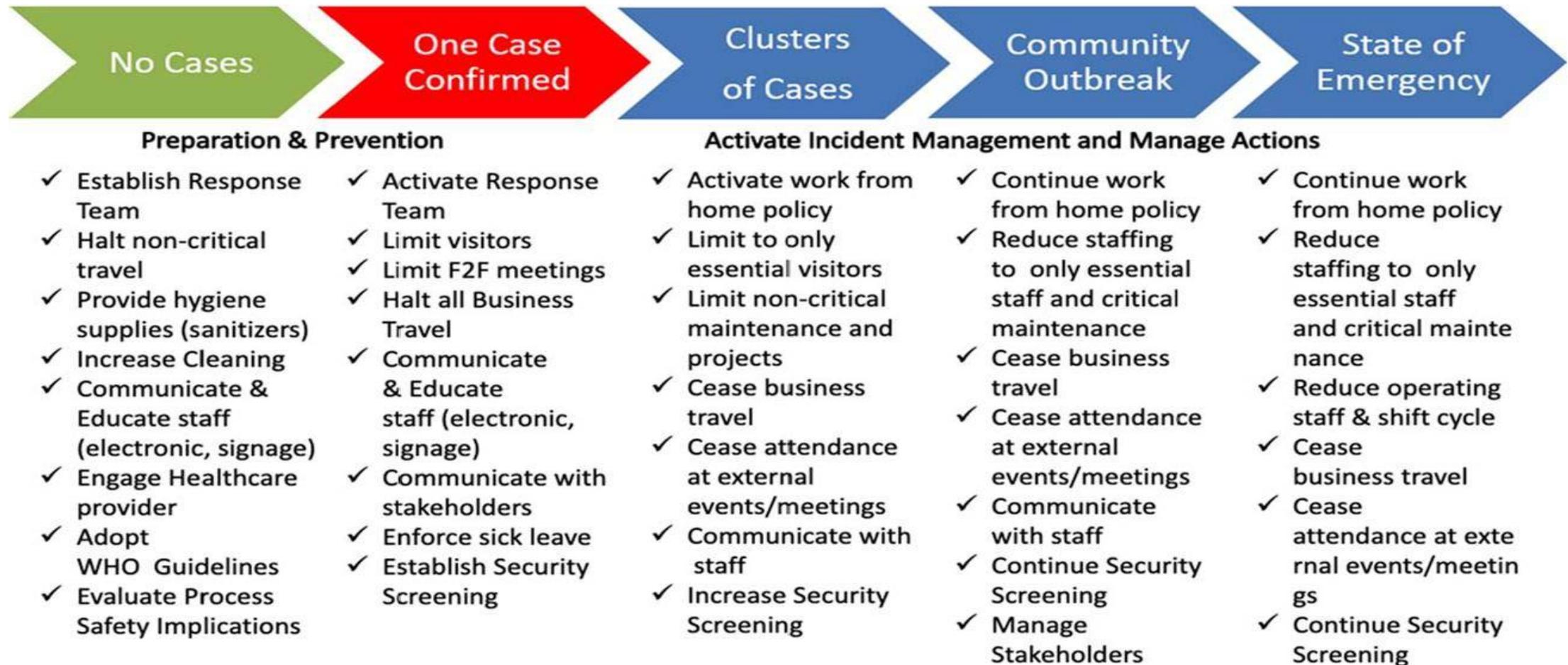
Infectious disease preparedness and response plans -IDPRP

IDPRP should consider and address the level(s) of risk associated with various worksites and job tasks workers perform at those sites. Such considerations may include:

- Where, how, and to what sources of SARS-CoV-2 might workers be exposed
- Non-occupational risk factors at home and in community settings.
- Workers' individual risk factors (e.g., older age; presence of chronic medical conditions, including immunocompromising conditions; pregnancy).
- Controls necessary to address those risks.
- Increased rates of worker absenteeism.
- The need for social distancing, staggered work shifts, downsizing operations, delivering services remotely, and other exposure-reducing measures.
- Options for conducting essential operations with a reduced workforce, including cross-training workers across different jobs in order to continue operations or deliver surge services.
- Interrupted supply chains or delayed deliveries.
- other steps that employers can take to reduce the risk of worker exposure to SARS-CoV-2 in their workplace.



Generalized response frame work



Occupational Risk pyramid

- The virus that causes COVID-19, during an outbreak may vary from very high to high, medium, or lower (caution) risk.
- The Occupational Risk Pyramid shows the four exposure risk levels in the shape of a pyramid to represent probable distribution of risk.

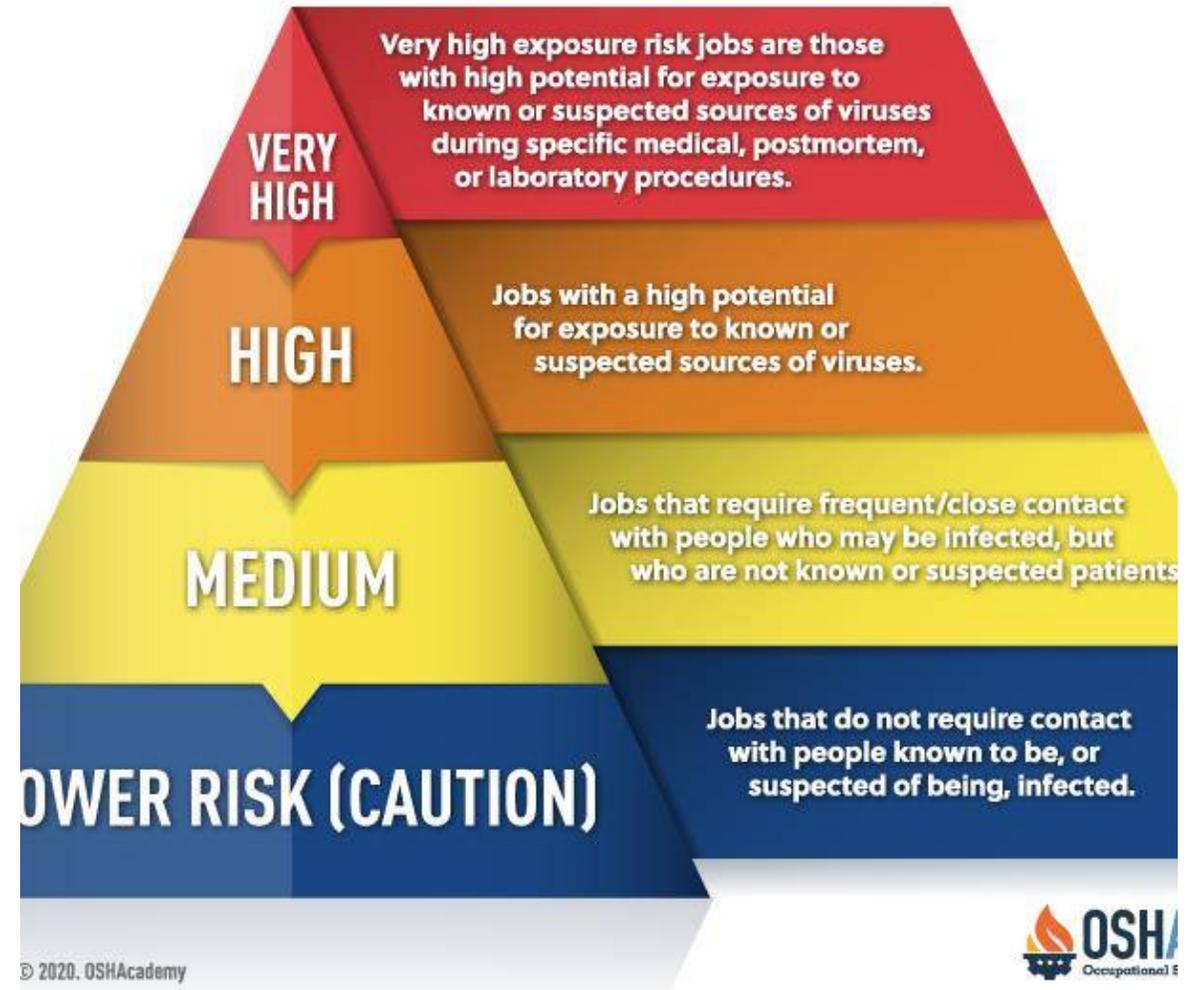
Occupational Risk Pyramid
for COVID-19

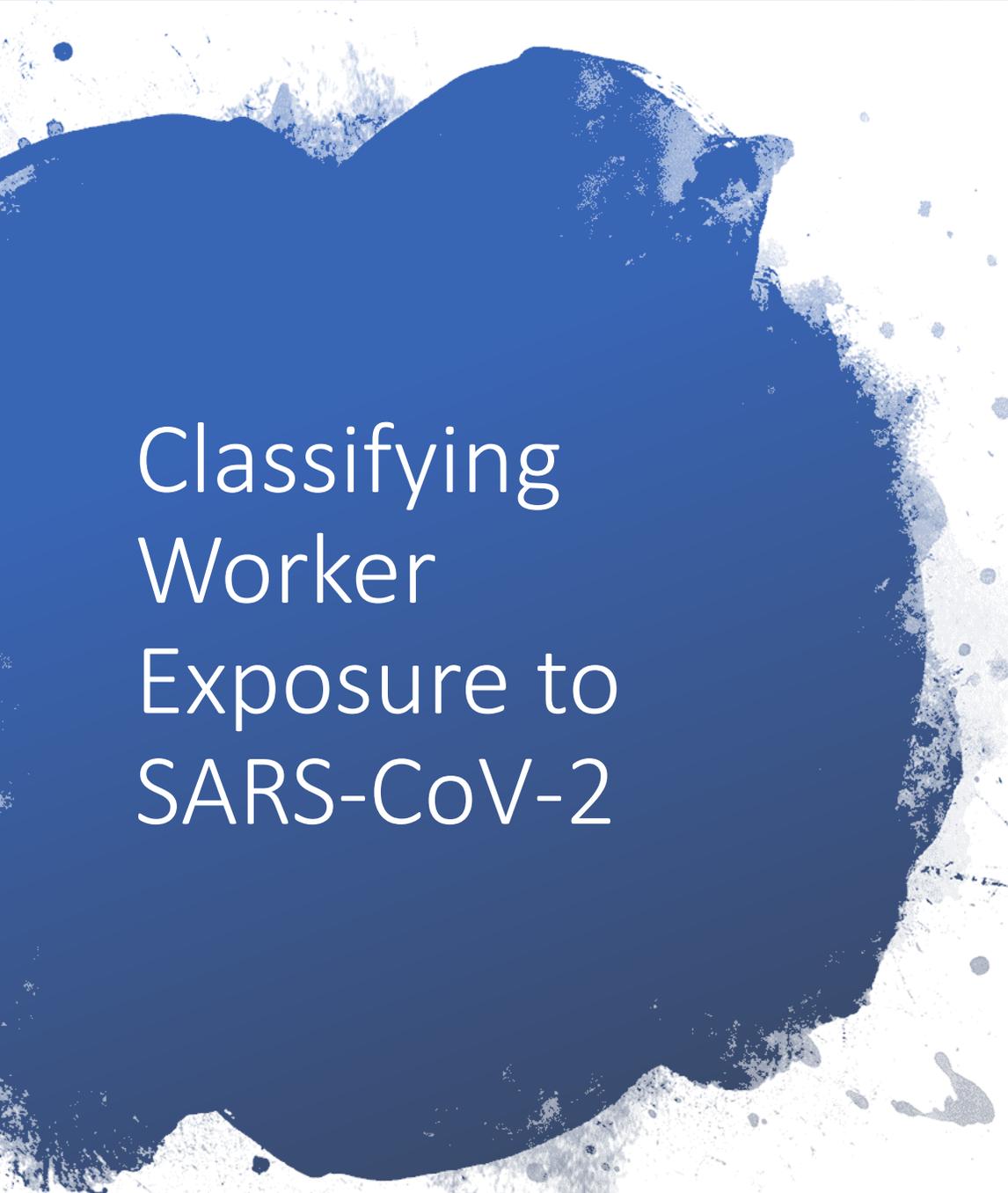


OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

Occupational Risk Pyramid

OCCUPATIONAL RISK PYRAMID





Classifying Worker Exposure to SARS-CoV-2

- **Most workers will likely fall in the lower exposure risk (caution) or medium exposure risk levels.**
- Medium Exposure Risk – jobs include those that require frequent and/or close contact with (i.e., within 6 feet of) people who may be infected with SARS-CoV-2, but who are not known or suspected COVID-19 patients, (e.g., frequent contact with travelers, schools, high-population-density work environments, some high-volume retail settings)
- Low Exposure Risk (caution)- jobs are those that do not require contact with people known to be, or suspected of being, infected with SARS-CoV-2 nor frequent close contact with (i.e., within 6 feet of) the general public. Workers in this category have minimal occupational contact with the public and other coworkers.

Guidance from central/ state Govt.

- Follow guidance from central, state, local, health agencies, and consider how to incorporate those recommendations and resources into workplace-specific plans.



Preventive measures against COVID-19 outbreak.pdf

Preventive measures ag x + v

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1 of 3 | Fit to width | Page view | Read aloud | Add notes

No. Z-110251/2020-LC
Government of India
Ministry of Labour and Employment
LC Section

Shram Shakti Bhawan, New Delhi
Dated 19/03/2020

To
All Workers' Organisations and Employers' organizations
(As per the list attached)

Subject: Preventive measures to be taken to contain the spread of Novel Coronavirus (COVID-19) -- regarding.

Sir/Madam

I am directed to refer to the subject mentioned above and to say it is imperative for all of us to take all possible measures to prevent transmission, reduce the impacts of the outbreak and support control measures. Ministry of Health and Family Welfare (MoH&FW) and Department of Personnel and Training, Government of India have been issuing various advisories in this regard, which are available on their respective websites. It is requested that these advisories may be followed scrupulously to prevent spread of Novel Coronavirus (COVID-19). Some of the important directions/advisories in this regard are as follows:-

- i) Make sure that the workplaces are clean and hygienic. Ensure proper cleaning and frequent sanitization of the workplace, particularly of the frequently touched surfaces. Surfaces (e.g. desks and tables) and objects (e.g. telephones, keyboards) need to be wiped with disinfectant regularly.
- ii) Ensure regular supply of hand sanitizers, soap and running water in the washrooms.
- iii) Promote regular and thorough hand-washing by employees, contractors and customers. Keep sanitizing hand rub dispensers in prominent places around the workplace. Make sure these dispensers are regularly refilled.
- iv) Display posters promoting hand-washing, along with other communication measures such as offering guidance from occupational health and safety officers, briefings at meetings and information on the intranet to promote hand-washing.
- v) Display posters promoting respiratory hygiene. Combine this with other communication channels commonly used in your organization or business.
- vi) Brief the staff, contractors and customers that if COVID-19 starts spreading in the community anyone with even a mild cough or low-grade fever (37.3 C or more) needs to stay at home. Hygiene and physical distancing (minimum 1metre) should be encouraged. They may be advised to avoid shaking hands and hugging as a matter of greeting.

Contd...

-2-

- vi) Encourage the staff to work from home wherever feasible.
- vii) Meetings, as far as feasible, may be done through video conferences. Minimize or reschedule meetings involving large number of people unless necessary. Non-essential official travel may be avoided.
- ix) All employees/workers may be advised to take care of their own health and look out for respiratory symptoms/fever. If feeling unwell, they may be advised to leave the workplace immediately and observe home-quarantine as per the guidelines issued by MoH&FW.
- x) Advise all staff who are at higher risk i.e. older employees, pregnant employees and employees who have underlying medical conditions, to take extra precautions. It may be ensured that such employees are not exposed to any front-line work requiring direct contact with the public.
3. An indicative list of Do's and Don'ts is also annexed for wide dissemination in your organization. It is therefore requested to take all necessary measures to control and prevent the spread of COVID-19.

Yours faithfully,
J. K. Singh
(J.K. Singh)
Deputy Secretary to Govt. of India
Tel No- 23711726

**OFFICE OF MINISTER OF HEALTH, POWER,
PWD, HOME, UD, WATER, I&FC & INDUSTRIES
GOVT. OF DELHI: DELHI SECRETARIAT
ROOM NO.704: 7TH LEVEL : 'A' WING
I.P. ESTATE: NEW DELHI**

No. minhealth/2020/1108 Dated:- 07.04.2020
ADVISORY

All the staff members working in this office are requested to follow the advisory below in letter and spirit:-

For Office

1. Office of Hon'ble Minister (Health) should be sanitized with Sodium Hypochlorite at 10.00 AM, 2 PM and 4.30 PM and whenever required.
2. Everybody should use his personal soap and sanitizer.
3. Don't shake hands.
4. Don't touch your eyes, nose and mouth.
5. Maintain personal hygiene and a safe distance (more than one meter) from persons during interaction.
6. Cover nose and mouth with tissue or elbow while sneezing and coughing.
7. Don't participate in gatherings, including sitting in groups at canteens.

While going back home

1. Ring up home when you start from office.
2. Someone at home should keep the front door open (so that you don't have to touch the calling bell or door handle) and a bucket of water with washing soap powder or bleaching powder added to it in the front door.
3. Keep things (car keys, pen, sanitizer bottle, phone) in box outside the door.
4. Wash your hands in the bucket and stand in the water for a few minutes. Meanwhile use tissue and sanitizer and wipe the items you have placed in the box.
5. Wash your hands with soap water again.
6. Now enter the house without touching anything.
7. The bathroom door is kept open by someone and bucket of detergent soap water is ready. You take off all your clothes including innerwear and soak inside the bucket.
8. Then take a head bath with a shampoo and body bath with soap.
9. Wash your clothes / put in washing machine with high temperature settings and dry clothes in direct sunlight.

[Signature]
07/04/2020
(S. S. PARIHAR)
Secretary to Minister

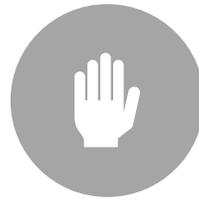
All Staff.

Advisories...

Implement Basic Infection Prevention Measures



As appropriate, all employers should implement good hygiene and infection control practices, including:



Promote frequent and thorough hand washing



Providing workers, customers, and worksite visitors with a place to wash their hands. Or alcohol-based hand rubs containing at least 60% alcohol.



Encourage workers to stay home if they are sick.



Encourage respiratory etiquette, including covering coughs and sneezes.



Provide customers and the public with tissues and trash receptacles.



Basic Infection Prevention Measures

Follow the manufacturer's instructions for use of all cleaning and disinfection products (e.g., concentration, application method and contact time, PPE).

Establish policies and practices, such as flexible worksites (e.g., telecommuting) and flexible work hours, (social distancing strategies).

Maintain regular housekeeping practices, routine cleaning and disinfecting of surfaces, equipment, and other elements of the work environment. Use cleaning chemicals, approved disinfectant against emerging viral pathogens.

Discourage workers from using other workers' phones, desks, offices, or other work tools and equipment, when possible.



Develop Policies and Procedures

- Develop Policies and Procedures for **Prompt Identification and Isolation of Sick People** (potentially infectious individuals).
- It is a critical step in protecting workers, customers, visitors, and others at a worksite.
- Employers should
 - inform and encourage employees to self-monitor for signs and symptoms of COVID-19 if they suspect possible exposure.
 - develop policies and procedures for employees to report when they are sick or experiencing symptoms of COVID-19.
 - Where appropriate, employers should develop policies and procedures for immediately isolating people who have signs and/or symptoms of COVID-19
 - Train workers to implement them.
 - Identify designated areas with closable doors may serve as isolation rooms until potentially sick people can be removed from the worksite.

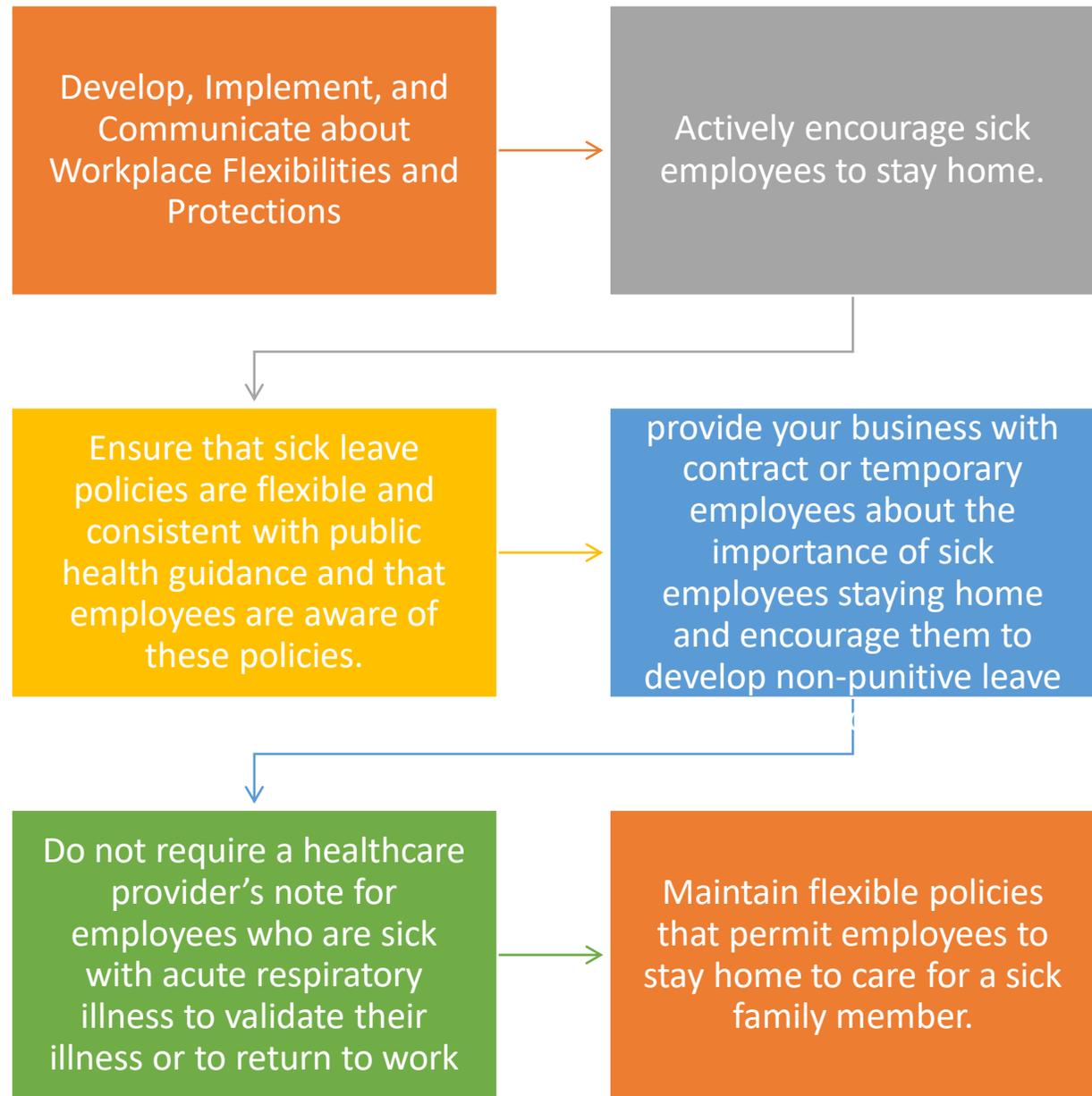
Develop Policies and Procedures

- Take steps to limit spread of the respiratory secretions of a person who may have COVID-19. Provide a face mask and ask the person to wear it. {the mask acts to contain potentially infectious respiratory secretions at the source (i.e., the person's nose and mouth). }
- If possible, isolate people suspected of having COVID-19 separately from those with confirmed cases of the virus to prevent further transmission—particularly in worksites where medical screening, triage, or healthcare activities occur, using either permanent (e.g., wall/different room) or temporary barrier (e.g., plastic sheeting).
- Restrict the number of personnel entering isolation areas.
- Protect workers in close contact with (i.e., within 6 feet of) a sick person or who have prolonged/repeated contact with such persons by using additional engineering and administrative controls, safe work practices, and PPE.

Chennai Trade centre -550 bed hospital



Workplace Flexibilities and Protections



Workplace Flexibilities and Protections

- Recognize that workers with ill family members may need to stay home to care for them.
- Be aware of workers' concerns about pay, leave, safety, health, and other issues that may arise during infectious disease outbreaks.
- Provide adequate, usable, and appropriate training, education, and informational material about business-essential job functions and worker health and safety, including proper hygiene practices and the use of any workplace controls (including PPE).
- Informed workers who feel safe at work are less likely to be unnecessarily absent.
- Work with insurance companies (e.g., those providing employee health benefits) about medical care in the event of a COVID-19 outbreak.

Implement workplace controls



The Dos and Don'ts of
CORONAVIRUS

The best way to control a hazard is to systematically remove it from the workplace, rather than relying on workers to reduce their exposure.

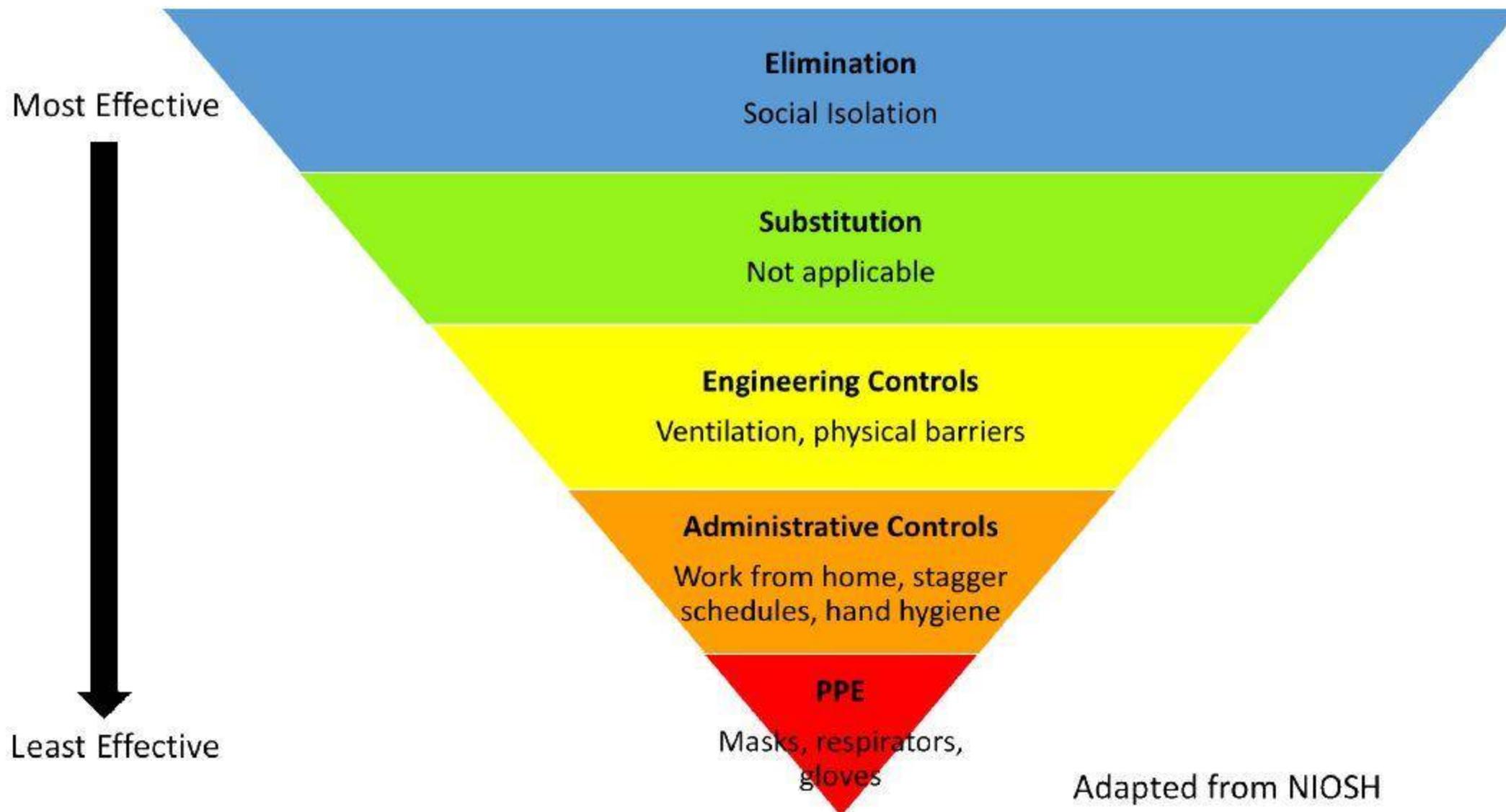


Engineering controls, administrative controls, safe work practices (a type of administrative control), and PPE.



There are advantages and disadvantages to each type of control measure when considering the ease of implementation, effectiveness, and cost. In most cases, a combination of control measures will be necessary to protect workers from exposure to SARS-CoV-2.

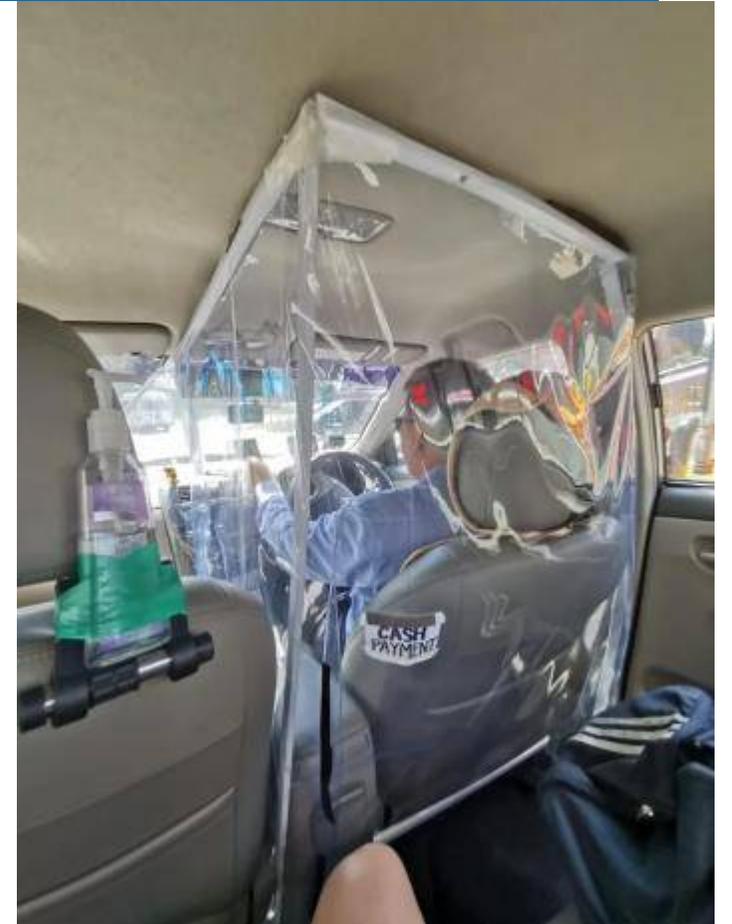
Applying the Hierarchy of Controls for COVID-19



Engineering controls

Engineering controls for SARS-CoV-2 include:

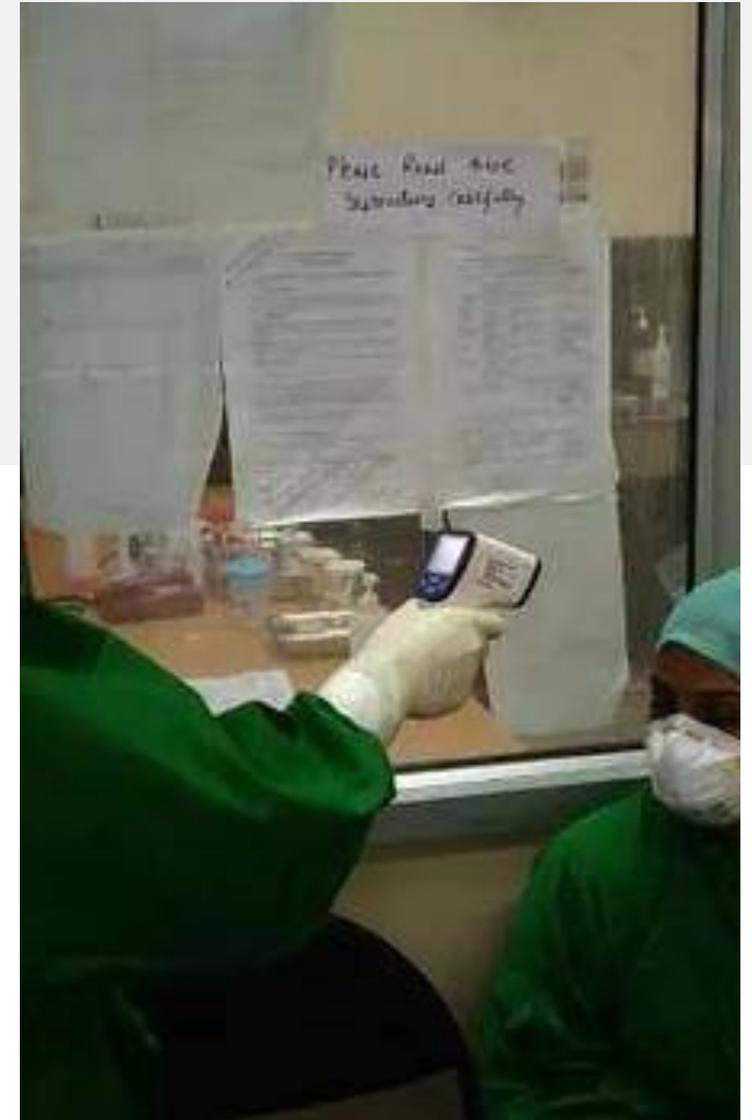
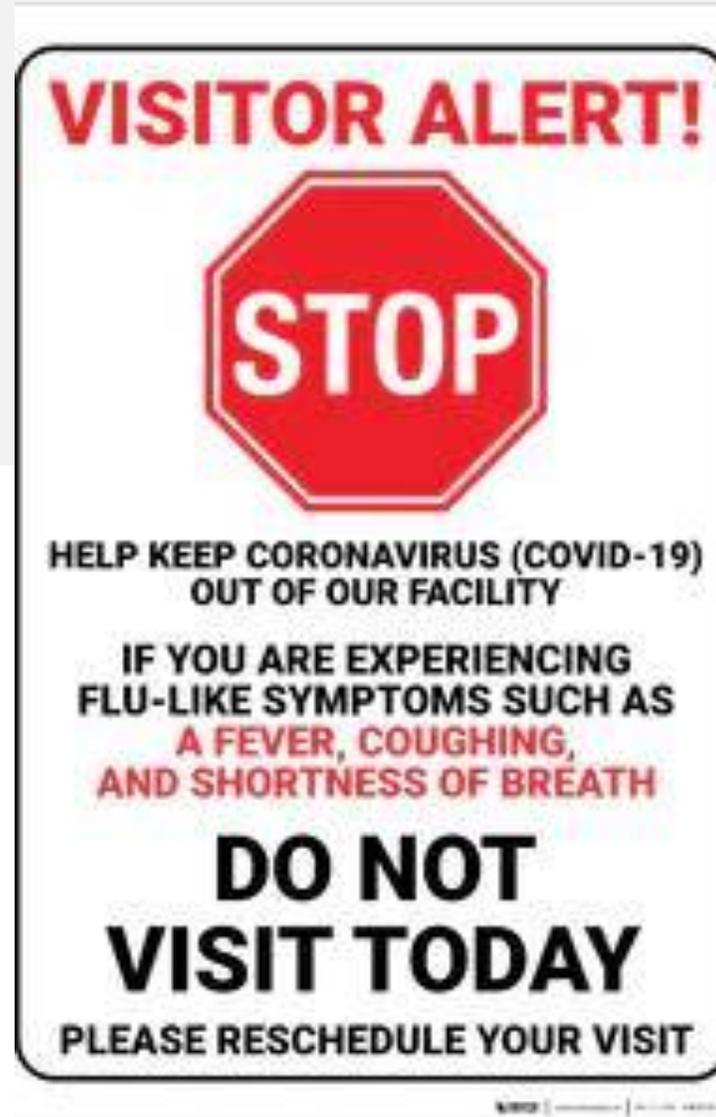
- Installing high-efficiency air filters.
- Increasing ventilation rates in the work environment.
- Installing physical barriers, such as clear plastic sneeze guards.
- Installing a drive-through window for customer service.
- Specialized negative pressure ventilation in some settings, such as for aerosol generating procedures (e.g., airborne infection isolation rooms in healthcare settings and specialized autopsy suites in mortuary settings).





Administrative controls for SARS-Cov-2

- Encouraging sick workers to stay at home.
- Minimizing contact among workers, clients, and customers by replacing face-to-face meetings with virtual communications
- Establishing alternating days or extra shifts that reduce the total number of employees in a facility at a given time,
- allowing them to maintain distance from one another while maintaining a full onsite work week.



Administrative controls

- Discontinuing nonessential travel to locations with ongoing COVID-19 outbreaks.
- Developing emergency communications plans, including a forum for answering workers' concerns and internet-based communications, if feasible.
- Providing workers with up-to-date education and training on COVID-19 risk factors and protective behaviors (e.g., cough etiquette and care of PPE).
- Training workers who need to use protecting clothing and equipment.
- Training material should be easy to understand and available in the appropriate language and literacy level for all workers.



**HANDSHAKING IS
NOT ENCOURAGED
AT THIS TIME.**

All public health agencies are recommending that all people refrain from shaking hands until further notice.

For the well-being of our customers and employees, please do not take offence if you are not greeted with a handshake.

Safe work practices



Safe work practices

- They are types of administrative controls that include procedures for safe and proper work used to reduce the duration, frequency, or intensity of exposure to a hazard.
- Providing resources and a work environment that promotes personal hygiene. For example, provide tissues, no-touch trash cans, hand soap, alcohol-based hand rubs containing at least 60 percent alcohol, disinfectants, and disposable towels for workers to clean their work surfaces.
- Requiring regular hand washing or using of alcohol-based hand rubs. Workers should always wash hands when they are visibly soiled and after removing any PPE.
- Post handwashing signs in restrooms.



DO THE FIVE

Help stop coronavirus

- 1 **HANDS** Wash them often
- 2 **ELBOW** Cough into it
- 3 **FACE** Don't touch it
- 4 **FEET** Stay more than 6ft apart
- 5 **FEEL** sick? Stay home

Personal Protective Equipment (PPE)

- PPE may also be needed to prevent certain exposures.
- Examples of PPE include: gloves, goggles, face shields, face masks, and respiratory protection, when appropriate.
- During an outbreak of an infectious disease, such as COVID-19, recommendations for PPE specific to occupations or job tasks may change depending on geographic location, updated risk assessments for workers, and information on PPE effectiveness in preventing the spread of COVID-19.
- Employers should check the WHO and Ministry of health websites regularly for updates about recommended PPE.



Personal Protective Equipment (PPE)

All types of PPE must be:

- Selected based upon the hazard to the worker.
- Properly fitted and periodically refitted, as applicable (e.g., respirators).
- Consistently and properly worn when required.
- Regularly inspected, maintained, and replaced, as necessary.
- Properly removed, cleaned, and stored or disposed of, as applicable, to avoid contamination of self, others, or the environment.



2 & 3 Ply Face Mask with Ear loops & Anti Bacterial Filter



MaskSaf™

3 Ply Mask (BFE \geq 95%)



"To enrich Quality of Human Life to Live Longer and Happier"

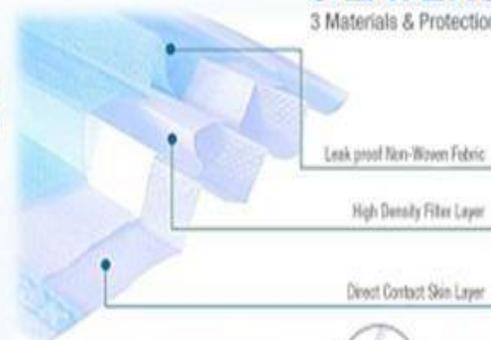
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MaskSaf™

3 Ply Face Mask

3 LAYERS

3 Materials & Protection



The face mask is made up of 2 or 3 layers of spun bund polypropylene (SBPP) which has soft layers that prevents skin irritation or allergy problems.

The Ear loop material is made from the round Lycra elastic at 7.5 inches which elongates with a ratio 1: 2 making it easy to wear and remove with comfort.

The malleable nose wire keeps the mask secure in its position.

Features

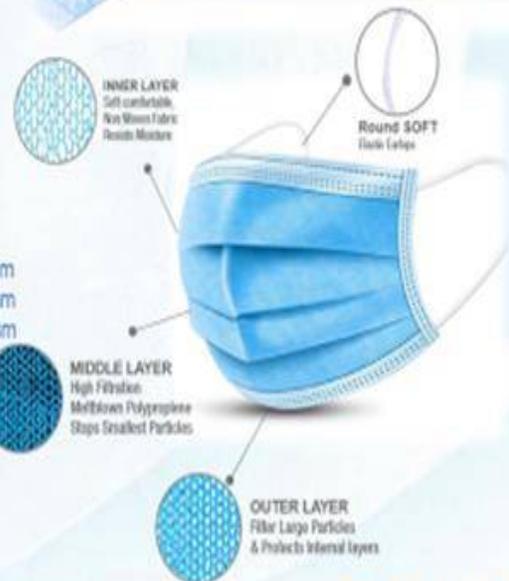
- Silicone free and Non-particulating white.
- Meltblown PP provides superior filtration.
- Hypoallergenic soft surface layers prevents skin irritation and allergy.
- Ultrasonic bonding technique used to make a clean production.
- Low breathing Resistance.

Technical Specification

Outer Color Facial Layer	Spun bund Polypropylene	- 20 to 30 gsm
Filter Centre Layer	Melt blown Polypropylene	- 18 to 25 gsm
Inner White Facial Layer	Spun bund Polypropylene	- 20 to 30 gsm

Available from May'2020

- 2 Ply Mask
- N-95 Mask
- PPE Kits



"To enrich Quality of Human Life to Live Longer and Happier"

www.cellbios.com

Personal Protective Equipment (PPE)

- Employers are obligated to provide their workers with PPE needed to keep them safe while performing their jobs.
- The types of PPE required during a COVID-19 outbreak will be based on the risk of being infected with SARS-CoV-2 while working and job tasks that may lead to exposure
- Workers, including those who work within 6 feet of patients known to be, or suspected of being, infected with SARS-CoV-2 and those performing aerosol-generating procedures, need to use respirator

Risk based process safety criteria

“Risk based process safety criteria. Effective efforts to improve safety must be based upon:

An understanding of the hazards and risks of the facilities and their operations.

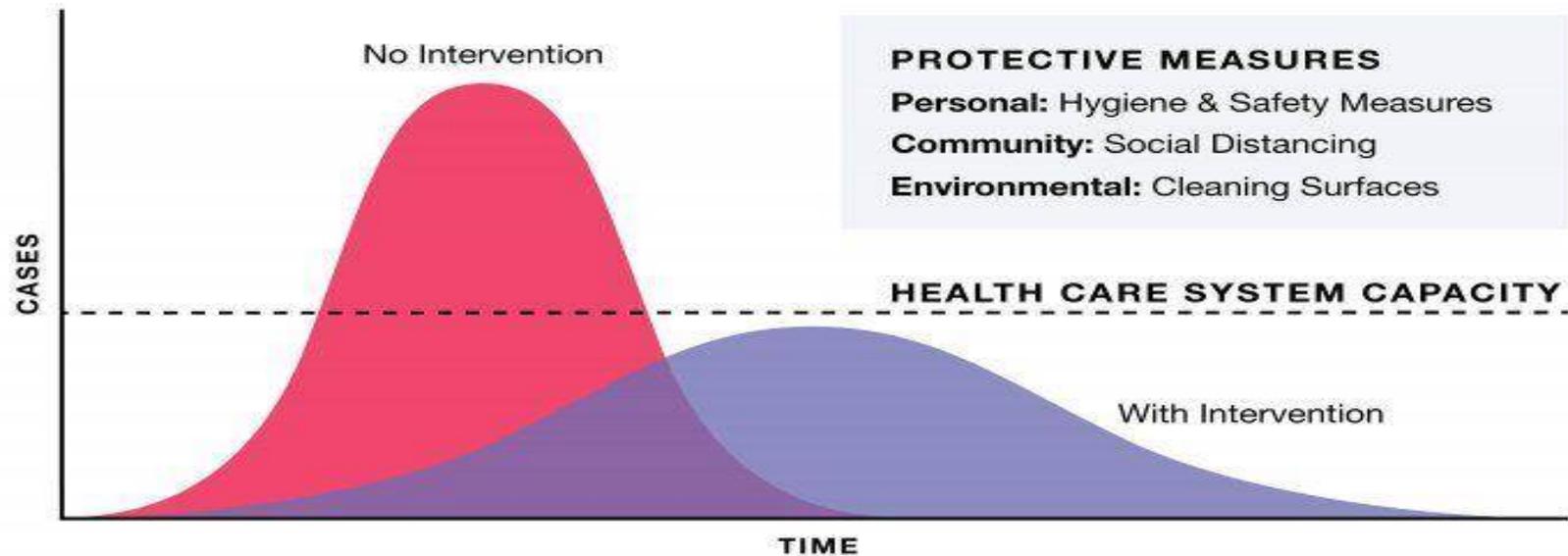
An understanding of the demand for and resources used in, process safety activities.

An understanding of how process safety activities are influenced by the process safety culture within the organization.” (CCPS 2007)

Collective action results....

Flatten the Curve

Collective action can limit the rise of new COVID-19 infections and help hospitals manage increased demand for care.



Source: CDC

Q & A



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