The Manchester Briefing on COVID-19

International lessons for local and national government recovery and renewal

Eighth briefing: Week beginning 25th May 2020

Produced by Professor Duncan Shaw, Dr Jennifer Bealt, David Powell, Professor Ruth Boaden, The University of Manchester, UK

What is 'The Manchester Briefing on COVID-19'?

The Manchester Briefing on COVID-19 is aimed at those who plan and implement recovery from COVID-19, including government emergency planners and resilience officers.

Each week we bring together international lessons and examples which may prompt your thinking on the recovery from COVID-19, as well as other information from a range of sources and a focus on one key topic. The lessons are taken from websites (e.g. UN, WHO), documents (e.g. from researchers and governments), webinars (e.g. those facilitated by WEF, GCRN), and other things we find.

We aim to report what others have done without making any judgement on the effectiveness of the approaches, or recommending any specific approach.

This week

We have provided four briefings:

Briefing A: Focus of the week - Starting recovery and renewal (and impact assessments)
Briefing B: Lessons you may find helpful from across the world
Briefing C: Case Study - Test, Trace, Track in Korea
Briefing D: Useful webinars

Other information

Please register at ambs.ac.uk/covidrecovery if you would like to receive future briefings. If this is the first briefing you have received and would like to be sent the previous ones, please email events@manchester.ac.uk.

If you would be willing to contribute your knowledge to the briefing (via a 30-minute interview) please contact Duncan.Shaw@manchester.ac.uk

We also produce a blog series which you can access here along with other news about our team and our work.

Briefing A: Focus of the week - Starting recovery and renewal (and impact assessments)

Introduction

This document outlines the issues that should be considered by all partners in the initial stages of planning recovery and renewal from COVID-19. These issues should be addressed before Impact Assessments are commissioned.

The consequences of COVID-19

There are three categories of consequence from COVID-19. Each consequence may be positive or negative and could transcend the phases of response, recovery and renewal:

- **Direct consequence** – primary **effect** of the COVID-19 health crisis. Many *direct consequences* will be addressed as a **transactional** activity by a single organisation or multi-agency partnership of tactical leaders. For example, the effect from COVID-19 of Local Authorities having to support shielded people who are clinically extremely vulnerable.
- **Wider consequence** – secondary **effect** which arises from a *direct consequence*. Many *wider consequences* will be addressed as a **transactional** activity by a multi-agency partnership of tactical leaders. For example, having to manage spontaneous volunteers to support shielded people with delivering food/medicines and provide befriending phone calls
- **Strategic consequence** – **impact** or **opportunity** which is of medium/long-term and broader significance. Many *strategic consequences* will be addressed as **transformational recovery** or **renewal** activity by a multi-agency partnership of strategic leaders. For example, recognising the fragility of the voluntary sector from COVID-19, commissioning voluntary organisations to support shielded people on an ongoing basis, thereby bolstering the organisations' financial viability

Below, we explain how **transactional** activities to address the **effects** of COVID-19 may be carried out by the Local Resilience Forum[1] (LRF), but **transformational** activities to address strategic **impacts** and **opportunities** are likely to require a broader strategic partnership.

Recovery and renewal

In Week 4 of The Manchester Briefing we explained how LRFs may lead short-term **recovery**. An LRF's governance and command, control and communication (C3) infrastructure means it is best suited to completing **transactional** activities to deal with the **effects** of Covid-19 by reinstating normal operations, learning lessons, and preparing for the next emergency. These transactional activities recover exposed fragilities, the pace of which will depend on ongoing demands from any second waves, backlogs, fatigue, and supply difficulties. This is short-term 'functional' recovery addressing the **effects** of Covid-19 and not the medium to longer-term impacts and opportunities of Covid-19 that could drive strategic renewal of people, places and processes.

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[1] https://www.gov.uk/guidance/local-resilience-forums-contact-details

Renewal (similar to what UK Government calls Rebuild[2]) is a medium/long-term process that extends beyond recovery. Renewal recognises that COVID-19 has compromised the very foundations of our country (e.g. imposing emergency legislation, removing liberties, undermining cultural norms, redefining vulnerability). We should not rebuild on those compromised foundations given their insufficiency and the possibility of future waves of the virus. We have seen the best of partnership working, but also challenges to be addressed before renewal can be truly successful. Renewal can involve **transformational** activities to deal with strategic **impacts** and **opportunities** created by COVID-19. Renewal seeks to develop a new normality through a complex social, political and developmental process to address strategic consequences. Renewal is strategic, democratic, geographic and broad-based (e.g. environmental, economic, legal).

Renewal may require broader strategic partnerships

The UK Government's COVID-19 Recovery Strategy[1] to maximise "*health, economic and social outcomes*" (p.15) suggests the need for **transformational** outcomes which LRFs alone are not well suited to deliver. To maximise success, transformational outcomes need broader strategic partnerships (e.g. with Health & Wellbeing Boards[3], Sustainability and Transformation Partnerships[4], Local Enterprise Partnerships[5]). These partnerships represent local political priorities and people/place centred outcomes that align with wider ambitions and needs. Such transformation requires a flexible model of governance, coordination or commissioning, underpinned by alignment on strategic themes (e.g. health, social, economic). Transformation through addressing strategic **impacts** and **opportunities** will be ongoing whilst the LRF delivers transactional activities to address **effects** and deliver its statutory functions.

The partnership structure for managing *local emergency* **recovery** and **renewal** in the UK is called the **Recovery Coordinating Group[6] (RCG)**. RCG can monitor how these effects are recovered as well as how renewal can address impacts and opportunities. For COVID-19, given the breadth of renewal activities, one of the first activities for RCG should be to seek alignment with the work of those broader partnerships better placed to deliver desired Health, Economic and Societal outcomes.

Alignment for recovery and renewal

Achieving a comprehensive understanding of health, economic and social effects, impacts and opportunities arising from COVID-19 is likely to be challenging for most LRFs. Even shared governance on recovery between the health, economic and social partnerships may be unrealistic. So, while recovery and renewal of health may be led by health partnerships, the recovery and renewal of social and economic may be best led by a wider RCG partnership.

Given the interdependencies between the **effects, impacts** and **opportunities** of COVID-19, RCG and other strategic partnerships should align thinking on recovery and renewal activities.

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[2] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/884760/Our_plan_to_rebuild_The_UK_Government_s_COVID-19_recovery_strategy.pdf

[3] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/144020/General-health-and-wellbeing-board-duties-and-powers.pdf

[4] https://www.england.nhs.uk/integratedcare/stps/view-stps/

[5] https://www.gov.uk/business/local-enterprise-partnerships-leps-and-enterprise-zones

[6] https://www.gov.uk/guidance/emergency-response-and-recovery

The University of Manchester, Oxford Road, Manchester, M13 9PL, UK

There are challenges to alignment as has been evident during the response phase – not least the: lack of coterminous boundaries; focus on the NHS; unclear collaboration in response between health, SCGs and Local Authorities; unknown levels of investment in renewal; and addressing agreements on scope and parameters, responsibilities, subject expertise and overlaps. Another expectation on local RCGs is to link into a national RCG (in MHCLG) and report up progress and issues for recovery.

The following list is not linear, but some activities that will support alignment of the RCG on these issues, include:

Identify RCG's membership

- Identify RCG's political and strategic leadership (e.g. select the Chair)
- Identify the required skills and members of RCG (e.g. organisations and roles to be represented)[7]
- Understand the knowledge, skills and perspectives of RCG members (e.g. subject matter expertise, [mis]aligned perspectives)

Identify wider partners and relationships

- Identify wider stakeholders and their power and interest in the recovery of health, economic and social effects (e.g. who to involve and to consult)
- Agree RCG's relationships with other bodies (e.g. RCG's influence and [in]dependence, and RCG's current/future relationships above [with national], sideways [with SCG], and below [with communities])
- Identify where intelligence about local and national response can be collected, to support recovery thinking

Decide role and modes of work

- Decide how RCG will define its role. Due to the breadth of COVID-19 consequences, decide whether RCG will have sufficient knowledge of all consequences to be an expert group – or whether it is more suited as a commissioning body that draws on the expertise and lived experiences of the structures set up for response.
- Establish the rhythm of RCG (e.g. the pause for reflection, pace of commissioning work, how work will be arranged)
- Identify collaboration, resourcing and funding opportunities

Decide RCG's framework

- Gather intelligence on the national Rebuild agenda to inform the framework
- Agree Terms of Reference for RCG, scope and parameters, and areas of responsibilities regarding health, economic and social effects.
- Agree a shared vision for recovery
- Agree shared assumptions and language (e.g. planning assumptions, lexicon)
- Decide a framework for renewal (e.g. naming conventions, structure of 'cells')
- Decide the criteria/thresholds for when each of the following begins and ends: response, recovery, renewal

Once these activities have been carried out, the RCG should be able to begin its recovery work. Below, we assume that RCG is defined as a commissioning body and one of its first tasks is to commission an impact assessment.

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[7] National Recovery Guidance: Common issues. HM Government, 20th February 2013. https://www.gov.uk/guidance/national-recovery-guidance-common-issues#impact-assessments

Assessing the effects, impacts, and opportunities

RCG can commission existing COVID-19 response cells/structures to provide information about effects, impacts, and opportunities to create an overall picture, from which it can develop recovery and renewal strategies. This information can then feed into an impact assessment, which follows an agreed process.

UK Government Recovery Guidance[8] on impact assessments focuses on assessing "losses" and attempts to monetarise those – perhaps because the main recovery mechanism available to national government is to financially reimburse localities. Focusing on losses enables subsidiarity, as then local authorities can act in ways to best financially address the local effects, impacts, and opportunities. Where the guidance refers to 'losses' we refer below to 'losses/impacts', to remind the reader that there are considerations beyond negative and financial losses i.e. there are also effects, impacts, and opportunities which can be understood.

The guidance presents the process as summarised below, which can be quite technical in places:

A – Set up the impact assessment

1. Identify the purpose of the impact assessment
   a. Define what the assessment is to be used for, the problems its results should address, and the desired level of accuracy and refinement.
2. Organise consultation and information collection
   a. Decide the workplan and timeframe for consultation and information collection
   b. Consult on the information needed by talking to people, running surveys, analysing database information
   c. Collect information by receiving expert input from many people and organisations, using their assembled knowledge, and accessing information in any form that would add value to the impact assessment
3. Define the boundary and timeframe of the impact assessment
   a. Agree a boundary to the assessment – for COVID-19 this will be a wide boundary (potentially whole-system, all-of-society) which may undermine its clarity
   b. Define how long after the crisis the assessment will be considering direct and indirect losses/impacts associated with it
4. Select the type of impact assessment to be made
   a. Agree how to assess impacts from a crisis. Three commonly-used approaches are:
      i. rapid assessments based on similar previous crisis
      ii. synthetic approaches based on estimations of losses/impacts (e.g. using averages)
      iii. survey approaches based on establishing actual losses/impacts
   b. Consider if a combination of approaches is needed
   c. Identify criteria to ensure consistency in the assessments being made (e.g. assessing the number of people, the state of services, needs)

B – Collect information for the impact assessment

5. Obtain information about the crisis
   a. Understand the crisis in sufficient detail (e.g. affected populations, resources used, cells stood up)

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[8] National Recovery Guidance: Common issues. HM Government, 20th February 2013.
https://www.gov.uk/guidance/national-recovery-guidance-common-issues#impact-assessments

6. Obtain information about people, assets and activities and their interaction with COVID-19
    a. Identify the effects/impacts/opportunities of the COVID-19 crisis on people (e.g. vulnerable people, staff, volunteers, affected people), place (e.g. environment) and processes (e.g. economy, businesses, ways of working, policy)
    b. Prepare a list/database of these effects/impacts/opportunities in consultation with knowledgeable groups
7. Identify the types of impacts
    a. Separate these effects/impacts/opportunities impacts (from Steps 5 & 6) into categories (e.g. positive or negative, direct or indirect, and tangible or intangible) to define where the major impacts have/will arise and what measurement techniques are needed (Step 4)

C – Assess impacts

8. Measure the extent of losses/impacts from all sources
    a. Decide how to categorise losses/impacts. This may be structured by loss/opportunity (e.g. positive or negative), category of losses/impact (e.g. direct, indirect and intangible or tangible) or by 'losses/impact sector' (e.g. humanitarian, infrastructure, children, VCSE, business, mental health). Then determine their indirect, direct and intangible losses
    b. Assess the losses/impacts using Step 4 approaches to impact measurement using survey, synthetic and averaging approaches
9. Decide whether to count 'actual' or 'potential' losses/impacts
    a. Agree how the actual or potential losses/impacts can be used in recovery management. The guidance says that:
        "Actual losses may discriminate against well-prepared communities if the loss assessment is used to decide on the worth of mitigation options.
        Actual losses may discriminate against poorer communities as they will typically have fewer assets and less economic activity to be damaged by a hazard.
        The difference between actual and potential losses will change considerably over time as people move and as other circumstances change."

D – Calculate Net Economic Loss[9]

10. *Economic Loss:* Calculate Annual Average Damages (AAD) if needed
    a. Identify economic losses and the justifiable need of investment for economic redevelopment and disaster mitigation. The guidance adds:
        "This step is generally useful for detailing the economic impact to a region and the required investment the recovery redevelopment and the disaster mitigation that can be economically justified (in terms of losses avoided on an average year, using an estimate of AAD.
        AAD is calculated by plotting loss estimates for a given hazard at a range of magnitudes, against the probability of occurrence of the hazard event."
11. *Net Economic Loss:* Assess economic benefits to region of analysis
    a. Identify the economic savings from the crisis that will offset the economic losses and will inform an assessment of post-crisis aid and insurance claims
    b. Measure the economic net loss of the crisis by subtracting the assessed economic benefits/opportunities from the assessed losses

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[9] Here we use 'losses' to refer to financial losses only

12. Collate and present the results of the economic loss assessment
    a. Present results from the impact assessment
    b. Identify important intangibles to consider alongside economic impact to ensure they are considered recovery planning

Conclusion

Given the breadth of **effects**, **impacts** and **opportunities** from COVID-19, the RCG will need to **align with other local strategic partnerships** to enable **recovery** and **renewal** of the health, economic and social effects. The focus on effects, impacts, and opportunities aims to broaden beyond only financial losses – although monetarising those will be important for future claims and deciding how to allocate available funding.

Next week, we will discuss effects, impacts and opportunities for recovery in more detail including: identifying activities under **functional recovery**; prioritising **short to mid-term recovery** activities that require coordinated action; and considering **strategic renewal opportunities** that require broader strategic and political partnerships.

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Briefing B: Lessons you may find helpful from across the world

We provide the lessons under six categories, with sub-categories for ease of reference. We have selected lessons that are of specific interest to the recovery process although many also relate to the response phase, and the likely overlap between response and recovery.

This week our lessons on humanitarian assistance focus on mental health, vulnerabilities of the LGBTQ+ community and engaging volunteers. Economic lessons include green economic strategies and business regeneration and resilience. Infrastructure lessons include those on cyber security and protecting infrastructure. Environmental lessons address urban planning for renewal and conservation. Communications lessons focus test, track and trace. The governance and legislation section includes lessons on holding successful democratic elections during a pandemic

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Recovery: Categories of impact	Actions	Country/ Region	Source
Humanitarian Assistance			
Mental Health	**Consider the differing mental health impacts on men and women.** Research in Denmark and China demonstrated that women were more adversely psychologically impacted by COVID-19 than men. In China, survey respondents demonstrated evidence of post-traumatic stress disorder (PTSD) Consider: ▪ Mental health services that are tailored for different genders to accommodate a safe space to discuss needs ▪ Ensuring increased access to mental health services through online systems and telephone calls ▪ Hand hygiene, mask-wearing and confidence in doctors have been observed to reduce psychological impact.	Denmark China	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7176490/ https://www.sciencedirect.com/science/article/pii/S0889159120305110?via%3Dihub
Mental Health	**Consider crisis response training programs for essential workers.** The Mental Health Commission of Canada has developed three programmes: Caring for Yourself / Caring for your Team, and Caring for Others: ▪ *Caring for Yourself / Caring for your Team* – Participants learn how to better understand their own mental wellness, and that of their team. They learn to notice if they might be moving into unwell areas, use practical actions to help with stress, and know when to reach out to get professional help, and learn tips to support team members ▪ *Caring for Others* – Participants focus on how to create a safe space to have conversations about mental health and/or substance use problems, and the skills required to respond to a mental health crisis until professional help arrives. This prepares participants to have conversations confidently about mental health during a crisis, with their family, friends, communities, and in their workplaces	Canada	https://www.mentalhealthcommission.ca/English/news-article/13950/mental-health-commission-canada-launches-free-online-crisis-training-essential

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Recovery: Categories of impact	Actions	Country/ Region	Source
Vulnerable people	**Consider the impacts of COVID-19 on LGBT+ people.** LGTBQI people have a number of vulnerabilities. Consider: ▪ LGBT+ people are less likely to have safe homes and are at a higher risk of homelessness (especially young people) and are at a high risk of domestic abuse ▪ The impacts of losing safe community spaces and the additional mental health impacts of this ▪ The complications with access to healthcare which can be especially hard for trans people who have specific medical needs ▪ The use of test, track and trace facilities for this vulnerable group. In South Korea a new wave of infections have been attributed to 3,000 people attending clubs that accommodated the LGBT+ community. But only half of people in attendance have gone for testing, due to fears that doing so would reveal their sexuality. Confidence in personal safety and confidentiality is paramount in track, trace and treat processes	UK Korea	https://www.stonewall.org.uk/about-us/news/how-covid-19-affecting-lgbt-communities Disaster risk specialist https://www.independent.co.uk/news/world/asia/coronavirus-south-korea-seoul-itaewon-nightclubs-covid-19-contact-tracing-a9508156.html
Volunteers	**Consider innovative ways to educate, entertain and engage volunteers at home.** In the USA, The Emergency Services research team at NBC Universal developed a Disaster Response Team "Train-At-Home" game. The game is based on Community Emergency Response Team (CERT) training, though you don't need to be CERT-trained to play. The game is designed to be fun, and for everyone. The game board and cards can be downloaded and printed at home. The aim is to provide tips and reminders to people about disaster response. The cards also hold references to sites where more information can be found. Disaster management games for younger audiences can also be found here: https://www.ready.gov/kids/games/data/dm-english/index.html	USA	Disaster Program Specialist

Recovery: Categories of impact	Actions	Country/ Region	Source
Economic			
Business regeneration	**Consider planning tools to support business resilience to COVID-19.** A guide by UNDRR and partners sets out 10 core steps of business resilience to COVID-19 that is particularly relevant for small businesses. These include: ■ Stay informed. Identify at least one workplace team member to be a Focal Point for COVID19. The focal point can help coordinate readiness activities, distribute information, answer questions and to coordinate staff roles and responsibilities during an outbreak ■ Identify core products and services which are essential to the survival of your business. Be prepared to change your business practices if needed to maintain delivering your essential services or products ■ Communicate plans with employees and customers ■ Establish policies for physical distancing, hand sanitizing, and safe working at work ■ Protect employee health. Provide public health materials on COVID-19, regularly clean surfaces that are often touched, and train your staff on what your COVID-19 response plans are once you have completed them. Also maintain the privacy of employees with confirmed or suspected COVID-19 infection and inform employees that some may be at higher risk for severe illness ■ Plan how to operate with absent employees ■ Prepare your supply chain. Identify and talk to your critical suppliers, identify alternate supply chains, understand your position in the supply chain ■ Plan to modify service delivery to customers ■ Apply for crisis assistance from government and business associations ■ Exercise your COVID-19 plan. Consider using existing standards to do this, such as ISO 22301 business continuity management	All	http://www.adpc.net/igo/category/ID1583/doc/2020-r74Yp1-ADPC-COVID19_Small_Business_Continuity_and_Recovery_Planning_Toolkit.pdf
Economic strategy	**Consider a green economic strategy that combines plans for zero or reduced carbon economies with tackling employment.** Consider: ■ Government schemes which pay young workers for employment in green industries to tackle unemployment ■ Retraining older people in green industries to "leave no worker behind" in any transition towards a different economy ■ Adaptation of plans for green industry by region. Some regions may be more adversely affected by job loss, for example, in areas that relied on tourism and hospitality so retrain these workers	UK	https://www.theguardian.com/environment/2020/may/17/labour-to-plan-green-economic-rescue-from-coronavirus-crisis

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Recovery: Categories of impact	Actions	Country/ Region	Source
Infrastructure			
Urban Planning	**Consider 'infrastructures of care' such as housing.** There are lessons to learn from the 'stay at home' policies in relation to inequalities and vulnerabilities. Safe and adequate housing is a central facet of a population's wellbeing and health. Housing for recovery and renewal would benefit from framing as pivotal 'infrastructures of care' for surviving in the present and for reimaging the future. Consider how to create: ▪ Better living conditions for migrants and people in temporary housing as they are particularly vulnerable. Those living in temporary dwellings have often experienced conflict, disaster and economic hardship ▪ Comfortable housing at a time when staying at home is pivotal. Ensure additional support is provided to those renting and the homeless to mitigate evictions, overcrowding, unaffordability, and substandard conditions ▪ Improved urban resilience and physical and mental health through housing. In most cities, mental and physical illness and premature death are disproportionally concentrated in poor communities and ethnic minorities ▪ More energy efficient low-carbon, innovative and sustainable housing ▪ More equal financial mechanisms and markets for land and housing that recognises the interdependencies between housing production, land, infrastructure and labour markets Avoidances of potential pitfalls of rapid urbanisation which can exacerbate inequalities, segregation, resource depletion, ecological crisis, displacement and migration	All	https://blogs.ucl.ac.uk/dpublog/2020/04/06/stay-at-home-housing-as-a-pivotal-infrastructure-of-care/

Recovery: Categories of impact	Actions	Country/ Region	Source
Cyber Security	**Consider developments to internet infrastructure and Virtual Private Network (VPN) technologies to offer safe and secure connections.** In Korea the following processes have been put in place for civil servants and these lessons could be expanded to other organisations: ***Expand systems and optimizing resources*** - Expanding the number of VPN licenses from 24,000 to 40,000, an increase of 16,000 - Optimizing load distribution methods to manage web server traffic - Increasing the maximum network capacity (national information telecom networks and VPN broadband from 1G to 4G) ***Support VPN use among employees working from home*** - Distributing signup guidelines, user manuals, and FAQs - Training for using VPN via video conference for workers, especially those in government institutions to improve security of sensitive information - Workers who work from home have call centres available from 9 am to 6 pm (including at the weekend) ***Monitor the daily system*** - Monitoring trends in number of subscribers, usage traffic, simultaneous log-ins, and networks e.g. Personal Area Network (PAN), Local Area Network (LAN), Wireless Local Area Network (WLAN) etc - Monitoring heavy traffic hours with the highest number of people logged onto the internet simultaneously (between 8 am and 10 am) - Focused monitoring every 10 minutes	Korea	http://ncov.mohw.go.kr/en/infoBoardView.do?brdId=15&brdGubun=151&dataGubun&ncvContSeq=2180&contSeq=2180&board_id&gubun
Environmental			
General environmental	**Consider the impacts of restricted movement of people on conservation.** The reduction of international travel has had positive environmental effects, but has negatively impacted conservation in developing countries. Consider: - How the effects of eco-tourism collapse and how to support conservation of the worlds' core ecosystems - How the economic implications of COVID-19 may impact surges in poaching, illegal fishing and deforestation, and how this can be policed - The dangers to Park Rangers who protect wildlife, and measures to protect staff from violence.	All	https://www.theguardian.com/environment/2020/may/05/conservation-in-crisis-covid-19-coronavirus-ecotourism-collapse-threatens-communities-and-wildlife-aoe

Recovery: Categories of impact	Actions	Country/ Region	Source
Protecting infrastructure	**Consider the safety of shut down facilities with hazardous substances on site.** Shut down and start-up processes at facilities need special attention to prevent accidents. Consider: ▪ If the shutdown is for a longer or undetermined duration then the operator needs to be aware of safety measures which should be taken ▪ Some hazardous materials degrade over time. These inventories need to be minimised and their situation monitored ▪ Nitrogen blanketing to protect against explosive atmospheres should be maintained ▪ Any loss of electrical power during the period of shut down may affect any systems that need to be maintained in operation (e.g. cooling, ventilation, pumping, stirring) ▪ Some processes, such as the storage of refrigerated gases, depend on a regular rate of consumption to maintain safe operating pressures. Reduced consumption due to a shutdown must be assessed and appropriate measures taken ▪ Warehouses that are not opened regularly may heat up due to external temperatures and absorption of solar radiation. This can lead to the release of hazardous materials or the build-up of hazardous atmospheres within the warehouse	Europe	Chemical Accident Prevention & Preparedness Pandemic measures and chemical process safety https://minerva.jrc.ec.europa.eu
Communication			
Test, Trace, Track	**Consider Test, Trace, Track mechanisms to support treatment of COVID-19.** See Case Study 1	Korea	
Test, Trace, Track	**Consider the important role of local councils in effective track and trace.** Councils maintain crucial services, have set up community hubs, and established local teams for tracing and tracking. Councils provide food and shelter to people at risk, help local businesses stay afloat and have mobilised volunteers and therefore know their communities in depth which can support trace and track. Councils: ▪ Are naturally placed to respond quickly to the distinct needs, challenges and infection rates of their own area ▪ Are equipped with their own teams of public health professionals	UK	https://www.theguardian.com/society/2020/may/05/private-covid-19-tracing-disaster-councils

Recovery: Categories of impact	Actions	Country/ Region	Source
Test, Trace, Track	**Consider that track and trace apps must be monitored as automated systems carry errors. For example, the CovidSafe App in Australia:** ▪ Alarmed and confused users with a message saying they had coronavirus, despite not being tested ▪ Suffered from hoaxes and phishing scams to retrieve people's personal information. For example, a text to users claiming to be from the government purported a new coronavirus contact-tracing app.	Australia	https://www.abc.net.au/news/2020-04-28/fake-text-warning-for-coronavirus-app/12193048
Communication with children	**Consider the need to speak with children about COVID-19 with accurate information appropriate for their age and developmental level.** The Centres for Disease Control and Prevention (CDC) advises to: ▪ Avoid language that blames others or leads to stigmas ▪ Pay attention to what children see or hear, whether it's online, on television, or media such as newspapers ▪ Reduce the amount of screen time focused on COVID-19 as too much information can lead to anxiety ▪ Talk to children about how some internet stories on COVID-19 may be based on inaccurate information ▪ Help children thoroughly wash their hands for at least 20 seconds ▪ Teach and remind children to practice healthy habits e.g. coughing or sneezing into a tissue	USA	https://community.fema.gov/story/Resources-to-Help-Youth-Cope-with-COVID-19-Uncertainty?lang=en_US

Recovery: Categories of impact	Actions	Country/ Region	Source
Governance and legislation			
Voting	**Consider how democratic elections can still take place.** Korea held an election during the COVID-19 pandemic. The government ensured a number of voting rights for: ▪ Confirmed COVID-19 patients ▪ Those who were subject to movement restrictions and became infected with the virus after the registration period expired ▪ Those who came into contact with self-quarantined persons and were also quarantined ▪ Overseas arrivals who were subject to movement restrictions up until Election Day on April 15 2020 Officials' actions included: ▪ Texting eligible voters in self-quarantine before the vote – about 13,000 affirmed they wanted to participate ▪ Marking a metre of social distancing space to ballot booths from nearby streets ▪ Giving permission to those without fever or respiratory symptoms to leave their homes so they could cast their ballots after 6pm, when polling stations closed for other voters ▪ Escorting voters and monitoring COVID-19 positive voters through tracking apps ▪ Providing masks to poll workers ▪ Checking temperatures of voters on arrival and moving anyone with a fever or not wearing a mask to separate areas to vote ▪ Sanitising the facilities after voters ▪ Providing voters who pass the fever screening with sanitising gel and disposable plastic gloves before entering a voting booth ▪ Encouraging voting via mail for hospital patients or those who were under two-week quarantine ▪ Organising an early voting period for those who were mildly ill – 400 people cast their votes at temporary booths	Korea	http://ncov.moh w.go.kr/en/infoB oardView.do?brdI d=15&brdGubun= 151&dataGubun &ncvContSeq=21 80&contSeq=218 0&board_id&gub un https://www.expr essandstar.com/n ews/world-news/2020/04/15 /south-korea-moves-ahead-with-national-election-amid-coronavirus-fears/

Briefing C: Case Study - Test, Trace, Track in Korea

A number of track and trace mechanisms to support treatment have been credited with supporting the response in Korea[1]. These include: Self-diagnosis Apps for in-bound travellers; the self-quarantine Safety APP; contact tracing and epidemiological investigations.

Self-diagnosis Apps for in-bound travellers
This self-diagnosis mobile application has been available to in-bound travellers at airports and harbours. The apps:
- Have been developed by the government to monitor symptoms of inbound travellers and provide them with prompt medical advice.
- Are downloaded onto a mobile device and:
  - Is required at entry by all inbound travellers since 1st April 2020.
  - Is available through the URL and QR codes available around the airport or harbour immigration gates and on special arrival cards.
- Require the in-bound traveller to:
  - Install the app and use it to submit passport information, nationality, name, address and other necessary information for quarantine.
  - Connect directly to a call centre and social media channels and provides medical answers against suspected symptoms to enable early treatment.
  - Report their health condition (body temperature, cough, sore throat, or difficulty breathing) through the application once a day during their 14 days of quarantine.
  - Seek medical advice if they are showing symptoms. This can be done through call centres operated by the Korea Centres for Disease Control and Prevention (KCDC), or at COVID-19 screening centres.
- Collect data entered by the user during the self-diagnosis which:
  - Is checked against immigration data before being sent to the public health clinics under jurisdiction of local governments.
  - Is transferred to local governments so that the corresponding public health clinics can provide medical advice, testing and instructions on how to receive care. This is done for travellers reporting symptoms for more than 2 days.

Self-quarantine Safety APP
This is a voluntary application for residents of Korea. The app:
- Has three functions to:
  - Conduct a self-diagnosis for the users to conduct and submit the results with the assigned government officers

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[1] Flattening the curve on COVID-19: How Korea responded to a pandemic using ICT
http://www.undp.org/content/seoul_policy_center/en/home/presscenter/articles/2019/flattening-the-curve-on-covid-19.html

- o Provide necessary information including self-quarantine guidelines and the contact info of the assigned government case officers.
  - o Ensure that self-quarantine orders are kept by setting off a GPS-based location tracking alarm whenever a user ventures out from the designated quarantine area - to prevent possible violation of orders. A case officer is also notified when quarantine is disobeyed; the case officer takes appropriate measures to have the subject return to the quarantine area.
- Has two types of application available:
  - o One for the users under self-quarantine – they use the application twice a day to monitor themselves for four symptoms: fever, cough, sore throat, and respiratory difficulties.
  - o One for the assigned government case officers – once submitted, the self-diagnostic data will automatically be shared with an assigned case officer, who will be notified if the user does not submit the self-diagnostic data or becomes symptomatic.
- Has been effective in monitoring those under self-quarantine and making sure that they stay in designated locations. The alarm function of the application has demonstrated to encourage the quarantined to follow regulations.

Contact tracing and epidemiological investigations

The COVID-19 Data Platform supports investigators as they trace infected people. The app:

- Is designed to:
  - o Support epidemiological surveyors to quickly identify the transmission routes and places that the infected person has visited
  - o Use real-time analysis of data through location tracking, card transactions, and CCTV recordings for accurate tracing of routes and places
- Takes users through a process of using the app as:
  - o Citizens voluntarily record their whereabouts on their smartphones using Google Timeline
  - o Using a 'My Timeline' function on Google Map application, the user whereabouts and routes are recorded automatically.
  - o Data on Google Timeline can be captured as screenshots and shared with epidemiological investigators, who will use the data to trace contacts and patient routes.
- Supports health officials in:
  - o Confirming the interview results of patient transmission routes with data on the system.
  - o Allowing big data analysis from real-time data feeds on COVID-19 patients, including their whereabouts and the time spent on each location.
  - o Using these multiple data points, so that the system can detect incidents of cluster infection and show the source of transmission.
  - o Enabling prompt data-driven COVID-19 epidemiological investigations.

Further details on the apps are available[2,3].

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[2]http://ncov.mohw.go.kr/upload/ncov/file/202004/1587521842434_20200422111722.pdf
[3]http://ncov.mohw.go.kr/upload/viewer/skin/doc.html?fn=1587107400738_20200417161001.pdf&rs=/upload/viewer/result/202005/

Briefing D: Useful webinars

Taken place in the past week	Webinar Title	Link to presentation
18.5.2020	COVID-19 and reopening the economy	https://bcf.princeton.edu/event-directory/covid19_17/
19.5.2020	The Big Rethink: 'Decarbonizing the Hard Way'	https://us02web.zoom.us/rec/play/vp1_d-Cv_Wk3GNbH4gSDA_9-W424KaqsgyAcr_NZmkbkWnVSOlWjbuFBYbRzGDWzsrcNnQAZ0iGxpjg1?startTime=1589904050000&_x_zm_rtaid=L8ZkjJL5SeqAxkofpdru2w.1590491030742.56d1694caf6178469b61ed05b4385015&_x_zm_rhtaid=814
21.5.2020	Towards the Pandemic-Resilient City	https://www.youtube.com/watch?v=WooF1GyOe1U
26.5.2020	Lessons from the COVID-19 pandemic series: Emerging Technologies in Response to COVID-19: Blockchain, ICT and Data for Pandemic Management	https://www.undrr.org/event/undrr-geti-who-and-global-policy-house-webinar-lessons-covid-19-pandemic-emerging
Coming up		
Date	**Webinar Title**	**Link to registration**
3.6.2020	Recovery after COVID-19	https://www.alliancembs.manchester.ac.uk/events/
3.6.2020	Security risk management and duty of care during COVID-19	https://phap.org/3jun2020
3.6.2020	Climate Risk and Vulnerability Assessments in Cities	Register here
4.6.2020	Pandemics, Planetary Health Crises: New City Priorities	https://www.facebook.com/events/1884803811649563/

The University of Manchester, Oxford Road, Manchester, M13 9PL, UK