

BEHAVIOR BASED SAFETY (BBS) CUM COVID-19 PREVENTION

Conducted by

**Institution of Safety Engineers
(India)**

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INSTITUTION OF SAFETY ENGINEERS (INDIA)

WELCOME

In Free Webinar Classes on

BEHAVIOUR BASED SAFETY CUM COVID-19 PREVENTION

on

23 April 2020

ISE (INDIA)





ABOUT US

Institution of Safety Engineers (India) is Non - Profitable organization set up in year 2012 under ZJEW Trust, Govt. Reg. No. 5240 and working with objective to prevent accident, protect environment & minimize losses during disaster. Institution of safety engineers (India) imparting safety, health, environment & quality related training to needy & provide similar services to industries, organization, institution to achieve zero harm.

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OUR SPEAKER

Mr. SHahnawaz: Member & Expert EHS

Mr. Mohd Tausif : B.Tech, PDIS, Co-ordinator,
Institution of Safety Engineers (India)

Mr. S.hahnawaz

He is graduate in Mech. Engineering, **M.Tech** (Env. Sc. & Eng.) from BIT, Durg, **PDIS from RLI Kol.**, NEBOSH-IGC and apart from this he has achieved several certification and Diploma in field of occupational Health & Safety from different reputed institution. He has Published several Articles/Journals related to occupational, Health Safety & Environment.

He has more than 15 year experience in Field of Safety, Health & environment as EHS professional in National/ Multinational company in India, Africa & Gulf. He is also Chartered Engineer (I), Life Time Associate Member of Institution of Engineers (India) & Life Time Senior Member of Institution of Safety Engineers (India) & Member of ZJEW Trust. In Past his Experience is in L & T, Shree Cement, Lohia Group, RNSN Seriate, IJT, Gammon India Ltd, like company. Apart from this he is Associated with several Non-Profitable organization as Member and Chief Editorial officer (CEO) of IJISEI.

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QUESTION & ANSWER

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BEHAVIOR BASED SAFETY CUM COVID-19

Behavior Based Safety is systematic and effective approach within organization or Society People that help to Control or minimize risk related to COVID-19. The goal of behavior - based safety is to change the behavior of employees or Society Peoples from “at risk” behavior's to “safe” behavior's.

CORONA VIRUS CASES IN WORLD TILL 23 APRIL 2020 (TILL AFTER NOON)

Coronavirus Cases:

2,639,025

RAMPURSX

[view by country](#)

Deaths:

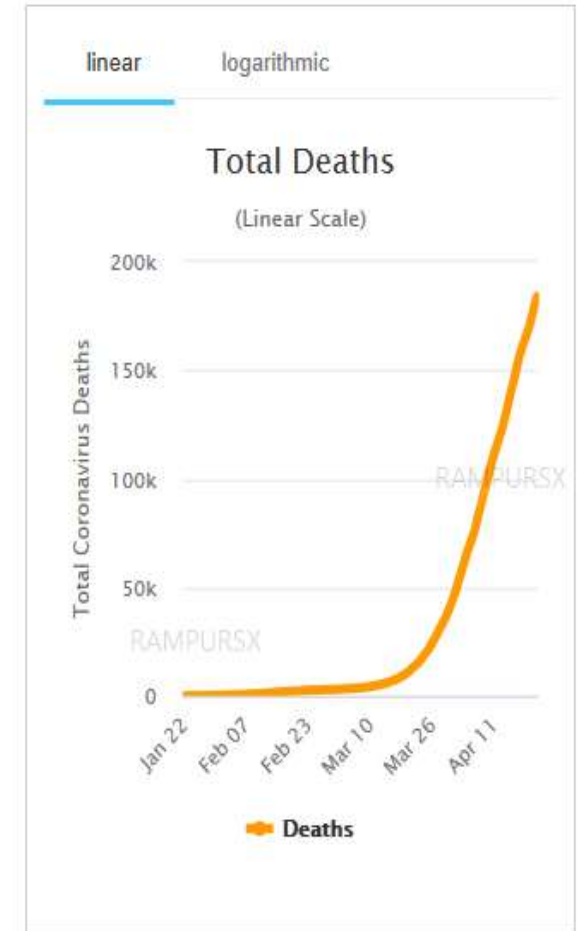
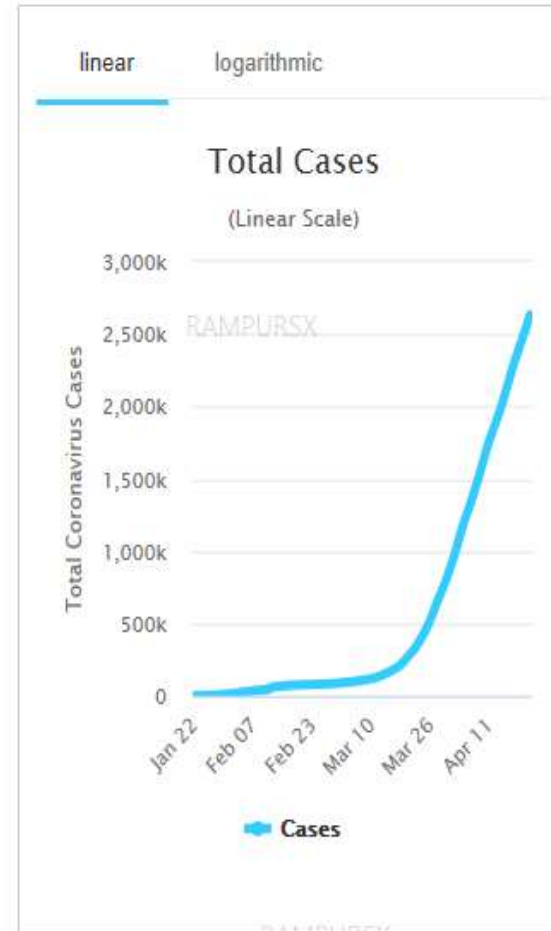
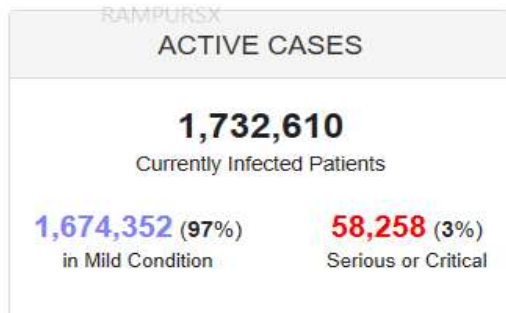
184,263

Recovered:

722,152

RAMPURSX

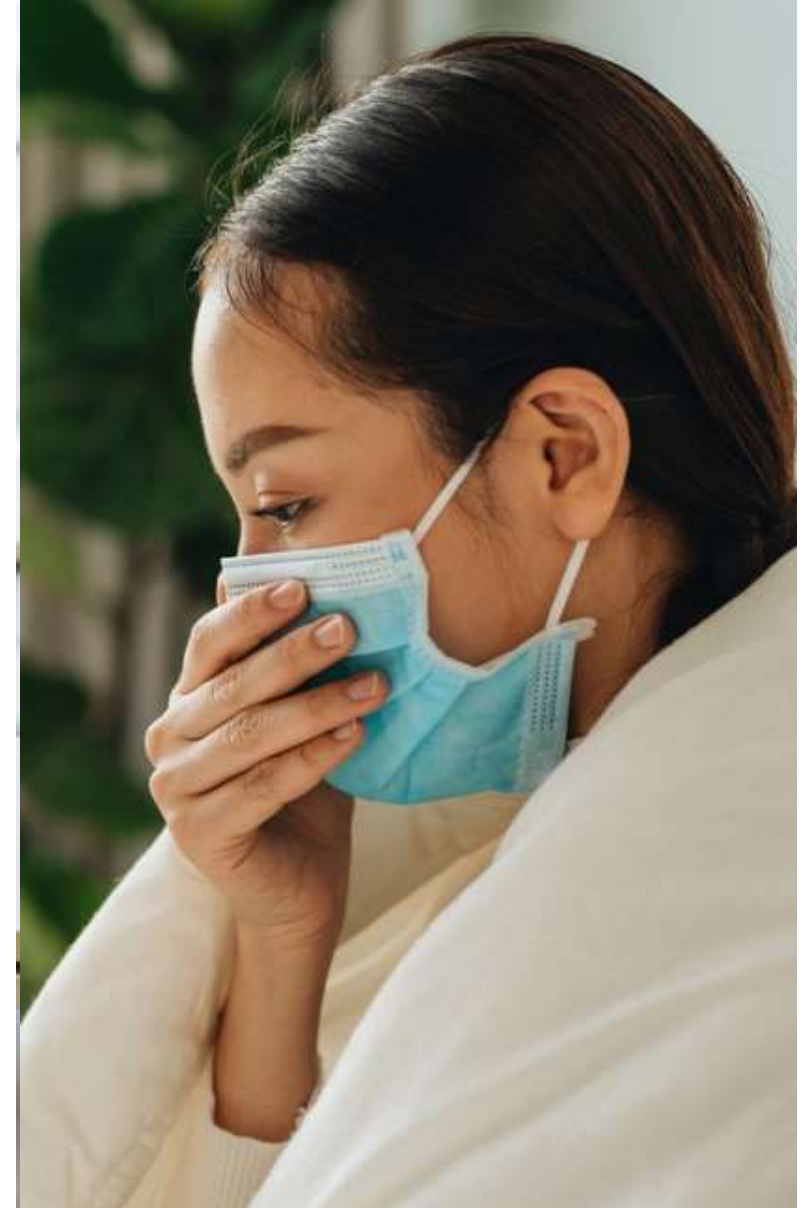
RAMPURSX



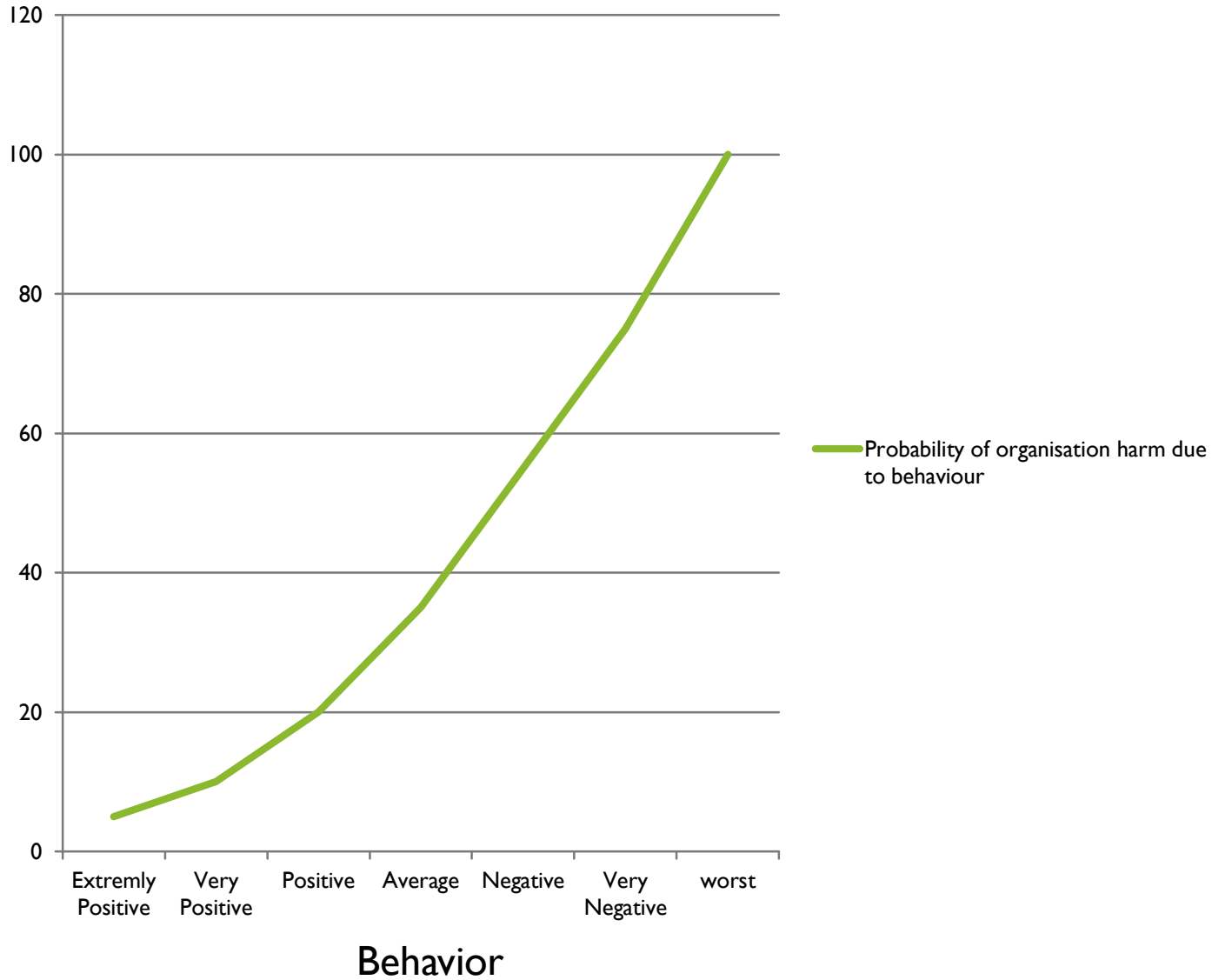
<https://www.worldometers.info/coronavirus/>

OBJECTIVE

- Creating awareness among Society People or organization employees
- Developing Positive Behavior among people to Control risk related to COVID-19.
- Changing Risk Behavior to Safe Behavior of people
- Preventing Society or Organizational Harm
- To control COVID-19 related risk will help to create employment opportunities and economic growth of country.



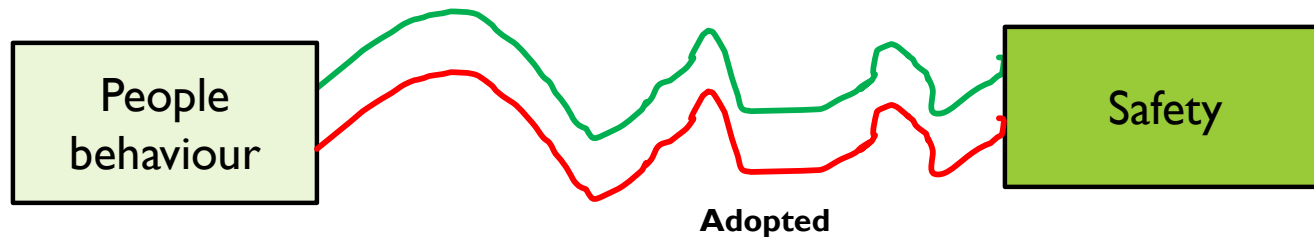
Probability of organisational harm due to Behaviour



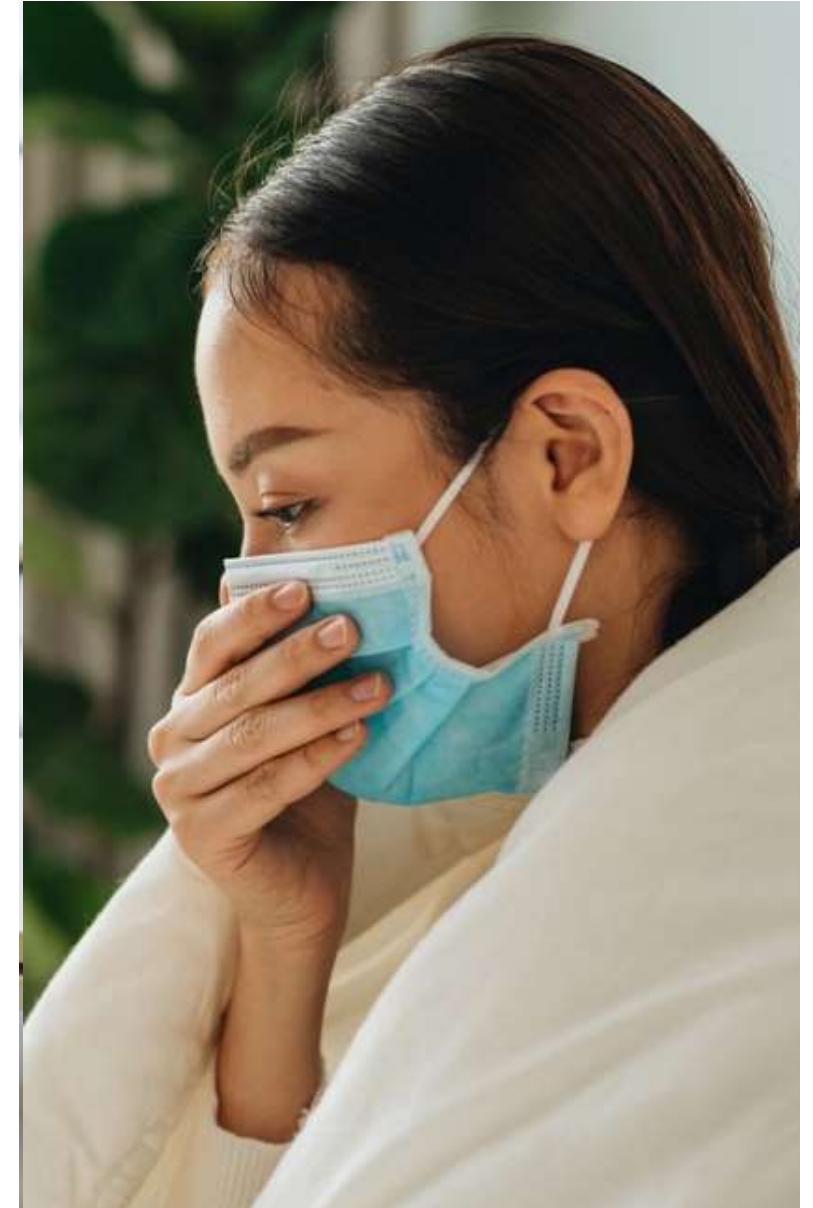
BEHAVIOR VERSUS
ORGANISATION
BUSINESS SUCCESS
OR FAILUR

BEHAVIOR BASED SAFETY

- Behavior Based Safety (BBS) is result of employees or people Positive attitude.
- Process of Injury or Disease prevention.
- Focus on Safe Behavior and acting accordingly.
- Prevent to Risk behavior.
- Chain between Govt. or Society Representative or Mgt. Representative and Peoples/ Employees to work together to follow govt. guidelines to acting safety.to minimize or control COVID related risk.
- Approach that help to create self desired among people to Prevent Risk/ Unsafe behavior.
- Consequence of people acting, thinking, communicating

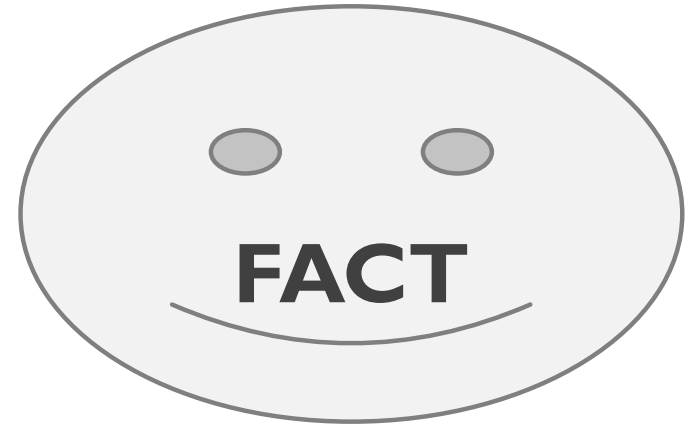


ABC



ATTITUDE

- The ways you **FEEL**
- The ways you **ACT**
- The ways to **COMMUNICATE** to People
- The ways you **THINK**
- Results that shows to others of your feeling, thinking, talking and acting.



Attitudes



**Are inside a person's head-therefore they
Are not observable or measurable,
However
Attitude can be changed by changing
behaviors**

Attitude

Positive (Safe) Attitude
(Avoid Mistake and its result
success, Prevent injury or Diseases)



Method to create Positive Attitude

Negative (Unsafe)
Attitude
(Mistake and its result failure,
injury, Disease)



Causes to create Negative Attitude

Poor Mgt. Commitment, No provision of Motivate to employees, Heavy work load, Blame Culture, Poor reporting culture, No proviosin of Training , Poor Supervision, Poor skill, Health problem, non-availability of resources etc.

ATTITUDE

UNSAFE ATTITUDE

SAFE ATTITUDE

Physical action



Effect on self



Effect on others



Unsafe outcome



Physical Action



Effect on self



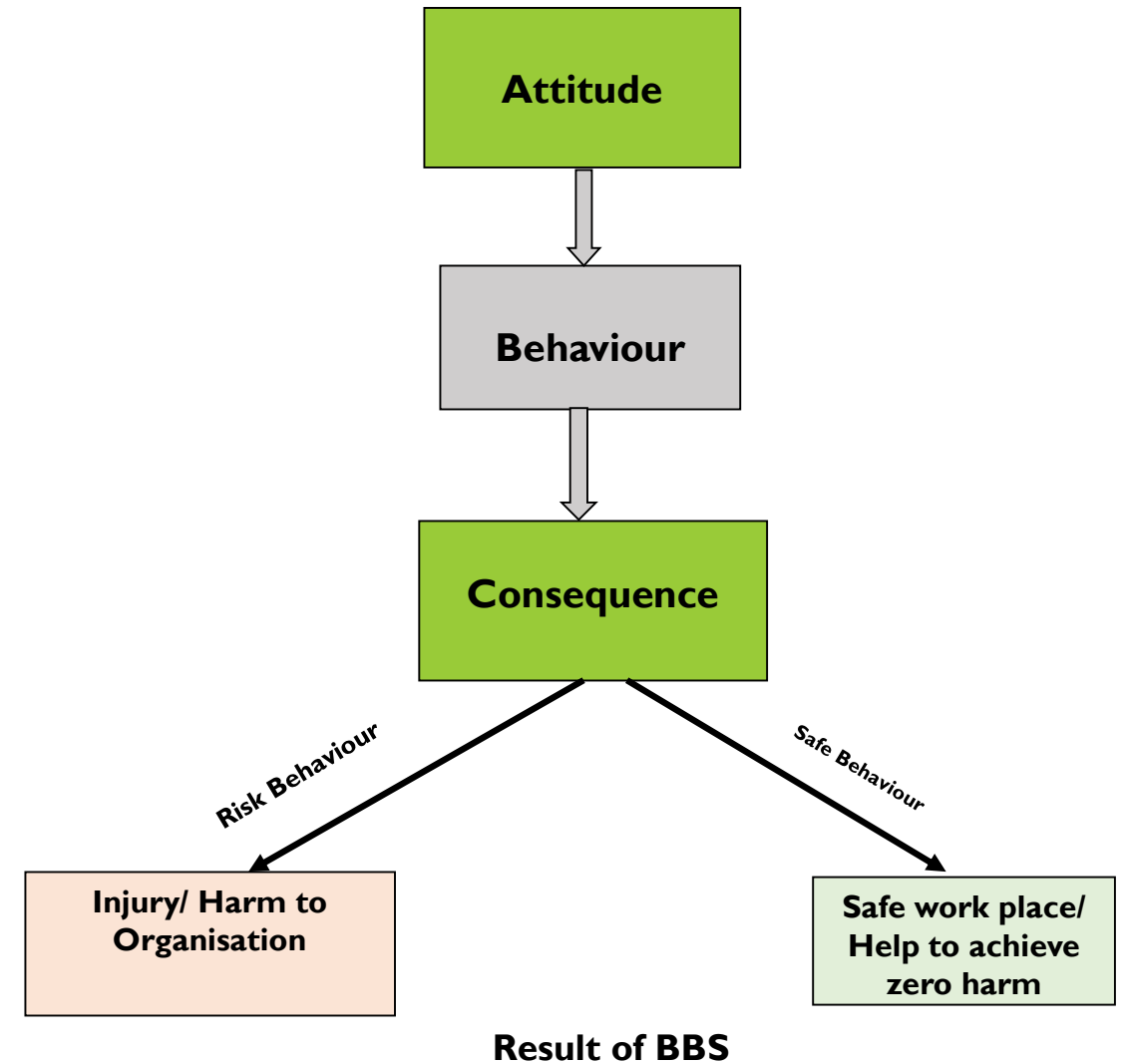
Effect on others



Safe outcome

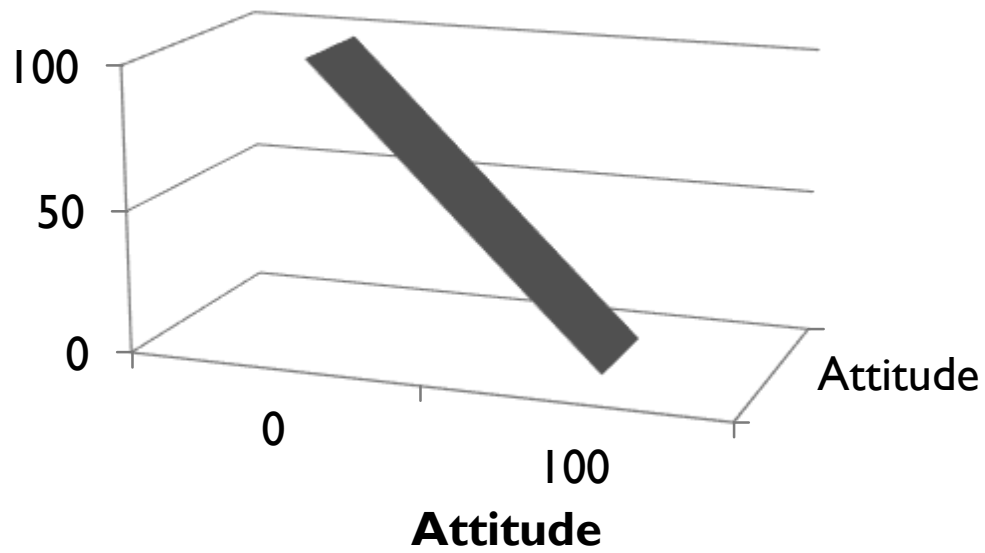
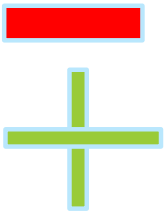


ATTITUDES V/S BEHAVIOR



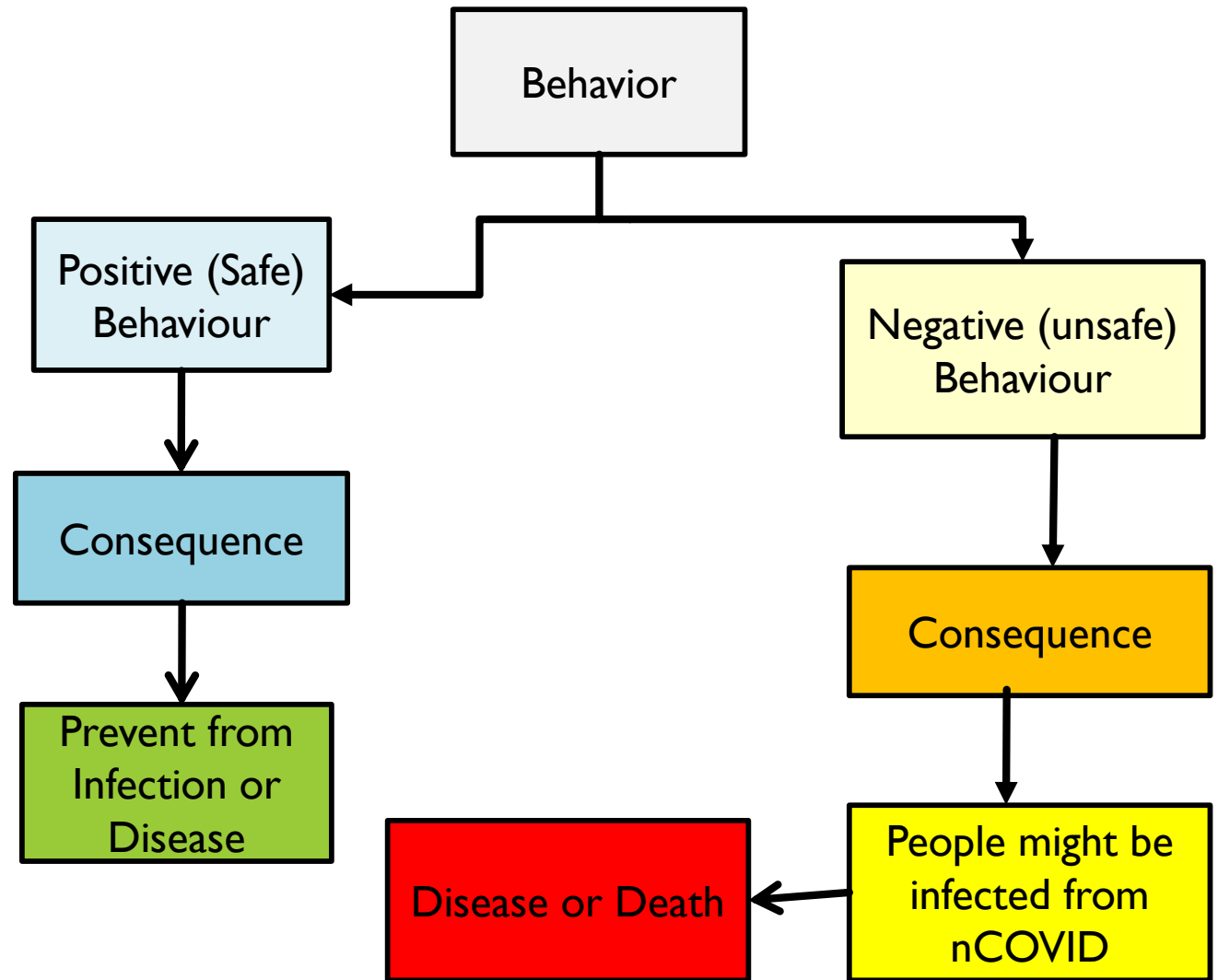


Behavior



ATTITUDE V/S
BEHAVIOR

HOW BBS HELP TO
MINIMISE OR
REDUCE RISK
RELATED TO COVID-
19 OR ANY
ORGANISATIONAL
HARM





HOW RISK
BEHAVIOUR
LEAD TO CAUSED
OF ACCIDENT OR
DISEASES



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UNDERSTANDING BEHAVIOR

Safe Behavior

Skills, Risk Assessment, Acceptance of Risk related to nCVI or organisation .

Un-Safe Behavior

Mistake

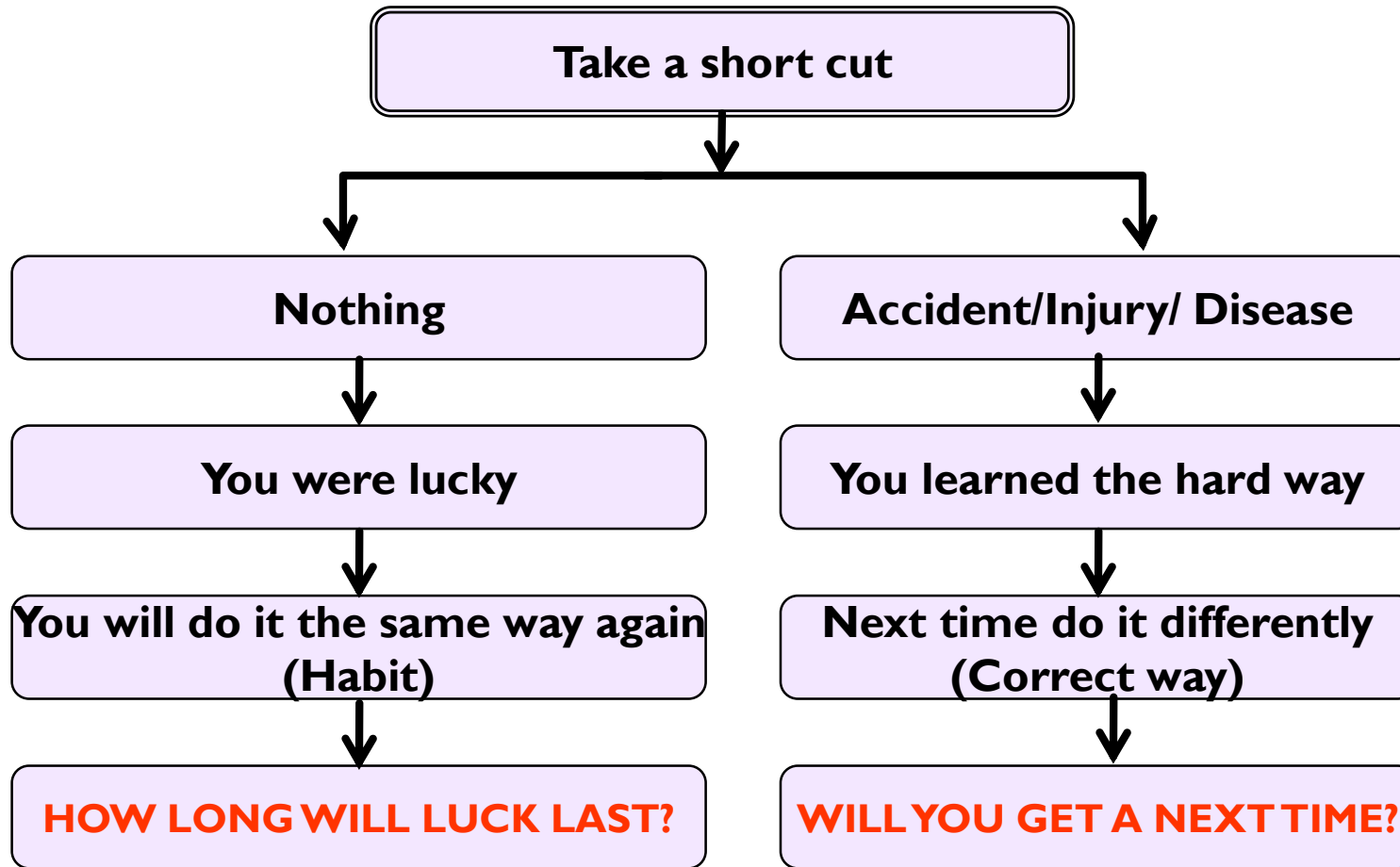
Poor Skills, Poor Risk Assessment, Political issue, Poverty

Un Necessary Risk Taking

Rejection of risk

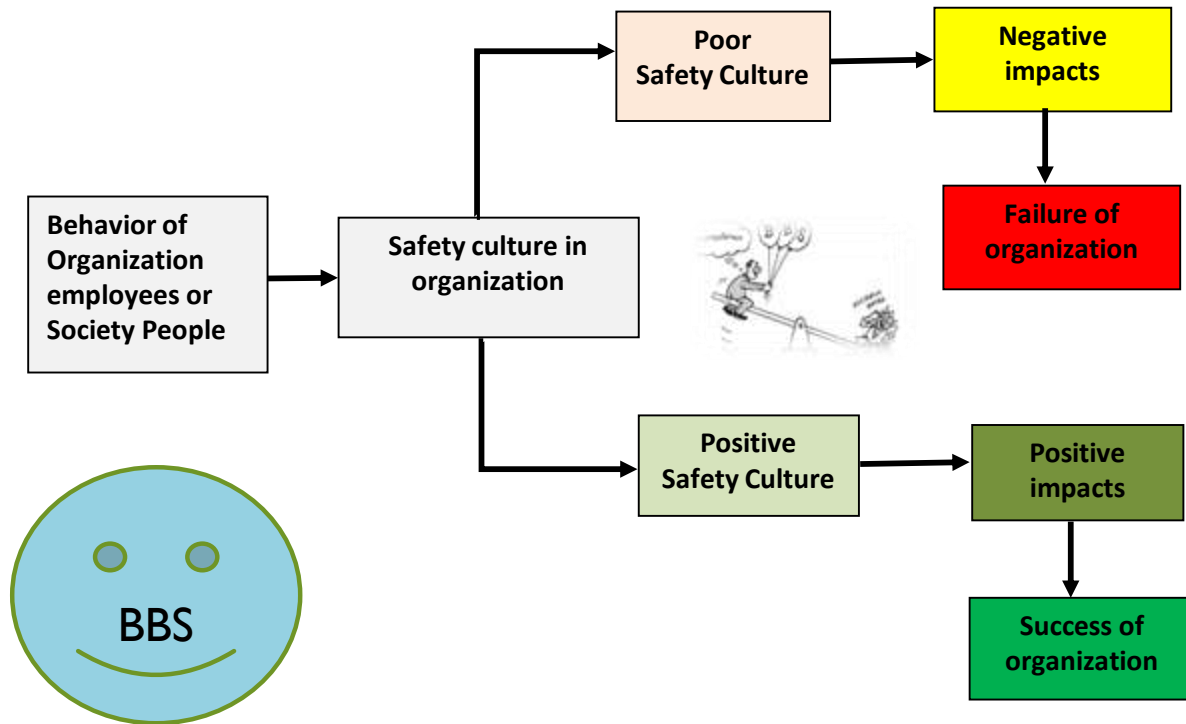
Unconscious Risk-Taking

Unaware about risk.

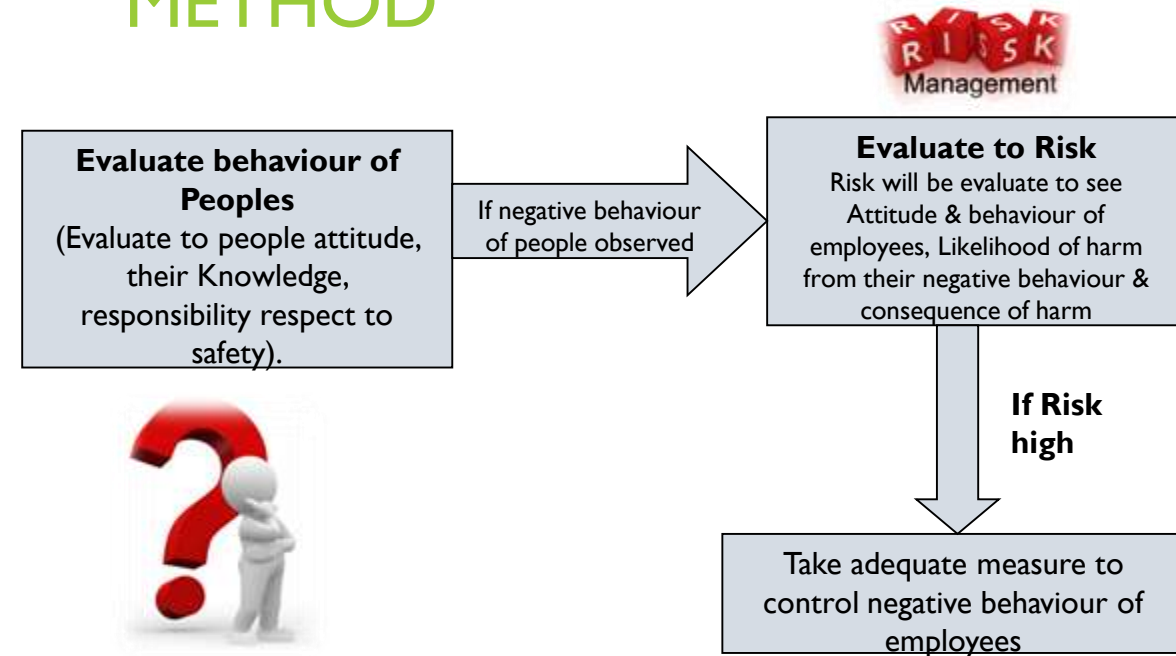


EXPERIENCE &
BEHAVIOUR

IMPACTS OF HUMAN BEHAVIOR ON ORGANIZATION SAFETY CULTURE



BEHAVIOR BASED RISK EVALUATION METHOD



I Identification of

S Safety related

E Error of human through

I Inspection or investigation or information collection
(-ve Behaviour people)

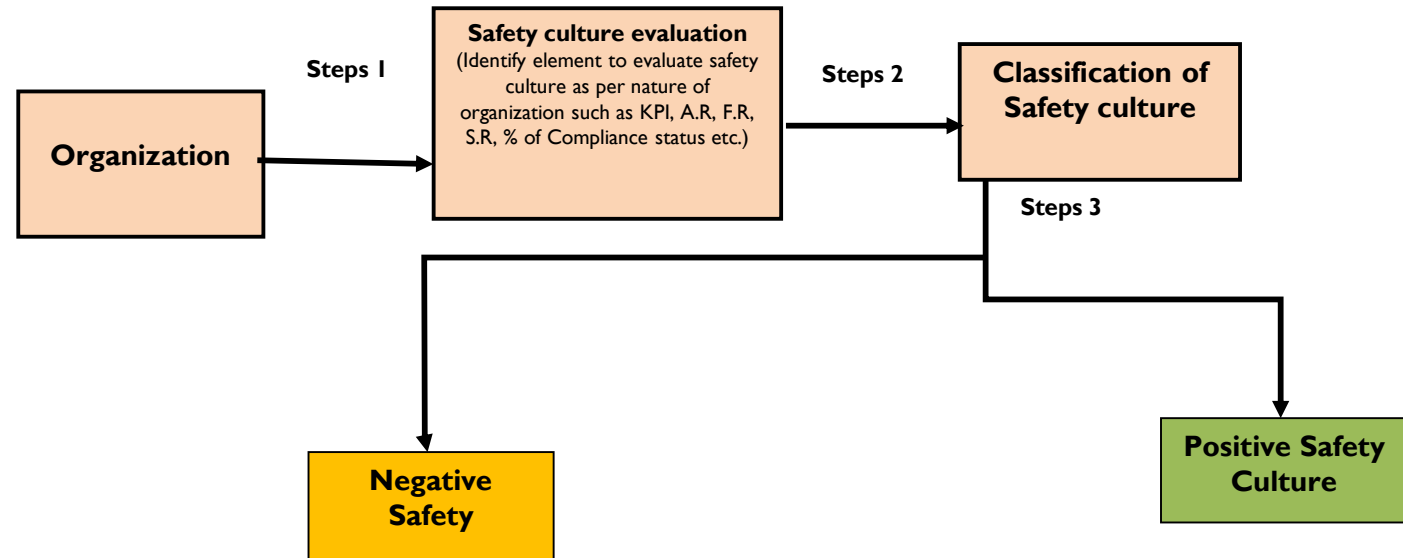
Identification of Safety related error of human through inspection or investigation



BEHAVIOR BASED RISK EVALUATION METHOD

BBS V/S SAFETY CULTURE

Safety Culture evaluation Method & Method to develop Positive Safety Culture



How to create Positive Culture

- Identify failure and cause of poor safety culture
- Decide control measure, Discuss with top management personnel and workmen representative
- Implement to effective system, Take corrective/ Preventive measure of safety culture failure
- Compliance of Safety rules, procedures and guidelines
- Check & Review time to time

- Need to ensure existing control measure regularly
- Evaluate Safety Culture Periodically

Note: A.R means accident rate, F.R means Frequency Rate, S.R means severity rates

TIPS FOR BBS

- Strong management commitment & its effective implementation
- Set clear and realistic Objective: Management should clear identify their objective related safety that want to achieve.
- Target & result evaluation: Identify Time that will required to achieve objective and identify such parameter that will help to measure company objective have achieved or not?
- Defined Clear role & responsibility section or Department wise and select easy, Positive and stable method.
- To work with associated with different similar industries and trade association to achieve Company objective
- Listen to company employees and involve him to participate in safety activity and use their idea to improve system whenever applicable.
- Make communication with employees including workmen in local/regional Language and eliminate to other factor that help to create blame culture.
- Always focus on Corrective/Preventive action to motivate workforce instead of penalty or Action on Incident investigation report.
- Identify Training need and conduct time to time to improve knowledge and skill among employees including workmen
- Motivate to workforce to create desired among them to adopting safe practices.
- Leadership: Personnel leadership quality and their competence will help to identify gap and seek opportunities to create safe behavior among employees.

BBS VERSUS SAFETY CULTURE



BBS



RISK LEVEL EVALUATION METHOD DUE TO NEGATIVE BEHAVIOUR

Risk: (Exposure to) the possibility of loss, injury, or other adverse or undesired circumstance; a chance or situation involving such a possibility

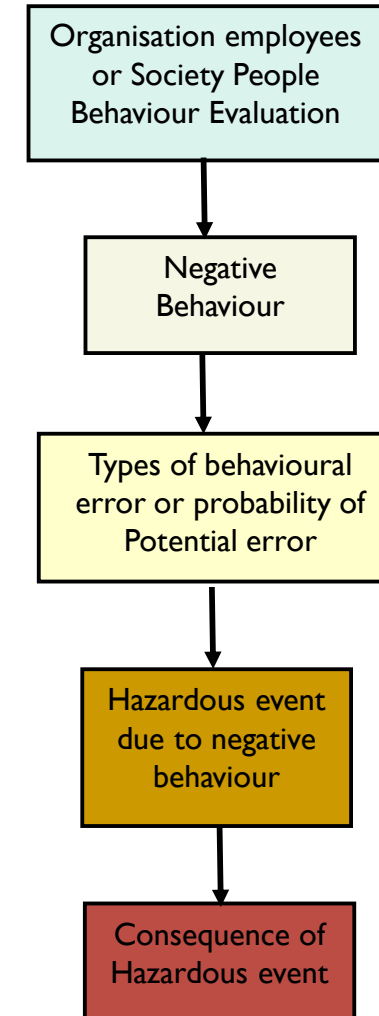
R: L X C

R: Risk

L: Likelihood of potential of Hazardous event due to Negative behavior of employee

C: Consequence of Hazardous event occurring

BEHAVIOUR BASED RISK EVALUATION & MGT.



If Risk Level is not Tolerable Take adequate control measure to minimize risk

BEHAVIOUR BASED RISK EVALUATION METHOD

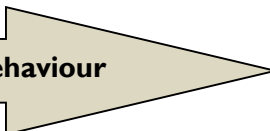
Likelihood of Hazardous event due to negative behavior (on based on Category behavior of employees or people)	Rating		Consequence of event that may occur due to negative Behavior	Rating
Very Positive Likelihood of no hazardous event	1		Incident occur but no harm	1
Positive Low potential of event occurring	2		Incident occur and results first Aid	2
Average Potential of event occurring	3		Minor such as LTI Minor loss that value less than 50 K INR	3
Negative High Potential of event occurring	4		Major such as Fracture, major injury, loss of property their value is above 50 K and less than 5 Lakh	4
Very Negative Extremely Potential of event occurring	5		Fatal/ Catastrophic	5

**Risk Level
Calculation Method
Due to Negative
Behavior**

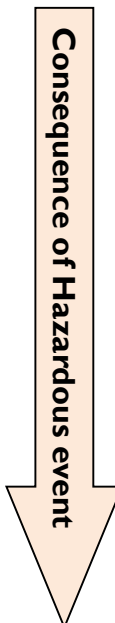
BEHAVIOUR BASED RISK EVALUATION

Risk Rating Range (R= L X C)	Risk level	Description
1-4	Low	No need to take additional control measure, need to ensure existing control measure and carry out close monitoring
5-9	Medium	Ensure additional control measure and ensure its effective compliance within certain time scale.
Above 9	High	Stop work immediately, develop action plan, implement effectively and then start to work.

R. E THROUGH TABLE MATIX FORM

Likelihood of Hazardous event due to Negative Behaviour 

	1	2	3	4	5
1	L	L	L	L	M
2	L	L	M	M	M
3	L	M	M	H	H
4	L	M	M	H	H
5	M	H	H	H	H

 Consequence of Hazardous event

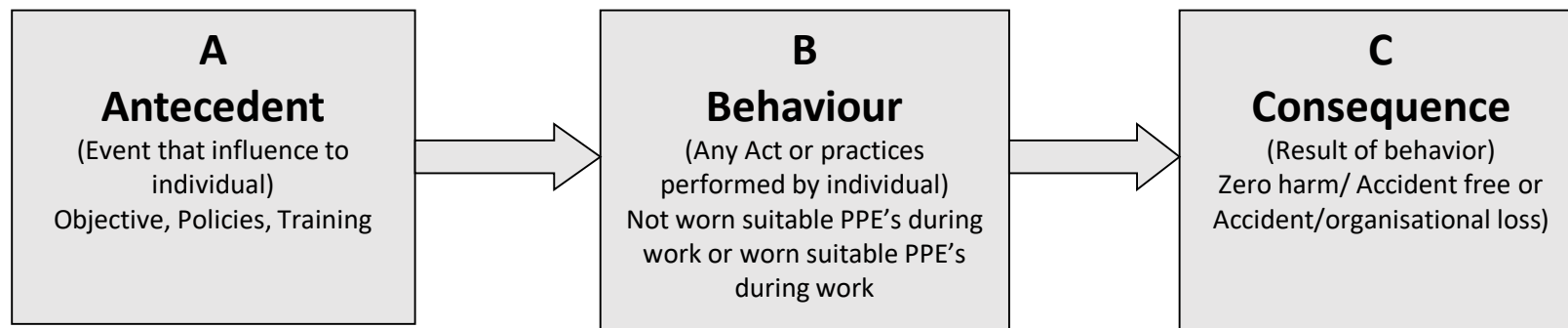
BEHAVIOR BASED RISK EVALUATION FORMAT

Activity Or Element of BBS	Human error/ Negative Behaviour/ Probability of Potential of negative behaviour	Likelihood of Potential Hazardous event due to -Ve behaviour	Consequence of Hazardous Event	Risk Calculation & Classification				Additional control measure	Risk Calculation, After control measure				Remarks
				L	C	R= L X C	Risk Level		L	C	R= L X C	Risk Level	

ABC MODEL

To evaluate risk, we identify attitude of employees then after evaluate their behavior. After evaluating behavior, we identify employees behavior nature that is negative or positive, if employees behavior is negative then we assess risk to see likelihood of potential event that may occur due to negative behavior & their consequence. Whenever risk evaluated then, management take adequate control measure to minimize risk as low as reasonable practicable (ALARP) as based on nature of behavior .

The goal of behavior-based safety is to change the behavior of employees from “at risk” behavior's to “safe” behavior's. ABC model is best tool to change human behavior. Most of today's behavioral safety efforts are based on this theory that says all behaviors are a result of antecedents and consequences.



ABC Model

BEAPI

BE: Behaviour Evaluation

Select the **element** as per nature of organization and identify **sub-element** of each element and check their compliance status. Few Elements related to behavior of people are:

- Work method & position (Behavioral)
- PPE uses (Behavioral)
- Safety Rules, Regulation Compliance (Behavioural)
- Tools & equipments (Behavioural)
- Housekeeping Compliance (Behavioural)
- Participation in Safety Program such as Training, meeting etc. (Behavioural)
- Hygiene & Welfare Amenity and their Proper utilization (Behavioural)

We can categorise compliance status of sub element wise as per below method

N.A Complied Under Progress Not-Complied

Health monitoring & Counseling of employees help to identify Behaviour.

AP: Action Plan Preparation

I: Implement to action plan

B: Behavior

E: Evaluation

A: Action Plan

P: Preparation

I: Implement to action plan

BEHAVIOUR BASED SAFETY DEVELOP MEATHOD AMONG ORGANISATION EMPLOYEES

BEHAVIOUR
BASED
SAFETY

- Identify Cause of Negative Behavior
- Develop Action Plan
- Discuss with Management
- Implement it effectively
- Checking & reviewing

nCOVID

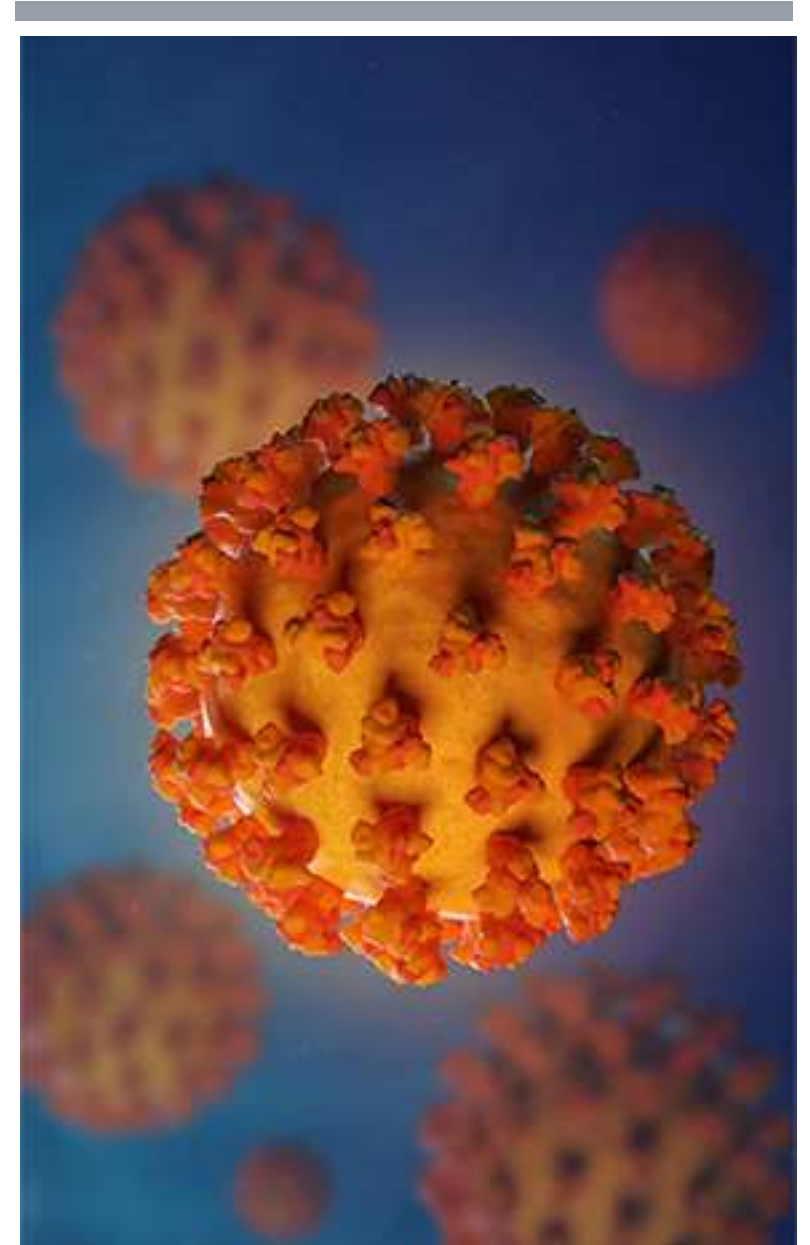


Biological Hazard

INTRODUCTION

Novel Coronavirus (COVI) Diseases is increasing rapidly in the world and day by day death percentages also increasing. Firstly COVID infected person was identified in china in December 2019 and Now Majority of country of this world is effecting from COVID-19. nCoronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome

(MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). A novel coronavirus (COVID-19) is a new coronavirus that has not been previously identified in humans. Novel coronavirus is a respiratory virus which spreads primarily through droplets generated when an infected person coughs or sneezes, or through droplets of saliva or discharge from the nose. Currently, there is no known treatment or vaccine available.



HOW DOES COVID-19 SPREAD

- **Droplets produced** by coughing and sneezing, especially by a patient in close proximity
- **Close personal contact**, such as touching or shaking hands that are not washed or sanitized.
- **Touching an object or surface** with the virus on it, then touching your mouth, nose, or eyes before washing or sanitizing your hands with alcohol based hand rub
- **Living in the same household** or same place as a COVID-19 patient in close contact.
- **Close contact with a COVID-19 patient**, without adequate precautions, by healthcare workers or other patients and visitors in healthcare facilities

COVID-19 Know The Facts
World Health Organization
Western Pacific Region

COVID-19 spreads primarily from person to person

- Droplets released when someone sick sneezes or coughs can land on the mouths or noses of people nearby
- Close contact with someone sick – like hugging or shaking hands

**COVID-19 mainly spreads from person to person
But it can also be left on objects and surfaces...**

door knobs, tissue, laptop and mouse, lift buttons, digital devices, pens

So if you touch something contaminated and then touch your face or another's face, you might all fall ill.

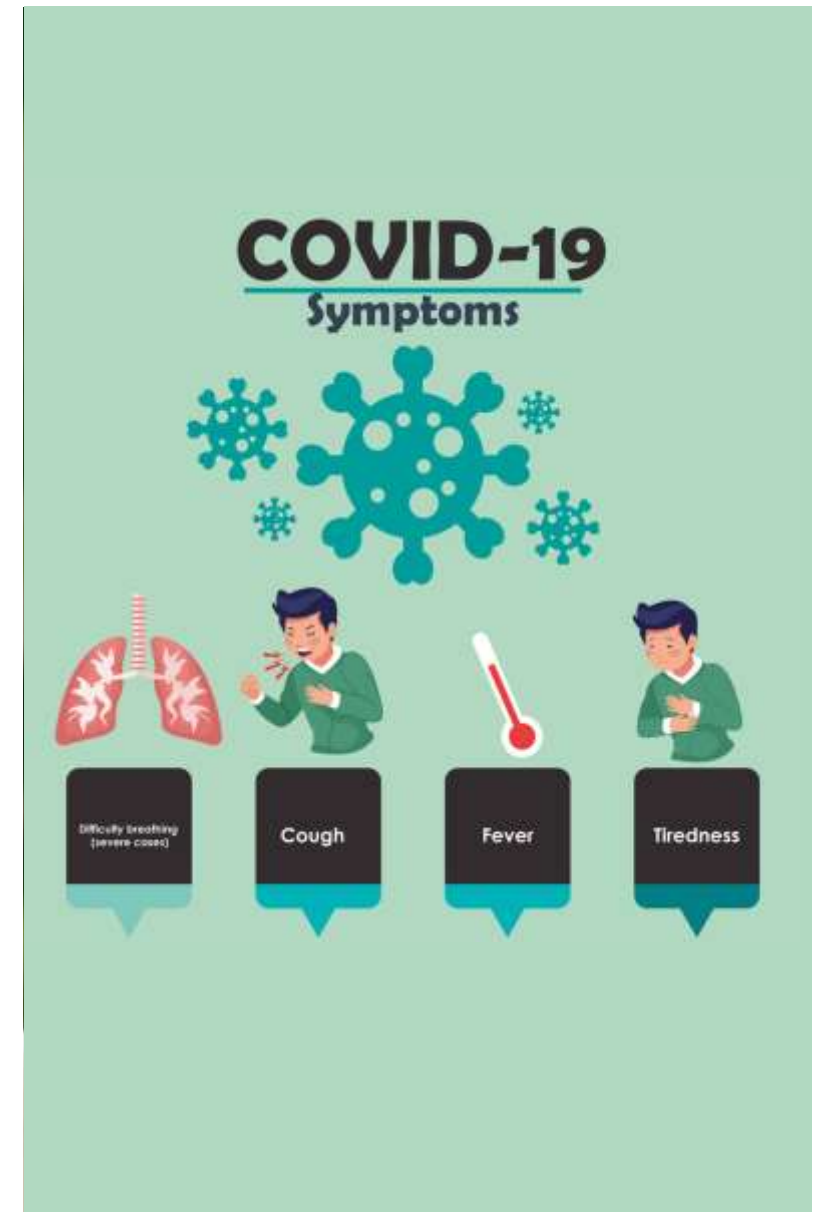
Reduce your risk of COVID-19

- Clean your hands often
- Cough or sneeze in your bent elbow – not your hands!
- Avoid touching your eyes, nose and mouth
- Limit social gatherings and time spent in crowded places
- Avoid close contact with someone who is sick
- Clean and disinfect frequently touched objects and surfaces

SYMPTOMS OF COVID-19

- **Dry cough, Fever, Breathing difficulties, shortness of breath**
- **Rapid heartbeats or Chest Pain or sensation in chest.**
- **Pneumonia**
- **Severe acute respiratory syndrome**
- **Kidney failure**
- **Death may occur (sever case)**

As per Studies, in few cases diarrhea symptoms is also found in COVID-19 infected people and corona infected people can be identified and confirmed only through Test.



STANDARD RECOMMENDATION

- Regular hand washing with alcohol Sanitizer at least 20 second or with soap and water at least 40-60 second.
- Clean & disinfect frequently touched objects & surfaces.
- Covering mouth (Tissue etc) and nose when coughing and sneezing, through tissue immediately in closed bin after use.
- Avoid close contact with anyone showing symptoms of respiratory illness such as coughing and sneezing.
- Avoid to travel in effected country/ Area.
- Use suitable mask, whenever required.
- Need to Create Awareness among society people and always maintain physical distancing.
- In case of any similar symptom found, immediate report to Approved clinic or Health Centre or call on respective state emergency contact Number.



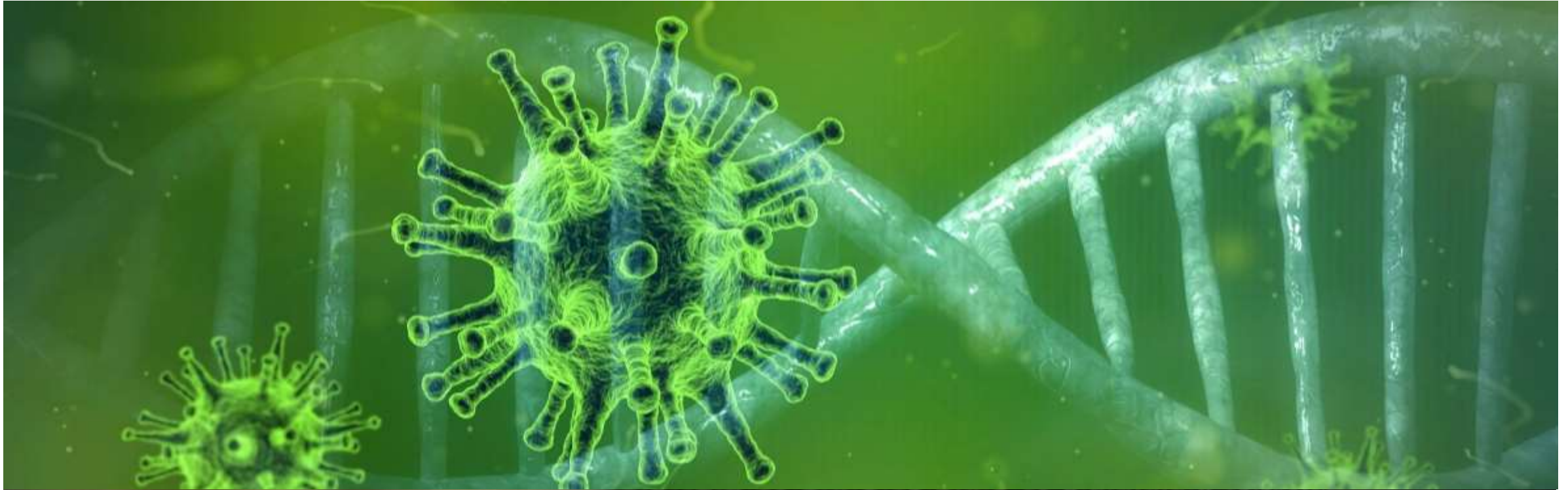
CONCLUSION

- Currently, No any effective treatment and no vaccine is available, Treatment is given on based on symptoms & patient's clinical condition.
- Physical distancing is best option to prevent infection from nCOVID.
- Clean to hand time to time with alcohol based sanitizer.
- Basically nCOVID symptoms may appear within 2-14 days after exposure.
- Our target is zero COVID-19 or accident by focusing on 'zero unsafe behavior' (which is the main cause of any incident or disease by involving all Peoples or employees in BBS approach.

“BBS minimize the risk related to COVID-19 or workplace incident”



References: WHO, ISEI Manual, IJISEI Journal



“PROTECT YOURSELF AND YOUR FAMILY FROM
NOVEL CORONA VIRUS INFECTION TO TAKE
ADEQUATE PRECAUTIONARY MEASURE”



THANK YOU!

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