

# **Effectiveness of Resource Dissemination to Oregon COVID-19 Construction Task Force Stakeholders**

**March 22, 2021**

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## **Purpose and Aims**

The purpose of this project was to use an online survey to identify the effectiveness of different routes of communicating and disseminating resources developed by the [Oregon Construction COVID-19 Task Force](#) on better practices to prevent the spread of COVID-19 in Oregon (and in some cases SW Washington) construction sites. This survey was administered through Qualtrics and approved by OHSU Institutional Review Board (IRB).

Dede Montgomery, MS, CIH, Oregon Institute of Occupational Health Sciences and Oregon Healthy Workforce Center, has been an active member of this task force and is an IPA through NIOSH to work on pandemic workforce issues. Through this survey, we hoped to learn what the primary sources of reliable information they (respondents) have seen about COVID and if they put into effect any of the steps recommended by the resources. Construction safety leaders and project managers were contacted via email and in virtual meetings through current work networks, including labor unions, Oregon builder and professional associations, and regularly-occurring participatory meetings (Oregon Construction Advisory Committee, Oregon COVID-19 Construction Task Force) to inform the organizations of the purpose of the online survey, and to request their participation by both completing the survey and sharing the survey URL via email and other electronic communications with their workforce. All Oregon construction and trades workers and managers were encouraged to take part in the survey. Individual names or identifiable information were not recorded in the survey.

### **Project Aims:**

- a) Determine if Oregon construction companies, leaders and workers are familiar with the Oregon COVID-19 Construction Task Force website and its “better practice” recommendations.
- b) Evaluate whether the website resources have been accessed and found helpful.
- c) Learn about key sources of information considered useful about COVID-19 and workplace exposure prevention other than the OR construction COVID task force website.

*(Optional - B. Hypothesis: Oregon associations affiliated with the Task Force or union members will be most knowledgeable about the website resources and to confirm having accessed them)*

## **Background**

The Oregon Construction and Trades Industry was considered as “essential work” when Oregon Governor Brown issued the Executive Order 20-12 *Stay Home, Save Lives* on March 23, 2020. Some other states did not allow all construction and trades work to universally continue. Because of this allowance, industry professionals and stakeholders began to collaborate and formed the Oregon COVID-19 Construction Task Force, with the intention of banding state safety and health leaders and regulators together to develop safe procedures and jointly lead voluntary informational walkthroughs at Oregon’s construction projects and workplaces to enhance procedure development.

In June, Dede Montgomery, MS, CIH of OHSU’s Oregon Institute of Occupational Health Sciences was asked to join the Task Force and to share web resource time to develop a webpage (on OHSU server) to house resource documents and tips, and technical safety and health information. This request was made due to the required timeliness needed to disseminate practices, and the inability of other partners to house the resources so quickly (see: <https://www.ohsu.edu/oregon-institute-occupational-health-sciences/oregon-covid-19-construction-task-force-resources>). Neither Montgomery nor OHSU received any compensation for participation, agreeing to participate voluntarily. Dede Montgomery only participated in virtual meetings and did not join project walk throughs. Ms. Montgomery joined other Task Force members to present nationally on this project for NIOSH/CPWR (<https://www.youtube.com/watch?v=8PTJGOBW-rg&feature=youtu.be>) in September 2020, and at the Northwest Occupational Health Conference in October 2020. Ms. Montgomery is currently on a one-year Intergovernmental Personnel Agreement (IPA) with the National Institute of Occupational Safety and Health (NIOSH) at 0.15FTE to support safe return of workers in Oregon and the Pacific NW during the pandemic.

## **Study Design**

A one-time anonymous survey containing 15 questions was developed via Qualtrics. Questions were crafted by Dede Montgomery, and vetted and edited by PI Kent Anger, and coordinators for the Oregon COVID-19 Construction Task Force.

All members of Oregon's construction and trades industry were invited and encouraged to complete the survey. The requisite to answering the survey was to be a member of the construction and trades industry based in Oregon or Washington, and positive affirmation to the first survey question was taken as confirmation of meeting this requirement. Working age adults older than 18 were invited to participate in this study. This survey was conducted using Qualtrics.

Survey participants were invited to participate in the Qualtrics survey using multiple methods, including:

- Invitation to Oregon COVID-19 Task Force member email listserve with invitation to participate and share with other members of their organizations and project contractors/subcontractors.
- Invitation by email to additional labor and construction association contacts (e.g., Oregon Home Builders).
- *Oregon and the Workplace Blog* announcement aimed at the safety, health and well-being community, and sharing via Oregon Institute of Occupational Health Sciences Twitter, Facebook and LinkedIn channels.
- Announcement of survey purpose with invitation to attend at related safety association meetings (Oregon Construction Advisory Committee, Oregon COVID-19 Construction Task Force).
- This description that was used within email and blog invitations was: "Dear members of Oregon Construction and Trades Industry, We invite you to participate in an anonymous survey to evaluate how well the guidelines developed by the Oregon Construction COVID-19 Task Force were shared within the Oregon and SW WA construction and trades industry. Participation in this survey will help us better understand how to effectively share pertinent safety and health information to Oregon construction and trades safety and health leaders and workers. We appreciate your taking the approximately three minutes to complete the survey."

## Findings

### About the respondents

56 individuals accessed the survey through the shared anonymous link and agreed to participate in the survey as queried in question #1. One respondent did not work on projects in Oregon. The largest percentage of respondents identified as safety professionals (53%), followed by Project manager/foreman (17%), Human Resources (8.5%), and Owner (4.3%). 17% identified as none of the above and listed other roles (including safety coordinator, company executive, education and others). Middle and large employers were more likely to be represented as follows: Employers with between 100-500 employees (40.4%), >500 employees (36.2%), <25 employees (12.8%), and 25-100 employees (10.6%). The largest percentage of respondents work in commercial construction (57.1%)

followed by trade specialty (23.2%), and residential construction (5.6%) with 14.3% of respondents selecting other (industrial construction, engineering/architecture, government, tech, iron workers, electrical, education, regulatory agency). Listed trade specialties included: Steel Erection, Commercial Roofing, Pipefitters, Carpentry & Plumbing, Mechanical, Sheet Metal, Construction training, Deep Foundation and Excavation, Mech and Arch, Glaziers, Electrical, Sheet Metal Fab and Install, Plumbing and HVAC. A majority of respondents were represented by a craft or trade union (58.7%) while 34.8% were not, and 5.6% reported representation by other union.

### **Respondent Knowledge**

Approximately 63% of respondents were familiar with the Oregon COVID-19 Task Force website to varying degrees, while 37% of respondents had never heard of it. 30% of those positively acknowledging familiarity with the website had heard about it but didn't know much about it, 13% were familiar with it and its resources, 13% were familiar with it and followed best practices shared by the task force, and 6.5% were members of the Task Force. Approximately 52% of the respondents had visited the website at least once with 17.4% having downloaded or used website resources or shared practices, and 47.8% had not visited the website. Of those who had used information provided on the webpage, 45% had shared the information with coworkers, 30% shared the information with their team and implemented the better practices on jobs, 15% used the information to better inform themselves, and 5% viewed it but had not implemented the tips.

### **Sources of Information**

When asked to rank order sources for information about safety work practices related to the pandemic, the largest percentage of respondents rank ordered Oregon OSHA as a top pandemic safety information source (41.9% as first, 45.2% as second and 35.5% as third) followed by Oregon Health Authority (22.3% as first source, 29% as second and 9.7% as third) with the Oregon COVID Task Force webpage following as third in importance (16% as first source, 16% as second, 22.6% as third). Finally, NIOSH was also recognized as an important source of COVID-19 safety information (receiving 13% as first source, 9.7% as second, and 35% as third).

### **Implementation**

When respondents were given the opportunity to specify what changes they have found most helpful in reducing COVID infection concerns and exposures at their worksites they listed the 31 items as listed below:

1. Management leadership and employee participation to reduce exposure.
2. Forklift use and sanitizing behind switch hands.
3. Specific building entrances, mask wearing, spatial distancing, pre-visit temperature and questionnaire
4. Instituting covid marshalls who are third party and audit the sites with our trade leaders
5. Sanitation and repeated education
6. Wearing masks and keeping our workers 6' apart.
7. Effective use of face coverings and social distancing adherence - LEADING BY EXAMPLE
8. Regular consistent communication, requiring masks, sanitization and social distancing, being thoughtful in approaching how the work gets done with minimal exposure - ie.. keeping same work group of an area.
9. Evaluation of students before and during training
10. Continuing to emphasize social distancing and use of masks/face-coverings when appropriate.
11. Daily health check before work
12. We plan our work differently to allow for social distancing. We also work our crews in non rotating schedules to keep any exposures to small pods of workers.
13. Social Distancing
14. trade scheduling/rotation
15. Stay home when you may have been exposed.
16. wearing masks
17. Masks, Distancing
18. Increased enforcement of wearing masks
19. Hand wash stations, gloves, masks, hand sanitizer at all sites.
20. To socially distant workforce inside trailers/break areas during breaks/lunches. Staggered shifts, brought more trailers in for space to hold employees.
21. Aside from the standard face coverings and distancing protocols--We implemented a full-time disinfecting crew that washes down all shop and tools and equipment on a continual basis throughout the day.
22. no changes
23. Use of technology to substitute against normal work practices within six feet.

24. More cleaning, use of masks
25. Disinfecting frequency and physical distancing
26. Re-scheduling to allow for more time due to reduced headcount to allow for social distancing. Phasing the project to reduce trade stacking.
27. Far too many to list
28. none
29. Distancing, face coverings, hand washing, site cleaning and disinfection, check-in protocols, training
30. none
31. Continuous cleaning and sanitizing of commonly shared surfaces

When respondents were given an opportunity to share what they felt their greatest needs were to improve workplace or site safety during the pandemic, they shared the following 28 items:

1. Social distancing is something monitored and coached.
2. Final wording on final rule
3. Compliance
4. Coaching behaviors and misleading information.
5. Accurate and timely information.
6. prevention of slips, trips and falls - focusing on them
7. Feel like we have it handled. The recent OR OSHA guideline assessment was a good test.
8. Leadership from our government
9. Consistency of application and transparency for all involved at the project site should someone get infected with COVID.
10. Masks make safety glasses fog. We need help solving this problem
11. We are still working to create a separation between trades without losing time on the schedule.
12. Consistent messaging from ALL parties (union reps. & subs mgmt especially) as to need for social distancing & mask use.
13. antifog safety glasses at a reasonable price.
14. properly wearing masks
15. Compliance

16. Supplies
17. Scheduling of projects to avoid trade stacking. Need to allow for >6 feet distance.
18. Consistency across all contractors and worksites would be an enormous step in the right direction.
19. using a QR code for check in instead of paper. Also, arranging work times for craft to get their work completed.
20. Face covering enforcement
21. Cleaning supplies, PPE
22. Working safely while maintaining 6'
23. Buy in from workers to follow PPE/social distancing guidelines.
24. Accurate information and employee cooperation
25. stop the bullshit
26. Staying vigilant
27. Ways to work close to each other for specific tasks. Ways to allow workers to work without mask when needed. As far away from others or activities that require eye protection and the mask creates glass fogging.
28. To get workers to stay home when they are sick and not come to work

When asked if there are other preferable ways to receive news about staying healthy during the pandemic, respondents made the following suggestions:

1. Application for smart phones per region or state
2. Safety professionals focused on finding information; using CDC and Harvard/Brown/Johns Hopkins forums since national company.
3. n/a
4. No, our Regional Safety Manager keeps informed.
5. Email is best. We use multiple sources.
6. Not really
7. No; There's plenty of information already available.
8. Don't know
9. I would like industry specific email updates regarding workplace best practices.

10. The OHA daily texts with updates are helpful & consistent. I opted to sign in, but it's a good delivery vehicle for updates & changes to protocols.
11. email
12. emails
13. Email blasts
14. There is a ton of information flooding in every day. Hard to sift through it all if there was more.
15. no
16. More COVID construction related data. Like case rates per 100 employees, etc.
17. No
18. Podcasts
19. There are plenty of sources, but finding good, accurate sources is the need.
20. none
21. No
22. I think the information should be released to through the local safety organizations and local unions.
23. No. I feel that OHA daily emails have provided awesome information on all aspects of the pandemic.

### **Other Correlations**

While recognizing the small sample size, the data was examined to look for correlations between employer size and Task Force webpage knowledge, and union memberships and Task Force webpage knowledge.

Employer size as related to webpage knowledge was not statistically significant nor was trade union membership. See data below following Q13. However, it appears that the larger companies both know about the resource and are following the guidance as compared to the small companies. And there appears to be some benefit to being a union member and having access to information that non-union members might not be otherwise aware of.

### **Takeaways**

The Oregon COVID-19 Task Force provided useful and relevant information for construction sites to address pandemic exposure issues and controls. Construction industry safety professionals and other personnel successfully shared this information within their

networks and at their jobsites, including multiemployer sites. Respondents to the survey, while a small dataset, appeared to have both knowledge and interest in effective infection control practices on job sites. Oregon construction partners would do well to team with Oregon OSHA for release of information on health and safety information, specifically pertaining to COVID-19, and potentially other issues, given the reliance by employers/employees on this statewide regulator for relevant worksite information. Receiving information by email appears to be a preferred method for staying on top of news and tips related to workplace safety and health, although some may utilize phone apps with relevant information if available.

### Supporting Data (top result highlighted)

#### Q2 - Where are your current projects located? (n=46)

(note: Q1 confirmed agreement to participate and details about the survey)

#	Answer	%	Count
1	Only Oregon	26.09%	12
2	Oregon and Washington	34.78%	16
3	Oregon and other states	36.96%	17
4	I don't work on projects in Oregon	2.17%	1
	Total	100%	46

#### Q3 - What best describes your job/role within your organization? (n=47)

#	Answer	%	Count
1	Safety professional	53.19%	25
2	Project manager or foreman	17.02%	8
3	Owner	4.26%	2
4	Human resources	8.51%	4
5	Construction or Trades worker	0.00%	0
6	Labor representative	0.00%	0

7	Other	17.02%	8
	Total	100%	47

## Other

### Other - Text

Safety Coordinator

Executive team

Company Executive

Education

Logistics

Development consultant to owners

Project Development / Management

## Q4 - What is the total number of employees within your organization (including part-time and seasonal)? (n=47)

#	Answer	%	Count
1	<25	12.77%	6
2	25-100	10.64%	5
3	>100 -500	40.43%	19

4	>500	36.17%	17
	Total	100%	47

**Q5 - What best describes your organization (n=56)**

#	Answer	%	Count
1	Commercial construction	57.14%	32
2	Residential construction	5.36%	3
3	Residential remodeling	0.00%	0
4	Trade specialty (please specify)	23.21%	13
5	Other	14.29%	8
	Total	100%	56

Trade specialty (please specify)

Steel Erection

Commercial Roofing

Pipefitters

Carpentry & Plumbing

Mechanical

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Sheet Metal

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Construction training

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Deep Foundation and Excavation

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Mech and Arch

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Glaziers

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Electrical

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Sheet Metal Fab and Install

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Plumbing and HVAC

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## Other

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Industrial Construction

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Engineering/Architecture

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Commercial, Industrial, Transportation Electrical

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Government

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Construction Education

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Tech

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Ironworkers

Regulatory agency

**Q6 - Are you represented by a craft or trade union? (n=46)**

#	Answer	%	Count
1	Yes	58.70%	27
2	Unsure	0.00%	0
3	No	34.78%	16
4	Other union	6.52%	3
	Total	100%	46

Other union - Text

Our Craft workers are from Local 290

I am not; we do employ union carpenters and laborers.

School

**Q7 - Are you familiar with the Oregon COVID-19 Construction Task Force resource webpage? (n=46)**

#	Answer	%	Count
1	No, never heard of it.	36.96%	17
2	Yes, have heard of it but don't know very much.	30.43%	14
3	Yes, am familiar with it and its resources.	13.04%	6
4	Yes, I am familiar with it and follow best practices shared by the Task Force.	13.04%	6
5	Yes, I am a member of a Task Force organization and involved in sharing these resources.	6.52%	3
	Total	100%	46

**Q8 - Have you visited the Oregon COVID-19 Construction Task Force resource webpage (see it at: <https://www.ohsu.edu/oregon-institute-occupational-health-sciences/oregon-covid-19-construction-task-force-resources>) (n=46)**

#	Answer	%	Count
1	No	47.83%	22
2	Yes, once.	15.22%	7
3	Yes, more than once but haven't downloaded or used the practices or resources.	17.39%	8
4	Yes, and have downloaded or used the practices and resources.	17.39%	8
5	Other	2.17%	1
	Total	100%	46

Other - Text

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Not yet, but I will now

**Q9 - How have you used the information provided by the Task Force on the webpage? (select the best answer)  
(n=20 including only those answering “yes” to Q8)**

#	Answer	%	Count
1	I have viewed it but not implemented the tips.	5.00%	1
2	I have the used the information to better inform myself about what to expect on my sites.	15.00%	3
3	I have shared the information with others I work with.	45.00%	9
4	I have shared the information with our team and we have used some of the better practices at our jobs.	30.00%	6
5	Other	5.00%	1
	Total	100%	20

Other - Text

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Our company and its construction trades have shared our management practices with the OR task force.

**Q10 - Where has your organization searched for information about safety work practices as related to the pandemic? Please place in priority order**

#	Question	1		2		3		4		5		6		7		Total
1	Oregon Construction COVID-19 Task Force and website.	16.13%	5	16.13%	5	22.58%	7	29.03%	9	12.90%	4	3.23%	1	0.00%	0	31
2	Oregon OSHA	41.94%	13	45.16%	14	12.90%	4	0.00%	0	0.00%	0	0.00%	0	0.00%	0	31
3	NIOSH (National Institute of Occupational Safety and Health)	12.90%	4	9.68%	3	35.48%	11	22.58%	7	12.90%	4	6.45%	2	0.00%	0	31
4	CPWR (Center for Construction Research and Training)	0.00%	0	0.00%	0	3.23%	1	29.03%	9	41.94%	13	16.13%	5	9.68%	3	31
5	Oregon Health Authority (OHA)	22.58%	7	29.03%	9	9.68%	3	6.45%	2	29.03%	9	3.23%	1	0.00%	0	31
6	My Union	0.00%	0	0.00%	0	6.45%	2	9.68%	3	0.00%	0	58.06%	18	25.81%	8	31
7	My trade association	6.45%	2	0.00%	0	9.68%	3	3.23%	1	3.23%	1	12.90%	4	64.52%	20	31

**Q11 - What changes have you made or seen made at your worksites that you have found most helpful for reducing COVID infection concerns and exposure?**

Forklift use and sanitizing behind switch hands.

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Specific building entrances, mask wearing, spatial distancing, pre-visit temperature and questionnaire

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Instituting covid marshall's who are third party and audit the sites with our trade leaders

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Sanitation and repeated education

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Wearing masks and keeping our workers 6' apart.

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Effective use of face coverings and social distancing adherence - LEADING BY EXAMPLE

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Regular consistent communication, requiring masks, sanitization and social distancing, being thoughtful in approaching how the work get's done with minimal exposure - ie.. keeping same work group of an area.

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Evaluation of students before and during training

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Continuing to emphasis social distancing and use of masks/face-coverings when appropriate.

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Daily health check before work

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We plan our work differently to allow for social distancing. We also work our crews in non rotating schedules to keep any exposures to small pods of workers.

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Social Distancing

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trade scheduling/rotation

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Stay home when you may have been exposed.

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wearing masks

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Masks, Distancing

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In creased enforcement of wearing masks

Hand wash stations, gloves, masks, hand sanitizer at all sites.

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To socially distant workforce inside trailers/break areas during breaks/lunches. Staggered shifts, brought more trailers in for space to hold employees.

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Aside from the standard face coverings and distancing protocols--We implemented a full time disinfecting crew that washes down all shop and tools and equipment on a continual basis throughout the day.

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no changes

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Use of technology to substitute against normal work practices within six feet.

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More cleaning, use of masks

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Disinfecting frequency and physical distancing

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Re-scheduling to allow for more time due to reduced headcount to allow for social distancing. Phasing the project to reduce trade stacking.

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Far too many to list

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none

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Distancing, face coverings, hand washing, site cleaning and disinfection, check-in protocols, training

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none

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Continuous cleaning and sanitizing of commonly shared surfaces

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Management leadership and employee participation to reduce exposure.

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## **Q12 - What are your greatest needs to improve workplace or site safety during the pandemic?**

Social distancing is something monitored and coached.

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Final wording on final rule

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Compliance

Coaching behaviors and misleading information.

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Accurate and timely information.

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prevention of slips, trips and falls - focusing on them

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Feel like we have it handled. The recent OR OSHA guideline assessment was a good test.

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Leadership from our government

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Consistency of application and transparency for all involved at the project site should someone get infected with COVID.

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Masks make safety glasses fog. We need help solving this problem

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We are still working to create a separation between trades without losing time on the schedule.

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Consistent messaging from ALL parties (union reps. & subs mgmt especially) as to need for social distancing & mask use.

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antifog safety glasses at a reasonable price.

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properly wearing masks

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Compliance

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Supplies

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Scheduling of projects to avoid trade stacking. Need to allow for >6 feet distance.

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Consistency across all contractors and worksites would be an enormous step in the right direction.

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using a QR code for check in instead of paper. Also, arranging work times for craft to get their work completed.

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Face covering enforcement

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Cleaning supplies, PPE

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Working safely while maintaining 6'

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Buy in from workers to follow PPE/social distancing guidelines.

Accurate information and employee cooperation

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stop the bullshit

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Staying vigilant

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Ways to work close to each other for specific tasks. Ways to allow workers to work with out mask when needed. Asin far away from others or activities that require eye protection and the mask creates glass fogging.

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To get workers to stay home when they are sick and not come to work

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N/A

**Q13 - Are there other ways that would be better for you to receive news about staying healthy during the pandemic?**

Application for smart phones per region or state

Safety professionals focused on finding information; using CDC and Harvard/Brown/Johns Hopkins forums since national company.

n/a

No, our Regional Safety Manager keeps informed.

Email is best. We use multiple sources.

Not really

No; There's plenty of information already available.

Don't know

I would like industry specific email updates regarding workplace best practices.

The OHA daily texts with updates are helpful & consistent. I opted to sign in, but it's a good delivery vehicle for updates & changes to protocols.

email

emails

Email blasts

There is a ton of information flooding in every day. Hard to sift through it all if there was more.

no

More COVID construction related data. Like case rates per 100 employees, etc.

No

Podcasts

There are plenty of sources, but finding good, accurate sources is the need.

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none

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No

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I think the information should be released to through the local safety organizations and local unions.

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No. I feel that OHA daily emails have provided awesome information on all aspects of the pandemic.

## Correlations between employer size, union membership and knowledge

		Q4: What is the total number of employees within your organization (including part-time and seasonal)?				
		Total	<25	25-100	100-500	>500
Q7: Are you familiar with the Oregon COVID-19 Construction Task Force resource webpage?	Total Count (Answering)	46.0	5.0	5.0	19.0	17.0
	Yes - am Task Force organization member (share resources)	6.5%	0.0%	0.0%	10.5%	5.9%
	Yes - follow best practices shared by the Task Force.	13.0%	20.0%	0.0%	10.5%	17.6%
	Yes - familiar with it and its resources.	13.0%	0.0%	0.0%	10.5%	23.5%
	Yes - but don't know very much.	30.4%	20.0%	60.0%	36.8%	17.6%
	No, never heard of it.	37.0%	60.0%	40.0%	31.6%	35.3%
Overall Stat Test of Percentages		0.7				

		Q6: Are you represented by a craft or trade union? - Selected Choice			
		Total	Yes	No	Other union
Q7: Are you familiar with the Oregon COVID-19 Construction Task Force resource webpage?	Total Count (Answering)	46.0	27.0	16.0	3.0
	Yes - am Task Force organization member (share resources)	6.5%	3.7%	12.5%	0.0%
	Yes - follow best practices shared by the Task Force	13.0%	14.8%	12.5%	0.0%
	Yes - familiar with it and its resources	13.0%	14.8%	6.3%	33.3%
	Yes - but don't know very much	30.4%	37.0%	25.0%	0.0%
	No, never heard of it	37.0%	29.6%	43.8%	66.7%
Overall Stat Test of Percentages		0.62			

