

COHESIVE
solutions

Using IBM Maximo HSE To Control The Spread Of COVID-19 In The Workplace

Supporting Safe Systems of Work in the Era of “New Normal”



Today's Agenda

- Welcome and Introduction
- Common Impacts of COVID-19
- How you can use Maximo HSE to help
- Live demo of some common use cases
- Q&A

PS: Logistics for Q&A and Polling

Presenters



Russ Anderton

Vice President: EAM Industry expertise in Oil & Gas, Manufacturing, Aerospace & Defense, Water Utilities



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Senior Designer/Architect at IBM for Maximo Health, Safety, and Environmental Manager

Cohesive: Who We Are

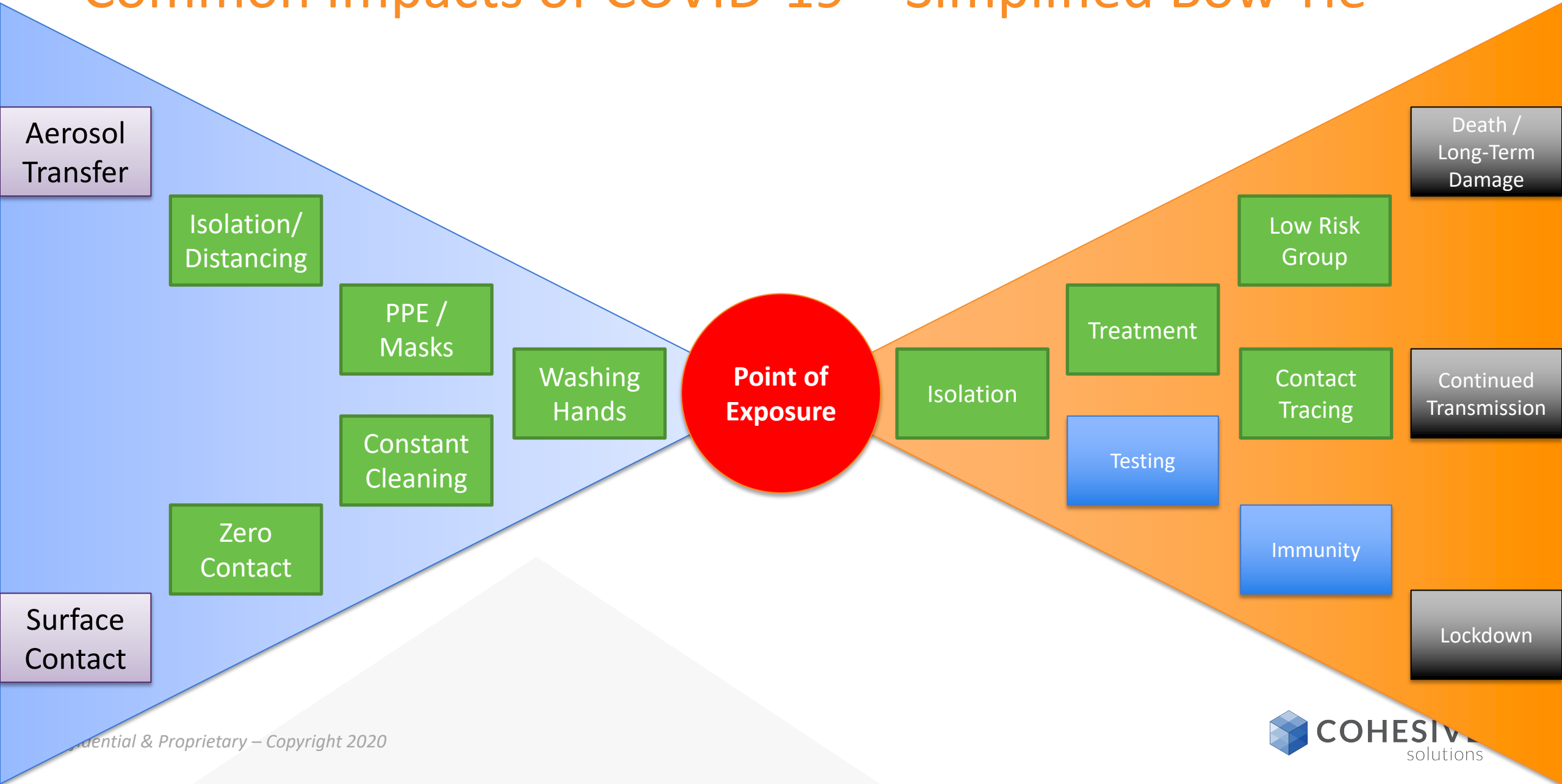


Common Impacts of COVID-19 – Overview

A new unexpected, uncontrolled, hazard in the workplace

- Personnel Impacts:
 - Infection can carry serious consequences:
 - Death of the Individual
 - Potential long-term physical damage
 - High rate of transmission to family and community
- Business Impacts:
 - Continued Lockdown – People are core to our operations
 - Long-term and short-term changes to how we operate
- What makes this unique and challenging to control?
 - Multiple transmission mechanisms – Aerosol & surface contact
 - Not all carriers are symptomatic

Common Impacts of COVID-19 – Simplified Bow Tie



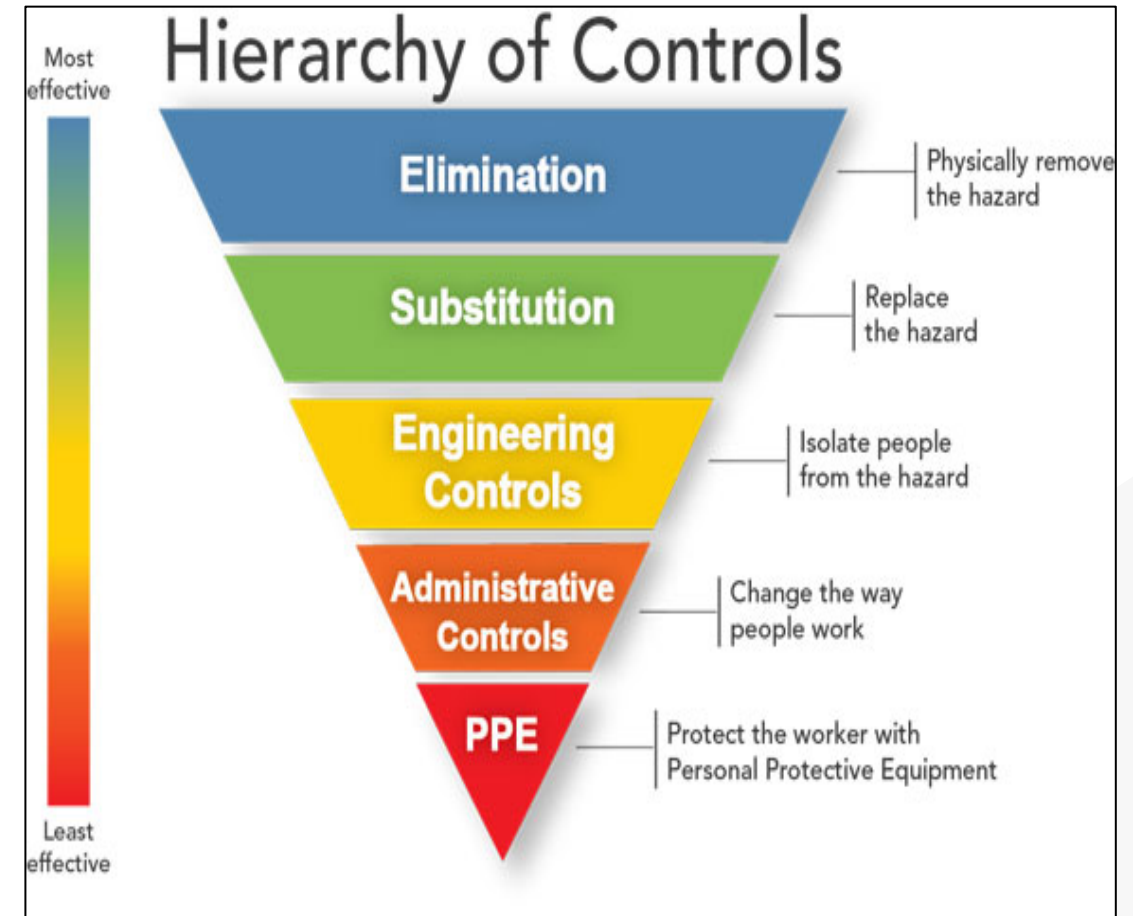
Group Poll

Where is your organization on re-entry?

1. Still evaluating options
2. Plan in place and re-entry is in progress
3. Already back/Never skipped a beat

Additional controls at the workplace are required in the post COVID-19 environment

- *“...the most effective protection measures are (listed from most effective to least effective): engineering controls, administrative controls, safe work practices (a type of administrative control), and PPE.”¹*
- *“The most effective controls are those that rely on engineering solutions, followed by administrative controls, then PPE.”²*



1. Guidance on Preparing Workplaces for COVID-19, OSHA 3990-03-2020

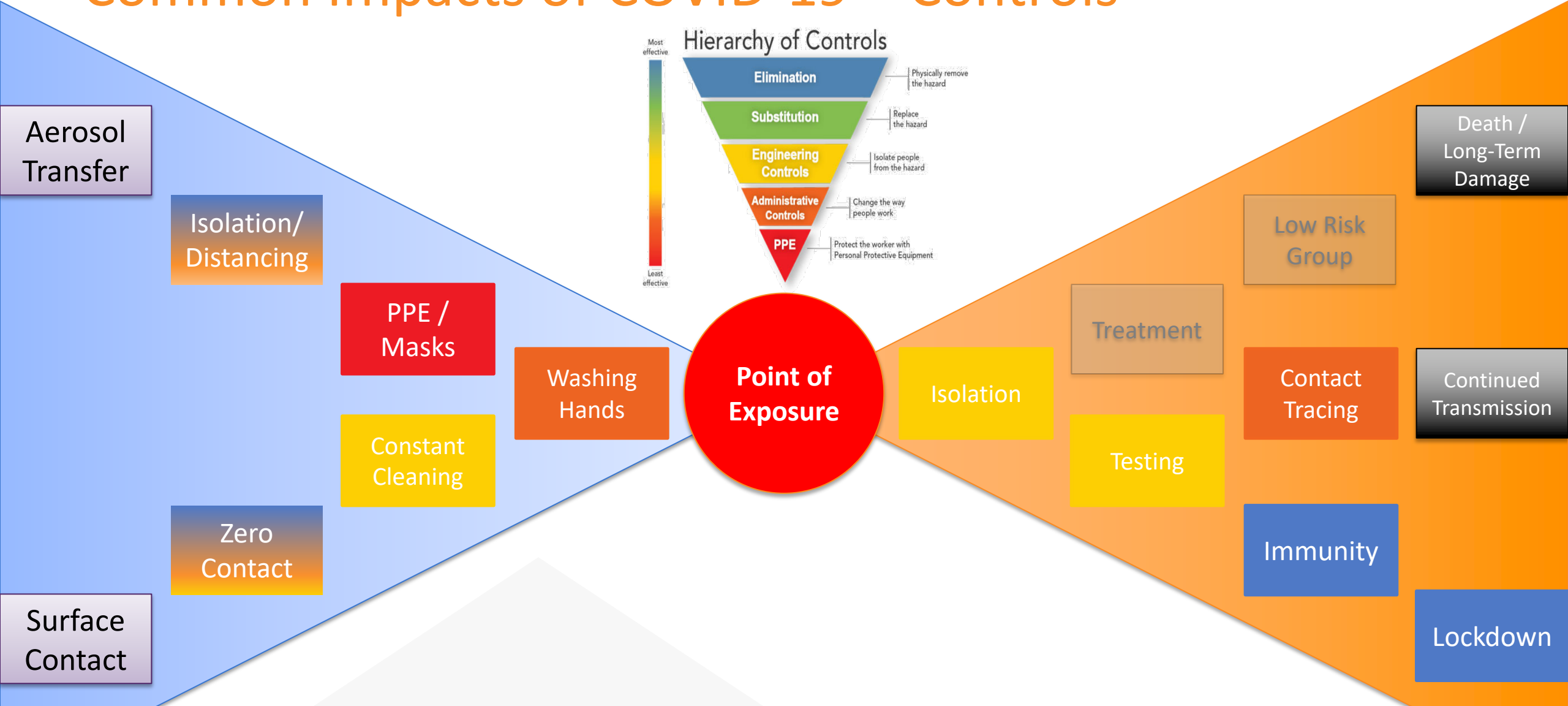


2. Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19), May 2020



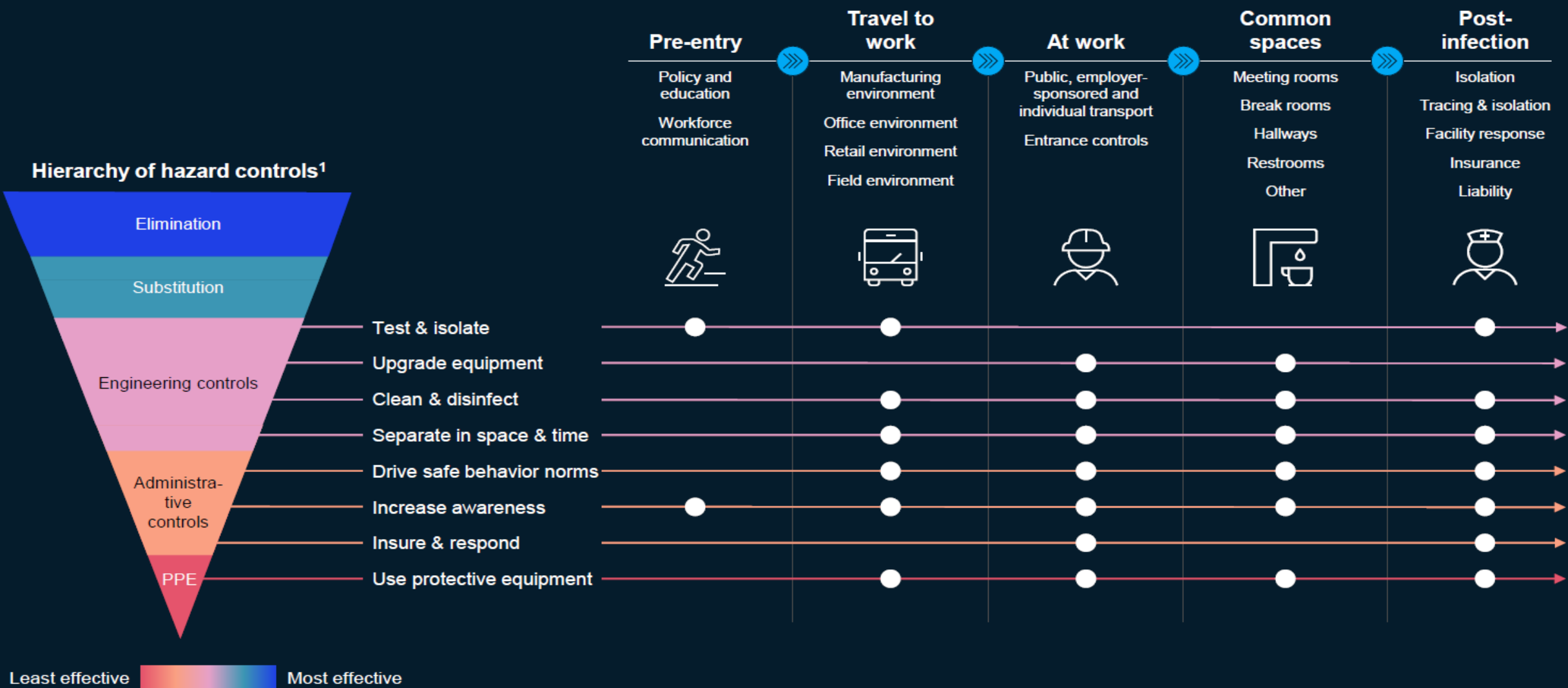
https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fspecific-groups%2Fguidance-business-response.html

Common Impacts of COVID-19 – Controls



How to consider transition: Ensuring protection across workforce journey

Workforce protection interventions across manufacturing, office, retail and field environments



1. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html> | <https://www.osha.gov/shpguidelines/hazard-prevention.html>

IBM Maximo for Health, Safety and Environment Manager

Maximo HSE Manager offer wide range of capabilities that will support additional safety and operational processes to support changes in working practices is response to the COVID-19 virus. Much of this capability can be quickly implemented and deployed.



Operations

- Policies
- Procedures
- Operator's Logs
- Operational Actions
- Shift Handover
- Bypass Management
- Production Loss Reporting
- Benefits/Losses
- Permit to Work



Maintenance

- Isolation Management
- Risk Management
- Hazards
- Failure Reporting
- Defects
- Commissioning and Startups
- Competency and Certifications



Safety

- Incidents
- Investigations
- Corrective Actions
- Improvements
- MOC
- Solutions
- Regulatory Compliance
- Audits
- Knowledge Management



Areas where IBM HSE Manager will support your business in Post COVID-19 work environment

- Preparation
- **Operating Procedures**
- **COVID-19 Training / Personal Certification**
- **WO Preparation Activities**
- **MOC**



- **Control**
- **Fit for Duty**
- **Risk Assessment**
- **Hazard Review**
- **Permit to Work**



- **Compliance**
- **Regulatory Compliance**
- **Audit & Survey**
- **Hazardous Material handling and disposal**



- **Reporting**
- **Incident Reporting**
- **Safety Observations**
- **Technical Integration (Worker Insights)**
 - **Face Mask Detection**
 - **Social Distancing**
 - **Health Monitoring**
 - **Occupancy Monitoring**
 - **Crowd Density**
 - **No Go Zones**
- **OSHA/RIDDOR**



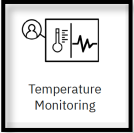

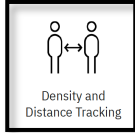
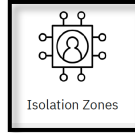



Group Poll

Do you have Maximo HSE?

1. We do not
2. Yes, but it's not in use
3. We are currently using HSE

Use case matrix

	 PPE	 Health and Wellness	 Temperature Monitoring	 Crowd Avoidance	 Density and Distance Tracking	 Isolation Zones	 Hazardous Waste	 Work Management
Regulatory Compliance	✓	✓	✓	✓	✓	✓	✓	✓
Operating Procedure / Polices	✓	✓	✓	✓	✓	✓	✓	✓
MOC/Corrective Action	✓	✓	✓	✓	✓	✓	✓	✓
Personal Certification	✓	✓	✓	✓	✓	✓	✓	✓
Fit for Duty	✓	✓	✓					
Risk Assessment	✓						✓	✓
Hazard Review	✓			✓				✓
Permit to Work				✓			✓	✓
Work Preparation Activities		✓					✓	✓
Safety Observation	✓	✓	✓	✓	✓	✓	✓	✓
Audit and Survey							✓	✓
Incident Management		✓	✓				✓	✓
OSHA / RIDDOR Reporting		✓	✓				✓	
Investigations		✓		✓	✓			

Demonstration

Q&A



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Kharding@us.ibm.com



Use Cases

More resources for you



Operating Procedures

Support the implementation of new ways of working by embedding operating procedures with an integrated system of work and safety management to help drive safe behaviour in the workplace.

Use Operating Procedures to support changes in safety processes using standard operating procedures embedded in Maximo to reinforce safety culture around social distancing and other safety related procedures.

Line Number	Description	Standard Action	Description
1	Review task risk assessment for PPE	>	
2	Obtain appropriate PPE	>	
3	Fit required PPE	>	
4	Verify social distance required	>	
5	Attend safety briefing	>	
6	Obtain permit if required	>	
7	Ensure social distance compliance	>	
8	Time out for safety	>	
9	Remove PPE	>	
10	Confirm work completion	>	



Work Order Preparation Activities

Checklists are a proven way of sharing organizational learning. Preparation Activities support the use of checklists directly embedded in the Work Order. Checklists can be created from Standard Actions/Action Groups quickly and easily without the need for system configuration. For example:

- Toolbox talk checklist
- Site safety briefing

A readiness audit can also be included within Preparation Activities to provide an additional level of assurance that the site and team are ready for work to start.

The screenshot displays the 'Work Order Tracking (Oil)' interface. The top navigation bar includes 'Find Work Order', 'Owner of Activity: MILLS', 'Keith Mills', 'Freeze Date: 5/6/2020 02:23 PM', and 'Preparation'. The main content area shows an 'Audit: 1001' for 'Social distancing readiness audit' with a 'Total Score: 0' and 'Preparedness: Ready'. The 'Evidence Long description' field contains the text: 'Social distancing readiness audit completed prior to issue of permit to work by site operations.' Below this, a table lists 'Preparation Activity Actions' with columns for 'Standard Action', 'Description', 'Action By', 'Action By Group', 'Completed?', 'Repeatable?', and 'Sign Off'.

Standard Action	Description	Action By	Action By Group	Completed?	Repeatable?	Sign Off
SSB1	Is everyone familiar with PPE requirem			<input type="checkbox"/>	<input type="checkbox"/>	
SSB2	Does everyone have the right PPE?			<input type="checkbox"/>	<input type="checkbox"/>	
SSB3	Are social distancing requirements und			<input type="checkbox"/>	<input type="checkbox"/>	
SSB4	What could go wrong with this work?			<input type="checkbox"/>	<input type="checkbox"/>	
SSB5	Confirm communication protocol			<input type="checkbox"/>	<input type="checkbox"/>	
SSB6	Permit to Work details verified			<input type="checkbox"/>	<input type="checkbox"/>	
SSB7	Responsibility for controls is clear			<input type="checkbox"/>	<input type="checkbox"/>	

Buttons at the bottom of the table include 'Select Actions', 'Select Action Group', and 'New Row'. A 'Go To Operational Actions' button is located at the bottom right of the interface.



Certifications

Ensure personnel have appropriate training in place before working in the new environment and provide greater visibility of these certifications.

Identify new personal certification and training requirements. These certifications can be associated with a Person record to support validation of completion of necessary training.

Certifications can also used to certify equipment and processes that support virus prevention measures. Where needed Certifications can be associated with an Audit record to support the safety management process.

Permit and Certificate Type	Description	Category	Status	Personal?
COCERT	COVID-19 Training Certificate	CERTIFICATE	ACTIVE	<input checked="" type="checkbox"/>



Management of Change/ Corrective Action

Many changes to equipment and processes will need to be introduced in response to the COVID-19 virus.

Maximo HSE's MOC application supports the management of these changes maintaining visibility by linking it with your existing asset structures and the work required to implement the changes.

Evaluate risk associated with these changes by linking into the Risk Assessment capability, manage multiple stage reviews and approvals, implement standard MOC process and manage closure of the changes

The screenshot displays the Maximo MOC application interface. The top navigation bar includes tabs for 'List View', 'MOC', 'Projects and Risks', 'Review and Approve', 'Pre-Start', 'Authorize', 'Pre-Start Safety Review', 'Post-Start', 'Closure', 'Related Records', 'Log', and 'Specifications'. The main content area shows details for MOC 1202, titled 'Modify HVAC system to meet COVID-19 requirements'. Key information includes: Status: WAPPR, Site: BEDFORD, MOC Type: GENERAL, and Owner: ENG. The 'User Information' section lists 'Entered By: WILSON' and 'Verified By: KAZMIER'. The 'MOC Details' section shows 'Location: BR200' (HVAC System- Main Office) and 'Asset: 11200' (HVAC System- 50 Ton Cool Cap/ 450000 Btu Heat Cap). Below this, there are sections for 'Reviewers' and 'Approvers'. The 'Reviewers' table shows two reviewers: Jane Boudreau (Reviewed? checked, Sign Off Date: 5/18/20 12:19 PM) and Keith Mills (Reviewed? checked, Sign Off Date: 5/18/20 12:19 PM). The 'Approvers' table shows two approvers: Rebecca Allen (Approved? checked, Sign Off Date: 5/18/20 12:19 PM) and Bob Caldzone (Approved? checked, Sign Off Date: 5/18/20 12:19 PM). The interface also includes a left-hand navigation menu with options like 'New MOC', 'Save MOC', 'Clear Changes', 'Change Status', 'Select Owner', and 'Take Ownership'.



Personal Certification – Covid-19 Training and Tracking

Implementing this capability will increase organization awareness of level of training completed by your workers, will reinforce ongoing organizational learning and meet regulatory training requirements.

Person – Certification – Roles – Communication Templates - Escalation

- Management Start Center Tracking
- Leverage Data on the Person Record + Certifications to track
- Automate the compliance process
 - Communication Templates
 - Roles
 - Escalation

The screenshot displays a notification window with the following details:

- Template:** 1019
- Role/Recipient:** CERTHOLDER
- Subject:** :certnum /:description is expiring in 7 days
- Message:** You must re-certify in order to maintain your compliance. :certnum /:description expires on :expiredate. Please go to www.OSHA.GOV and complete your certification/



Incident Response Start Center

Use Start Centers to provide a focal point for the control of work and an overview of compliance with regulatory requirements.

Create a Start Center to help manage incident response. Leverage standard Maximo capabilities for Escalations, KPIs and Service Level Agreement to provide a level of increased system assurance.

The screenshot displays the Incident Response Start Center interface, which is divided into several sections:

- Administration:** Includes links for "Covid Quick Reporting", "Improper PPE Disposal", "Occupancy Issue", and "Social Distancing Issue".
- How are we doing?:** A section with a filter and a chart showing "Safety Observation (By COVID ISSUES in the last 24 hours)". The chart is a pie chart with four segments.
- Bulletin Board:** A table listing messages with columns for Subject, Message, Post Date, Expiration Date, and Viewed.

Subject	Message	Post Date	Expiration Date	Viewed
>> New Work Place Entry Rules	In workplace settings where employees ar...	5/17/20 12:19 PM	5/31/20 12:19 PM	Y
>> New Lunch Room Rules	Each employee shall be required to wear ...	5/17/20 12:18 PM	5/31/20 12:18 PM	Y
- Covid-19 Workplace FAQs:** A list of frequently asked questions with a "Set Chart Options" link.
- COVID ISSUES 24 hours:** A legend for categories: FACE_MASK, HAZMAT, OCCMONIT, and SOCDIS.
- Fit for Duty:** A section with a "Click to complete Fit for Duty" button.
- Favorite Applications:** Includes "Create Incident (OII)", "Bulletin Board", "COVID QUICK REPORTING", "COVID-19 Employee Diagnosis Reporting", "Occupancy / Overcrowding Issue", and "Social Distancing Issue".
- Improper PPE Disposal Observations:** A chart showing counts by date.

Date	Count	Percent (%)
5/25/20 1:00 PM	2	50
5/26/20 1:00 PM	1	25
5/27/20 1:00 PM	1	25
- Social Distancing Alerts:** A bar chart showing counts by date.

DATE	Count	Percent (%)
5/25/20 2:00 PM	4	44.44
5/26/20 4:00 PM	3	33.33
5/27/20 2:00 PM	2	22.22
- Covid-10 Training Certificates:** A table listing names and expiration dates.

Name	Expiration Date
Tom Revis	06/01/20
Fred Stanley	05/30/20
Keith Mills	06/01/20
Mark Jacoby	06/02/20
Bob Pillance	06/01/20
Jane Boudreau	06/02/20
Tory Little	05/30/20
Ganesh Venka	06/01/20
Bob Crocker	06/01/20
- Occupancy Overcrowding Issues:** A table listing reported dates, reported by, and locations.

Reported Date	Reported By	Location
5/25/20 4:30 PM	WI	MOPLOOR1
5/26/20 10:45 AM	WI	CONF300



Incident Response Start Center

The Start Center can be set up to use ticket templates in conjunction with the incident self-service applications to allow users to quickly generate safety observations and incidents. It can also be used to shared lessons learned and key safety performance data. Very specific Start Centers can be set up to highlight COVID-19 related data.

The screenshot displays the 'Ticket Templates' application interface. At the top, there are navigation tabs for 'List View', 'Template', and 'Specifications'. The main content area shows a list of templates with columns for Template ID, Class, and Status. Below this is a 'Details' section for a selected template, showing fields for Owner Group, Service Group, Classification, Owner, Service, Class Description, Internal Priority, Vendor, Organization, Incident Type, Incident Category, and Safety Observation Type.

Below the details is an 'Activities' table with columns for Sequence, Job Plan, Description, Owner, Owner Group, Priority, and Vendor. The table shows two activities: one for 'Set-up No Go Zone' and another for 'Deep Clean Area Impacted'.

At the bottom of the screenshot, there is a small table showing a summary of data:

DATE	Count	Percent (%)
5/25/20 2:00 PM	4	44.44
5/26/20 4:00 PM	3	33.33
5/27/20 2:00 PM	2	22.22



Fit for Duty

A fit for duty questionnaire can help eliminate potential issues with personnel entering the workplace who may not be in the right condition to do so

Use the Service Request application to support your facility entrance control process with an opt-in program to capture daily Covid-19 data from your workforce.

Create Service Request

Fit for Duty Questionnaire

Reported By
WILSON

Phone
(617) 555-9017

E-mail
m.wilson@helwig.com

Reported Date
5/7/20 1:48 PM

Question	Answer
> Have you had close contact with or cared for someone diagnosed with Covid-19 in the last 14 Days?	<input type="text"/>
> Have you experienced any cold or flu-like symptoms in the last 14 days?	<input type="text"/>
> Have you traveled out of the State in the last 14 Days?	<input type="text"/>
> Have you been in close contact with anyone who has traveled out to state within the last 14 days?	<input type="text"/>

Additional Details

Please enter a summary and a more detailed description of your Service Request.

Summary

Details

Font: Size: Format: None

Submit Cancel



Work Order Hazard Review

Implementing this capability will help increase awareness of new risks in the workplace and reinforce organizational learning.

Hazard Review on a Work Order supports more complex checklists that often require a question and answer format or need more information to be entered when completing a checklist. Hazard Reviews can be used as an alternative to a full risk assessment for certain types of lower risk activity with lower consequence but greater frequency.

The screenshot displays the 'Work Order Tracking (Oil)' software interface. The main window shows a 'Review Actions' table with columns for 'Standard Action', 'Description', 'Yes? No? Not Applicable? Alphanumeric', 'Score', and 'Completed? Sign Off'. A modal window is open over the table, showing details for a specific review action.

Review Item	Description	Yes?	No?	Not Applicable?	Alphanumeric	Score
10	Exposure to dust?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		0
20	Exposure to Asbestos?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		0
30	Exposure to COVID19 virus?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		0
40	Exposure to noise?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	93db max.	1
50	Exposure to vibration?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		0
60	Exposure to heat?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	28deg C max.	2

Preparation



Control



Compliance



Reporting



Risk Assessment

A greater range of activities in the new working environment may require task risk assessment.

This capability supports formal risk assessments which reference a risk matrix configured to meet a company's risk policies. The Risk Assessment application can be leveraged to reference company risk management policies based on the combination consequence, severity and likelihood of a hazard.

Management of risk involves the identification of hazards in the workplace and appropriate controls to mitigate risk to as low as reasonably practical. Risk assessments can be linked to both work orders and permits to work or used stand alone.

The screenshot displays the Risk Assessment (Oil) application interface. The top navigation bar includes tabs for Risk Assessment, Hazard Review, Review and Approval, Checklist, Environmental Risk, Assessment Team, Specifications, Related Records, and Log. The main content area shows details for a risk assessment with ID 1001, titled "Working in confined areas with social distancing". It lists the preparer as WILSON, Mike Wilson, and the status as DRAFT. The location is identified as "Main Boiler- 50,000 Lb/Hr".

Below the details, there is a table of risks. The table has columns for Hazard, Description, Consequence, Severity, Risk Ranking, and Mitigated Risk Ranking. Two risks are listed:

Hazard	Description	Consequence	Severity	Risk Ranking	Mitigated Risk Ranking
CONSPACE	Confined space				
DUST	Airborn dust				

Below the risks table, there is a section for "Precautions for CONSPACE". This section contains a table with columns for Precaution, Description, Organization, Site, and Precaution Confirmed? Date. Six precautions are listed:

Precaution	Description	Organization	Site	Precaution Confirmed? Date
CSPERMIT	Confined space permit required	EAGLENA	BEDFORD	<input type="checkbox"/>
BODYHR	Full Body Harnesses x2(entering and re	EAGLENA	FLEET	<input type="checkbox"/>
CSPERMIT	Confined space permit required	EAGLENA	FLEET	<input type="checkbox"/>
EXPLIGHT	Explosion Proof Light	EAGLENA	FLEET	<input type="checkbox"/>
FIREEXT	Fire Extinguisher	EAGLENA	FLEET	<input type="checkbox"/>
HORN	Horn	EAGLENA	FLEET	<input type="checkbox"/>

Preparation



Control



Compliance



Reporting



Permit to Work

Extend and improve the control of work to incorporate areas that may now have stricter access requirements.

In the new working environment there may be a need to extend the scope and use of permit to work systems. For example confined space permits may be more broadly applicable in a range of working environments where access has to be carefully managed. Permits may also be required for areas with defined social distancing requirements.

The Maximo HSE Permit to Work process is fully integrated with work management so that permits can be planned and directly raised from work orders where required improving visibility of work where a permit is required.

The screenshot displays the Maximo HSE Permit to Work system interface. The main header shows 'CONFINED SPACE PERMIT' with a sub-note: 'This permit is automatically suspended in the event of a site general alarm.' The form includes several sections:

- Permit Header:** Permit ID 1001, Description 'Remove compressor guide rail', Status 'REQUEST', Site 'BEDFORD', Owner 'MAINT', and Owner Group 'MAINT'.
- Permit Details:** Required Date '5/8/20 9:30 AM', Validity '8', Working Hours, and Units.
- Task Details:** Location 'Boiler Room Reciprocating Compressor', Asset, Physical Location, Area, Unit 'Unit 4', Zone Classification, Work Shift 'SHIFT1', and Grouping Code.
- Task Description:** 'Replace damaged compressor guide rail. All work to be carried out in accordance with social distancing guidelines.'
- Task Information:** Originating Work Order '1201 - Repair compressor guide rails', Originating Task, Activity Category 'Maintenance', Cross Area Counter Signature Required?, Isolation Certificate?, Isolation Specialist, and Reason for Isolation 'No isolation required'.



Hazardous Material Handling and Disposal

The amount of Hazardous waste generated as a result of Covid-19 required PPE use, must be disposed of in accordance with local regulations.

- Define Policy / Procedure according to regulations
- Train/Certify Personnel
- 'Operationalize' using Job Plan or Ticket Template
- Sensor-enabled Hazardous Waste Bins to trigger activity
- Incident Reporter provides quick capture of Improper Disposal
- Audit for regulatory compliance

The screenshot displays the 'Audit and Survey (OII)' application interface. The main form is titled 'Hazardous PPE Disposal Audit' with ID 1002. The form includes several sections:

- Metadata:** Type (AUDIT), Category (PROCESS), Classification, and Class Description.
- Details:** A rich text editor containing the text 'In process audit of permit to work system'.
- Organization:** Organization, Site, Owner, Owner Group (COVIDRES), Status (DRAFT), and Status Date (10/22/18 7:23 AM).
- Attachments:** A list of checkboxes for various audit types: Climate Survey?, Survey Format?, Template?, External Audit?, External Agency?, Vendor Audit?, and Vendor.
- Context:** A table listing related records:

Context	Certification
Location	Regulation
Asset	COVID19 > Safe Work Practices
Operating Policy	Certification Required?
Operating Procedure	Permit and Certificate Type
1005 > PPE WASTE DISPOSAL PROCEDURE	Technical Authority Type
Person	Certification
Supervisor	

At the bottom right, there are buttons for 'Select Permit and Certificate Type' and 'New Row'.



Regulatory Compliance

*Deep Cleaning Trigger
Automated Work Generation and
systematically capture compliance
artifacts*

- Scheduled
 - Generate work according to regulatory specified schedule
 - Systematically capture regulatory compliance data

- Event Driven
 - Safety Observation
 - Crowd Detection – WI
 - Occupancy Monitoring - WI

Work Order Tracking (Oil) Mike Wilson

Find Work Order

← List View Work Order Plans Assignments Related Records Actuals Safety Plan Log Failure Reporting Specifications Service Address Details Regulations Map

Work Order: 1340 Deep Cleaning Job Plan Site: BEDFORD Status: WAPPR

Regulations Filter 1 - 1 of 1

Regulation	Description	Regulation Number	Regulation Type	Regulatory Authority	Applies to Work Order?
COVID19	Safe Work Practices	123245	HEALTH	OSHA	<input checked="" type="checkbox"/>

Select Regulations New Row

Material Status Last Updated Flow Action Assist?

Completions

Job Details	Asset Details	Priority
Job Plan: DEEPCLEAN	Asset Up? <input type="checkbox"/>	Asset/Location Priority: 1
Job Plan Revision #	Warranties Exist?	Priority
Job Plan: DEEPCLEAN	Reforecast Pending? <input type="checkbox"/>	
Remarks		

Preparation



Control



Compliance



Reporting



Audit and Survey

The audit process is one of the most effective ways of verifying that safety management processes are operating effectively.

This capability can be deployed without any configuration work. Audit findings can be used to identify defect processes and track corrective actions. Example audits as follows:

- Readiness audits
- Procedural audits
- Behavioural audits

The screenshot shows the 'Audit and Survey (Oil)' interface. The main content area displays a table of questions for a 'Social distancing readiness audit' (Audit and Survey: 1001, Status: DRAFT). The table has columns for Line Number, Description, Sequence, and Section. The questions are as follows:

Line Number	Description	Sequence	Section
1	Are all safety procedures updated?	1	Procedure
2	Task risk assessments in place?	2	Procedure
3	New SOP circulated to all personnel?	3	Procedure
4	Safety screens in place?	4	Implement
5	Distance separation markers in place?	5	Implement
6	Separation zones clearly identified?	6	Implement
7	Training records complete?	7	Implement
8	PPE stock levels above safety level?	8	Implement

The screenshot shows a detailed view of a finding within the 'Audit and Survey (Oil)' interface. The finding is titled 'Training incomplete' (Finding: 1, Sequence: 1). The description of the finding is: 'After a check of training records it was found that 5 personnel with a need to access the site had not completed their training.' The finding is associated with the regulation 'Social distance guidelines' (IN125) and the question 'Training records complete?' (7). The interface includes a rich text editor for the finding description and a list of related regulations and questions.



Incidents and Investigations

- Support updated regulatory reporting requirements and improve the quality of reported data.
- Use the incident management process to track virus related incidents and illness. Investigations can be used to carry out root cause analysis of incidents. Identify lessons learned and drive correction action and improvements. Safety observations and near miss reports can be identified to support implementation of preventive measures that may alleviate potentially hazardous situations and working practices.
- Link to Maximo Worker Safety to manage incidents originating from wearable devices.

The screenshot displays the IBM Maximo Worker Safety interface. The top section shows the 'Create Incident (Oil)' form with the following details:

- What happened?** Social distancing guidance breached
- Affected Date:** 5/6/20 2:41 PM
- Incident Type:** OBSERVATION
- Incident Category:** HIGH POTENTIAL
- Safety Observation Type:** UNSAFE ACT

The 'Details' section contains a text description: "While performing a lifting operation two operatives were in close contact. Separation was estimated to be less than 1 metre. Neither operative was wearing a face mask at the time."

The 'Reported Date' is 5/6/20 2:41 PM. Below this is an 'Attachments' section with a table:

Document	Description
There are no rows to display.	

The bottom section shows the 'Investigations (Oil)' interface for investigation 1129. The 'Causes' table is as follows:

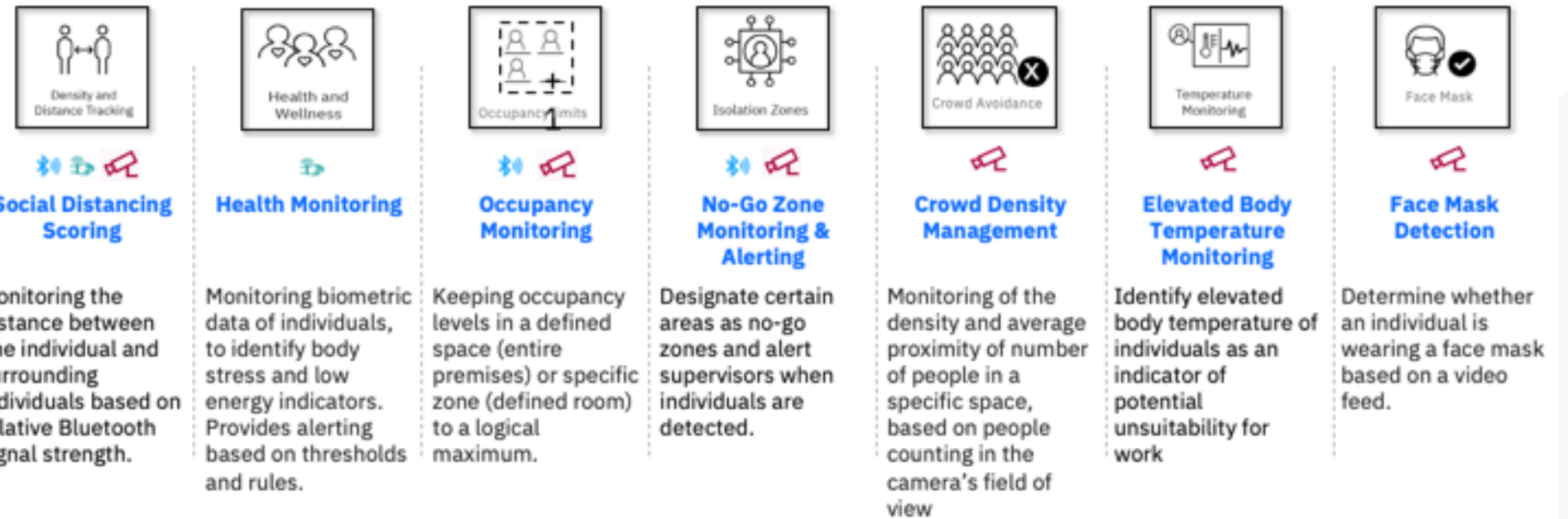
Line Number	Why?	Cause	Related Line Number	Is a Root Cause?
1	Why were the guidelines breached?	Lifting operation required close contact		<input type="checkbox"/>
2	Why did the lift require close contact?	It was not properly planned	1	<input type="checkbox"/>
3	Why was the lift not properly planned?	Social distancing procedure was not ac	2	<input type="checkbox"/>
4	Why was procedure not followed?	Planner not aware of procedure	3	<input type="checkbox"/>
5	Why was the planner not aware?	Planner had not received training	4	<input checked="" type="checkbox"/>
6	Why was the planner not aware?	Guidelines sent to incorrect distribution	4	<input checked="" type="checkbox"/>






Capturing Incident Details - Sources

Solution definition: Worker Insights combines latest sensor technologies with analytics to provide insights and monitor potential risks

Worker Insights utilizes inputs from optical and thermal imaging cameras, Bluetooth beacons and mobile phones to provide analytical insights to workers and supervisors for a wide range of critical use cases



Solution based on :  Bluetooth Beacons and Smart Phones  Wearables  Cameras



Incident Reporting – Covid-19 OSHA – RIDDOR Reporting

Capture Covid-19 Employee Incidents

- Event Details – Quick Insert
- Ticket Template Standardized Response Plan - Repeatable Controlled Process
- Impacted Persons - ID Contract Tracing and drive required actions
- Sequence of Events - ID Areas for Deep Cleaning and drive required actions
- Generate OSHA Style 300 / 300A report
- Return to Work Certification

Injury and Illness Incident Report

Reporting

Page 1 of 2

Log of Work-related Injuries and Illnesses

Identify the Person			Case Description			Classify the Case				Enter the Number of Days the Injured Worker or Ill Worker was:		Check the "Injury" Column or Choose One Type of Illness					
(A)	(B)	(C)	(D)	(E)	(F)	Death	Days Away from Work	Job Transfer or Restriction	Other Recordable Cases	Away from Work	On Job Transfer or Restriction	Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	Other Illnesses
Case Number	Employee Name	Job Title	Date of the Injury or Onset or Onset of Illness	Where the Event Occurred	Describe the Injury or Illness, Parts of the Body Affected, and Objects / Substances that Directly Injured or Made Person Ill	(1)	(2)	(3)	(4)	(1)	(2)	(1)	(2)	(3)	(4)	(5)	(6)
100	Tony Redding		May 23, 2018 11:00 AM	LA	Covid-19 Diagnosis	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16 Days		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
100	KACHER		May 6, 2018, 1:00 PM	TORTERH	Fingers on left hand were crushed Crushing Injury Fingers the dough rolling machine	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		02 Days	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

From: May 1, 2018 To: May 9, 2018

Organization: EMALINA

Site(s): BEDFORD

City, State, Zip: Bedford, WA, 91730

Zip: 02760

Type of Treatment: Emergency Room

What Object or Substance Directly Harmed the Employee?
Covid-19 Virus

If the Employee Died, what was the Date of Death?

Was working with Tony on 5/24.

Safe Harbor

General Use

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.