RISK-BASED TOOLS TO LIMIT THE SPREAD OF SARS-COV-2: INFORMATION ON ACTIVITY RISKS AND INDUSTRY STANDARDS

by Julian Morris and Adrian Moore

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EXECUTIVE SUMMARY

Until the prevalence of Covid-19 is reduced to minimal levels or there is herd immunity, businesses, churches and other organizations will likely have to continue to take measures to limit the risk of infection. This brief considers tools that could be adopted by businesses and other organizations to that end.

We emphasize that the purpose of these tools is to enhance trust and improve information sharing, so that individuals can move around more freely than would otherwise be the case in a world still filled with grave fear of a deadly disease. While such tools offer intrinsic benefits, they may also offer an alternative to the mandatory restrictions under which so many of us were or are laboring and which might otherwise be re-imposed should another wave of disease occur.
# TABLE OF CONTENTS

| PART 1 | INTRODUCTION .................................................................................................................... | 1 |
| PART 2 | CRITERIA FOR ACTIVITIES RED-AMBER-GREEN (RAG) SYSTEM ........................................... | 3 |
| PART 3 | COVID-19 INDUSTRY STANDARDS ....................................................................................... | 6 |
| PART 4 | CONCLUSION ...................................................................................................................... | 8 |
| ABOUT THE AUTHORS ........................................................................................................ | 9 |

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**BRIEFS IN THIS SERIES**

Reason’s series of policy briefs on *Recovery from the Coronavirus Crisis* includes:

- **Covid-19 Lockdown Problems and Alternative Strategies to Reopening the Economy**
- **Covid-19: Lessons from the Past and Other Jurisdictions**
- **The Covid-19 Status App: A Risk-Based Tool to Enable Businesses to Reopen While Limiting the Spread of SARS-CoV-2**
- **Monitor-Test-Trace-Isolate: Policies for Understanding and Reacting to Covid-19 Infections**
- **PPE: How to Increase Production and Distribution of Masks Amid Covid-19**
INTRODUCTION

One way to address the trust deficit created by Covid-19 and the policy responses to the disease is for businesses and other organizations to establish and communicate the actions they are taking to reduce the risk of infection.

During the lockdowns, many jurisdictions imposed rather arbitrary restrictions on freedom of movement, typically based on what kinds of jobs people do (deemed to be so-called “essential workers”). This has resulted in financial hardship for tens of millions of people, as well as enormous frustration.

Some activities pose minimal risk of harm to others, while providing significant benefits to the individual. An uncontroversial example is outdoor exercise, which, if undertaken with appropriate caution (wearing a mask if in a built-up area, for example) can help build and maintain a healthy immune system, thereby reducing the likelihood of suffering from Covid-19. While outdoor exercise has generally not been prohibited, many forms of outdoor work have been, even forms of work that do not involve close contact with others, which also would seem a low risk activity. That is not merely iniquitous—it has harmed some of the poorest members of society.
While outdoor exercise has generally not been prohibited, many forms of outdoor work have been, even forms of work that do not involve close contact with others, which also would seem a low risk activity. That is not merely iniquitous—it has harmed some of the poorest members of society.

Other activities pose considerable risks of infection both to the individual undertaking them and to others. In many cases, this work also provides sufficient benefits to the worker and others to justify permitting the work to continue, albeit with necessary precautions. Health care work, such as undertaking tests and treating Covid-19 patients, is an obvious example.

Rather than seeking to determine the essentiality of an activity, it makes more sense to determine the risk an activity imposes on the individual undertaking it and others whom they might encounter. And rather than imposing per se prohibitions, it makes sense to specify the criteria for participation in specific higher-risk activities. These criteria should be as objective, as clear, and as impartial as possible. Moreover, given that in most cases the criteria will be best ascertained by the organizations facilitating the activities, such decisions should be left to those organizations.

Already many of those businesses that remained open during the lockdown have established rules intended to limit transmission. For example, many grocery stores have implemented minimum distances between customers, spray customers hands with disinfectant, and require staff to wear masks or face protectors. But as a wider range of businesses begins to reopen, including many whose operation entails close contact, there is a need for the development and communication of clear and simple operational rules that will limit transmission and enhance trust.
CRITERIA FOR ACTIVITIES RED-AMBER-GREEN (RAG) SYSTEM

One relatively simple way to categorize and communicate the riskiness of activities, and hence the kinds of precautions necessary for participation, is through a red-amber-green (RAG) system. Logically, the criteria for an activities RAG would relate to the likelihood of exposure. Table 1 provides a rough RAG with some illustrative activities (these are intended to show in general how such a RAG might work and should not be taken literally, not least because there is likely to be significant variation among organizations and companies offering activities).
By applying clear, risk-based criteria such as these, it will be possible for an employer, service provider, or other organization to define the circumstances under which activities can take place. This will likely include a combination of requiring appropriate PPE and restrictions on proximity (for example by spacing tables at restaurants and limiting crowding on public transport, which might or might not be a major source of transmission\(^1\)). At the same time, knowing which activities and locations are riskier invites measures to mitigate those risks. For example, given the higher likelihood of transmission during activities that entail high levels of respiration, a gym might limit access to individuals who likely pose less risk (e.g. are “Green” or “Amber” on a status app) and/or it might limit the number of customers inside at one time, require customers to wear masks, take greater care to ensure that equipment is cleaned after each use, spread cardio equipment more widely apart, etc.

### TABLE 1: RED-AMBER-GREEN ILLUSTRATIVE ACTIVITIES CRITERIA

<table>
<thead>
<tr>
<th>Status</th>
<th>Criteria</th>
<th>Example Locations</th>
<th>Example Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>Confined space with high transmission potential</td>
<td>Hospital, hotel, restaurant, call center, gym, subway, bus, plane</td>
<td>Nursing, waiting tables, gym cardio, commuting by mass transit</td>
</tr>
<tr>
<td>Amber</td>
<td>Open indoor space with low transmission potential</td>
<td>Segmented office, taxi/ride-share with open windows, stores</td>
<td>Chef, construction, attending yoga class</td>
</tr>
<tr>
<td>Green</td>
<td>Outdoor space with no crowds</td>
<td>Fields, parks, beaches, personal vehicles</td>
<td>Cycling, driving tractor, cleaning pool</td>
</tr>
</tbody>
</table>

This activities RAG system will allow businesses and other organizations to better define who can participate in what activities, as determined by the organizations setting the rules of participation in those activities. Combining this system with use of a status app, as discussed a companion policy brief in this series, would allow even more-refined risk management.\(^2\) Those systems allow a similar Red-Amber-Green risk category for individuals

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based on their exposures and test results. Green individuals logically would not be subject to any restrictions. For the most part, Amber individuals will likely be able to participate in most activities if they are wearing appropriate PPE. Red individuals would be prohibited from participating in most activities except some classified as Green (e.g. walking in open spaces, maintaining an appropriate distance and wearing a suitable mask).

“Again, it should be stressed that the purpose of these RAG systems is to enhance trust and enable the removal of government-imposed restrictions.”

Again, it should be stressed that the purpose of these RAG systems is to enhance trust and enable the removal of government-imposed restrictions. In general, decisions regarding what activities are permissible and what activities are not permissible for different people should be made by the organizations on whose property those activities take place. For the most part, these will be private organizations (the owners of offices, restaurants, movie theatres, and so on), so the decisions are part of a system of private ordering.
COVID-19 INDUSTRY STANDARDS

If implemented, an activities RAG system would be one part of a broader set of risk management tools used by an organization to protect staff, members, and customers. Both OSHA and the CDC provide guidance for workplace risk management in the context of Covid-19\(^3\) but industries may want to develop their own standards that better match their circumstances, melding input from health experts with understanding of their industry’s operations and conditions. Such standards would provide private organizations with tools to manage infection risks. Perhaps more importantly, Covid-19 Standards could offer businesses a way to communicate to employees and customers that they are adopting best practices to limit risk—thereby enhancing their reputation and helping to regenerate trust.

Beyond their effects on reputation and trust, businesses have other incentives to implement rules that limit the risk of infection to their employees and customers. If an outbreak is traced to a specific facility, it may have to close down temporarily for deep cleaning and may even face liability.\(^4\) A business that adopts best practices for limiting the

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Governments could further encourage adoption of good practices, including industry standards, by expressly limiting liability for companies that adopt them. For example, such companies could be exempted from liability in negligence for injury and death that results from Covid-19; liability would only ensue if a company has been reckless.5 Governments also must determine which activities may take place in government-owned buildings and transportation systems. The rules adopted by the entities operating these facilities should follow the best practices adopted by the private sector.

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CONCLUSION

As state and local governments remove Covid-19-related restrictions on individuals, businesses, schools, churches and other organizations, we believe those organizations would in many cases benefit from implementing some or all of the actions we have outlined in this brief, clear delineation of the types of activities that may be undertaken and under what circumstances, application of best industry practices, and standards that embody those best practices. By so doing, organizations can help limit the likelihood of further transmission of SARS-CoV-2, enhance their reputation, and build trust among employees, customers, and members. But it cannot be stressed more strongly that the decision to implement these actions must be voluntary. Each organization has better knowledge about its particular circumstances than does the government and, even though mistakes will be made, must be free to choose which measures to take. Moreover, as the incidence of Covid-19 declines in one place and then the next, such freedom of action affords organizations the opportunity quickly to remove measures that should only be in place when a substantial risk of infection is present.

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ABOUT THE AUTHORS

Julian Morris is a Senior Fellow at Reason Foundation, Senior Scholar at the International Center for Law and Economics, and a Fellow of the Royal Society of Arts. He has written extensively on the law and economics of innovation, risk regulation, economic growth, human health, and environmental protection. Morris is the author of over 100 research papers and the editor of several books, including *Rethinking Risk and the Precautionary Principle* and *Sustainable Development: Promoting Progress or Perpetuating Poverty*. Prior to joining Reason, he ran International Policy Network, an international think tank that focused on issues relating to trade, health and the environment. He was also a Visiting Professor in the Department of International Studies at the University of Buckingham and a member of the Council of the School of Pharmacy. Before that, Morris ran the environment and technology program at the Institute of Economic Affairs in London. He is a graduate of the University of Edinburgh and has Masters degrees in economics and related subjects from University College London and Cambridge University. He also has a law degree from the University of Westminster.

Adrian Moore, Ph.D., is vice president of policy at Reason Foundation. He leads Reason’s policy implementation efforts and conducts his own research on a wide range of economic policy topics. He has published numerous articles and studies on policy issues and change management in the public sector. He is co-author of two books and numerous policy reports and articles. Moore earned a Ph.D. in economics from the University of California, Irvine. He holds a master’s in economics from the University of California, Irvine and a master’s in history from California State University, Chico.