COVID-19
Guidance on Current and Future Management
V1.0 June 2022
This document contains recommendations from the IADC Health Subcommittee that developed a systematic risk assessed approach to be used as a standard guide appropriate COVID response to ALARP given local health and business continuity risk.

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Suggested revisions to the guidelines are invited and will be considered along with future changes to its content. Suggestions should be submitted to the Health Subcommittee Co-Chairs C/O International Association of Drilling Contractors, 10370 Richmond Avenue, Suite 760, Houston, TX 77042. (713-292-1945)

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Purpose and Scope
The overwhelming influence on our industry in the last 2+ years has been the COVID-19 Pandemic. Since January 2020 it has created significant drilling business disruption via restricted movement of employees, supply chain constraints and need to respond to highly variable and stringent regulatory requirements. The body of work and resources IADC members have invested in the response has been considerable. This has demonstrated a benefit to have a centrally agreed and industry aligned approach to COVID control as the Pandemic progresses to an endemic state and it is becoming reasonable to de-escalate prevention measures.

The aim of the document is to provide an industry relevant COVID response playbook for the future. This will provide clarity to IADC members in an uncertain time and assist them to synthesize and simplify complex public health information to ensure the ongoing safety of the workforce. This shall be provided in the form of recommended thresholds and actions which will align IADC members to a common understanding of As Low As Reasonably Practical (ALARP). The document will raise awareness that the future of virus is not yet certain, and companies need to be ready to escalate and de-escalate responses to COVID-19 and to continuously maintain Pandemic Preparedness. This centralised alignment will allow IADC members to strategically negotiate their risk management strategies and activities with clients and regulators.
Pandemic Natural History

Pandemics are a natural phenomenon that have occurred at infrequent and unpredictable intervals throughout human history. They arise when a new pathogen emerges and spreading around the world. Most are *zoonotic* diseases, meaning diseases that spread from animals to humans. COVID-19 is the most recent example, but other significant examples include influenzae, HIV, Lassa fever, MERS, Monkeypox and Ebola.

When a virus first emerges it may have characteristics that cause significant human health impacts including hospitalisation and death. These are termed high consequence infectious diseases (HCIDs). Once a virus is embedded in human populations and animal reservoirs they cannot be eliminated and will continue to circulate despite significant control efforts. This is termed an “Endemic” scenario which means it will always be present but in a more stable and predictable form. Most viruses will mutate and generate “variants” over time, but this also creates an adaption to their human hosts. Over time the severity of health impacts tends to stabilize to minimal illness.

At the time of writing in June 2022 the COVID-19 dominant strain globally is still Omicron and its sub-variants. Research has shown despite vaccination some persons are still vulnerable to COVID infection and will experience hospitalizations and potentially death. These are identified by the World Health Organisation (WHO) as

1. The immune naïve (those who have never had a vaccine or an infection)
2. The elderly, particularly those > 80 years
3. The otherwise frail with unmanaged chronic health conditions and/or reduced immune function

IADC member workforces as less likely to have these vulnerability characteristics. Companies have the ability to determine individual worker health risk via a combination of

- Vaccination status
  And
Crisis Models
There are many models of Crisis Management. Jacques relational model (Jacques, 2007) applies well to the COVID pandemic situation as it has required processes and activities that have overlapped or occurred simultaneously. The need for barriers in response to current risk has ebbed and flowed over time and across different areas.

By understanding the current crisis level in an operating area, IADC member organisation leaderships can allocate appropriate levels of resources to mitigate crisis-related losses. This model also demonstrates major learnings of this COVID-19 Pandemic, that once significant threat subsides companies must continue to maintain awareness and preparedness for future infectious and other health crisis threats.
**“Living With Covid” Time for Threshold Changes**

Crisis incident management must at some point de-escalate to a post-crisis management phase. The globe is moving to an acceptance of the virus, but this is only the end of the crisis chapter. It will not be eradicated and has the potential to mutate significantly and return to a significant population health threat. Widespread access to vaccination in many countries has demonstrated a decoupling of severe health impacts despite high case rates. At the time of writing many nations have signaled intent or begun de-escalating national regulatory requirements. Global political and business leaders have aligned to this by raising their tolerance of health impact to newly defined “socially acceptable” levels. This has allowed re-established previous living and working patterns.

Governmental removal of mask mandates, opening indoors venues to full capacity and ceasing proof-of-vaccination requirements creates new societal norms. Workplace protections will not work if the workforce is unwilling to adopt them consistently. However, reducing barriers may foreseeably lead to surges health risk and potential need to re-establish these same barriers. Companies need to maintain flexibility of the infection barrier systems and explain to their workforce that current de-escalations are performed based on risk. Future re-escalations may also be required, based on health and/or disruption to operations risk.

At all times drilling companies should recognise the limits of scientific knowledge of the COVID-19 virus including an inability to predict future evolutions. The reasons for IADC Health Subcommittee to advise the shift away from Crisis Phase is based on

- The biological behavior of COVID-19. There will always be a background positive case rate if it is tested for.
- Many nations are moving from total case rate metrics to that of hospitalisation and death metrics.
- Deaths attributable to COVID-19 will continue to occur but are likely to have less media interest. Societies are moving into an acceptance norm for the deaths of vulnerable people.

At all times safe de-escalation requires ongoing surveillance of virus impacts in the operating communities, coupled with a detailed knowledge of the nationally based legal requirements for COVID management.
Recognising Mental Health Impacts of Crisis Phase Controls

The Pandemic has had mental health impacts on much of the globe that has widely been described as a sense of overwhelm. For drilling industry workers in addition to social lock downs, health fears for self and family, strains on relationships and repeated uncomfortable testing many drilling industry workers have had to endure repeated quarantine periods and extended hitches due to travel restrictions. They have been repeatedly cut off from natural sources of companionship and support. This is being recognised as its own phenomenon termed “Isolation trauma”.

As the industry initially faced drops in demand there were also impact on job security creating genuine fears regarding the future. Perceptions of job insecurity create knock on effects including fear of the unknown including re-training, potential financial hardship, loss of “way of living” and a potential need to leave established residences to pursue work options. In an industry known for its pragmatism there is the added complication of a historical culture where mental health issues are stigmatized and perceived as personal weaknesses. Studies have shown up to 40% of remote site workers experienced suicidal thoughts on rotation some or all the time (ISOS Foundation 2021)

The discussion of worker mental health management is beyond the scope of this guidance and will be addressed as a separate Health Subcommittee document. The key point for IADC members is to recognise many workers have faced significant mental health strains during the Pandemic and the impacts are likely to continue to present over the next 5 - 10 years. Continuous adherence to the crisis phase response will only add to the already significant negative impacts on mental health. Embracing de-escalations when possible will allow workforce to re-establish familiar living and work patterns and minimise these impacts.
It is reasonable to expect a future with tiered system of response, with the stringency of public-health measures titrated to current viral impacts and governments themselves moving to a gradations of policy approach. The Health Subcommittee recommend COVID-19 infection control actions are based on the standard hierarchy of controls model. If widely adopted, it will assist in discussions across companies and help guide ALARP preventions. This is analogous to extreme weather categorization and response. Much of the time, life will proceed as usual, with surveillance systems in place and tools on standby. As risk rises additional protective barriers will be used to further mitigate change in risk.

1. **Elimination** – for endemic infections including COVID-19 this is not possible.

2. **Substitution -> Vaccination**: The health risk to individuals depend on their personal vulnerability. There is clear scientific evidence that COVID-19 immunity is protective against severe acute health impact. COVID vaccination and prior COVID infection of workforces are an accurate measure of their personal risk.
There is a still-evolving understanding of the duration and potency of vaccinations but going forward they are highly likely to continue to have a central role to play as a baseline of protection.

3. **Engineering** – Ventilation with assurance of indoor air quality has been scientifically confirmed as a key infection control measure. Regular workplace assessments should be performed to ensure the air quality maintenance systems are effective. Investing in systems for decontaminating air is a rational as high air-quality standards creates a constant and invisible control for COVID-19, other respiratory illnesses and protects general worker health from all respiratory hazards.

4. **Administration**

**Maintenance of Healthy Workers: Medicals** Worker health status can be assessed through a regular medical fitness assessment program. Those with poor baseline health or significant risk factors including Obesity can be counselled and managed to better health and overall reduced COVID health risk.

**Maintenance of personal hygiene standards** Simple measures such as routine hand and respiratory hygiene behaviours (cover your cough, do not attend when unwell) should have ongoing promotion and the company to ensure availability of hygiene consumables to comply. Adherence to protective behaviors are personal risk-based decisions. As viruses elude our senses, the dangers are harder to gauge. Leadership demonstration of basic hygiene as a personal value and workplace expectation will drive ongoing personal adherence of the workforce.

**Maintenance of Prepared Workplaces:** Site based teams including medics should maintain awareness of acute infectious threats and continue to perform Infectious emergency response Drills to maintain skills.

5. **PPE** – In business-as-usual routine, use of masks is not recommended unless there is a legislative requirement to do so. Remote locations should continue to hold stockpiles of appropriate PPE, testing kits and if required medications to allow an initial response to an unexpected case rates surge or severe impact.

**BAU Other:** The capacity and demand on local health services should also remain under review to understand the level of potential support in the community including ICU support and effective antiviral treatments.
De-escalation and Re-escalation: Recommend Thresholds

The advised threshold triggers represent a recommended risk appetite. Each company should determine action triggers against its own internal value set and local operating context. Regulatory disruption to operations when a COVID positive case arises continue to be highly variable and controls may need to remain higher to protect against business continuity risk. The mechanics of the guidance below focus on 2 main aspects for implementation

**Understanding Local Government Thresholds:** Governments may elect to use a number of metrics to determine a roll out or pull back of protective responses. Based on experience these may include new cases per 100,000 people, the R number, overall test positivity rate and viral levels in wastewater monitoring.

The Health Subcommittee consensus opinion is that Hospital Pressure / Capacity is likely to become a core metric. This is due to its objectivity but it will only detect surges once established.

2. Prioritising prevention barriers

A scale up and down according to risk approach is recommended however widely infected workforces can still have reduced attendance and productivity even if health risk is not lethal.

For a mild to moderate change in local risk profile, termed Level 2 Local Epidemic recommended additional barriers to the standard BAU Hierarchy actions include

- Consider return to requirements COVID tests before attending workplaces
- return to requirements to use masks in crowded indoors spaces
- allow more flexibility in home working arrangements for vulnerable individuals
- run additional promotional campaigns on COVID vaccine boosters, hand-washing and physical distancing
- Testing and isolation positive workplace cases

As health risk rises significantly (termed Level 3) with demand on ICUs and hospitals under pressure stricter measures will be needed. The increased measures are reasonable as companies need to consider the workplace as a collective risk

Recommended actions include Level 2 and

- Re-establish vaccine booster mandates where legally able
- Strict hygiene measures including mandatory masks and spacing
- Reset Capacity limits in indoor workspaces
- Consider a complete shift to work-from-home
- Amending travel protocols to essential business only
- Considering of quarantine processes for remote work locations.
- Consider paid sick leave programmes that do not have this established.

A comparison of traditional triggers and the new advised triggers are provided in the table below

<table>
<thead>
<tr>
<th>Historic Trigger levels</th>
<th>Updated 2022 trigger levels and recommended IADC Actions</th>
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<tbody>
<tr>
<td><strong>Level 1:</strong> COVID-19 is not known to be present</td>
<td><strong>Consolidated Level 1 Local Endemic</strong></td>
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<tr>
<td><strong>Level 2:</strong> COVID-19 is present in the community but the number of cases and transmission are low</td>
<td>Definitions</td>
</tr>
<tr>
<td><strong>Level 3:</strong> COVID-19 in general circulation</td>
<td>- COVID-19 in general circulation</td>
</tr>
<tr>
<td></td>
<td>- Socially acceptable impact on hospitalisation and death rates. Predominantly impacting known vulnerable groups</td>
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<tr>
<td></td>
<td>- Include newly identified variants with similar risk profiles</td>
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<tr>
<td></td>
<td>- Death rates within normal annual levels</td>
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<td></td>
<td><strong>Actions:</strong></td>
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<tr>
<td></td>
<td>- Primary barriers as per Hierarchy vaccination and ventilation of workspaces.</td>
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<tr>
<td></td>
<td>- Workplace Non-attendance or segregation if symptomatic, left to personal management.</td>
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<tr>
<td></td>
<td>- Testing of symptomatic cases according to health authority requirements</td>
</tr>
<tr>
<td></td>
<td>- No additional barriers required.</td>
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<tr>
<td></td>
<td><strong>Goal:</strong> Prevention of severe illness and transmission to ALARP considering health risk to the working population.</td>
</tr>
<tr>
<td><strong>Level 4:</strong> Epidemic circulation and transmission is high and direct pressure on healthcare services</td>
<td><strong>Level 2 Local Epidemic</strong></td>
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<td></td>
<td>COVID-19 rates above endemic norms. Includes new variant with significant immune escape. Starting to see impacts on hospitalisation with wider population impact not just vulnerable groups. Includes some healthy working age persons, but rare.</td>
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**Action:** Additional barriers required. Primary barriers as per Hierarchy plus below

- Consider COVID tests before attending workplaces - consider differing merits of restricted access remote sites and offices.
- requirements to use masks in crowded indoors spaces to reduce transmission
- allow more flexibility in home working arrangements especially for known vulnerable individuals
- run additional promotional campaigns on COVID vaccination including boosters, hand-washing and physical distancing
- testing and isolation positive workplace cases

**Goal:** Prevention of severe illness by ensuring immunity and prevention of transmission ALARP in workplace

<table>
<thead>
<tr>
<th>Level 5 - level 4 and there is a material evidence or risk of healthcare services overwhelm</th>
<th><strong>Local Epidemic Crisis</strong></th>
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<tbody>
<tr>
<td>New variant with significant immune escape and widespread population impacts. COVID-19 case rates above endemic norms with direct relationship to hospitalisation. Impacting widely including healthy working age persons, not just vulnerable groups.</td>
<td><strong>Action:</strong> All additional barriers required. Primary barriers as per Hierarchy Plus Level 2 plus below</td>
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<tr>
<td></td>
<td>- Compulsory testing before entry to remote site work +/- office</td>
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<td></td>
<td>- Considering optimised quarantine processes for remote sites</td>
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<td></td>
<td>- Consider a complete shift to work-from-home for offices</td>
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<tr>
<td></td>
<td>- Re-establish vaccine booster mandates where legally able</td>
</tr>
<tr>
<td></td>
<td>- Strict hygiene measures including mandatory masks and spacing</td>
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<tr>
<td></td>
<td>- Capacity limits in indoor workspaces</td>
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<td></td>
<td>- Amending travel protocols to essential business only</td>
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<td></td>
<td>- Consider paid sick leave programmes – encourage person to stay at home in jurisdictions that do not have this established under standard contracts.</td>
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Long COVID

Long Covid is a recognised chronic health impact phenomenon. It is a complex disorder that is still not well defined nor understood at this stage. Due to high numbers of cases globally it is likely to impact industry over the following years. A separate Health Subcommittee guidance on recognition and management will be provided.

Next Steps

IADC members are strongly advised to review their current COVID-19 control plans. They should consider where de-escalation is possible to align to current operating area societal norms and ALARP risk protections. They should determine what ongoing surveillance programs they have in place and determine what pandemic preparedness measures they will maintain indefinitely.

Conclusion

The purpose of the IADC Health Subcommittee is to facilitate the exchange of best practice knowledge and practical management standards for health issues. Collaboration on guidance development with other IADC groups is encouraged with an ethos of knowledge sharing and integration. The IADC Health Subcommittee endeavors to improve the overall performance of the drilling contractor companies by maintaining physical and mental health issues that impact the productivity of workforces. By adopting flexible and scalable responses to COVID-19 risk drilling contractor companies will be better placed to serve our customers and key stake holders now and into the future.

References

IOGP-IPIECA (2021) Joint IOGP-IPIECA position on COVID-19 vaccines November 2021

