

The Manchester Briefing on COVID-19

International lessons for local and national government recovery and renewal

Sixteenth briefing: Week beginning 20th July 2020

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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: Developing resilient systems (Part 1)

Briefing B: Lessons from across the world

Briefing C: Supporting children with autism and their parents

Briefing D: Useful webinars

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to receive future briefings**

Other information

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: Developing resilient systems for crisis and emergency response (Part 1)

Introduction

COVID-19 has tested the resilience of systems. For emergency planning by local government (the context of this briefing), examples of these tests of resilience include:

- the connection between national and local decision making protocols
- sharing and analysing data and information across the partnership
- the subsidiarity of local government in the context of alignment of the whole system into this health-led emergency e.g. the NHS, sub-national and temporary regional structures, and multiple recovery coordination groups
- public sector working with military, private and voluntary sectors
- self-direction of local government to commission and procure

With this backdrop, this week we explore how the experience of COVID-19 prompts consideration of what national and local (ambitious) renewal of systems to develop resilience to crises and major emergencies could look like. This extends our thinking from the performance of individual organisations towards considering the performance of the system as a whole. We present a model of 5 systems: operational delivery; coordination; management; intelligence; and policy. Firstly, however, we consider the need for developing resilient systems through renewal.

Why do we the need to develop resilient systems through renewal?

The duty to enable resilience is detailed in legislation (e.g. the UK the Civil Contingency Act 2004 provides the legal basis for emergency preparedness). However, in the last 16 years the UK has experienced devastating events that have challenged resilience partnerships, including:

- severe weather-related emergencies (e.g. ***Somerset levels, 2013-4***; Storm Desmond, 2015; Devon and Cornwall, 2018);
- acts of terrorism (e.g. ***London bombings, 2005***; Manchester Arena attack, 2017);
- poisonings (e.g. ***Litvinenko, 2006***; Skripal, 2018);
- marauding attacks (e.g. ***Cumbria, 2010***; London, 2017-19);
- severe fires (e.g. ***Grenfell Tower, 2017***).

At the time, the events in bold italics were thought to be unique for the UK but, with the hope that the Grenfell Tower fire will truly be unique, time has sadly shown the other events were not.

Pandemics were previously an abstract low probability / high consequence risk in the UK's National Risk Register. The UK's first experience of pandemics has shown that its complexity, breadth and pervasiveness can only be addressed through taking a systems approach to resilience. A whole system response is needed i.e. the

health system cannot deal with a pandemic on its own and if just one part of the system struggles (e.g. the provision of PPE or testing capacity), then the whole system is strained.

These issues encourage consideration of resilience as a result of this first experience and where COVID-19 has exposed opportunities for improvement. This briefing explores how to answer these questions by looking at resilient systems .

Defining a resilient system for crisis and emergency response

Academic theory offers many systems approaches. Here we select one that is particularly relevant to crisis management and has been applied to this context before by government - Viable Systems Model (VSM)¹. To create a viable and resilient system , VSM advises that there is a need for strength in 5 systems:

1. Delivery of operations
2. Coordination and communication of operations
3. Management of processes, systems and planning, including audit
4. Intelligence
5. Strategy, vision and leadership

These 5 systems are broad-based, interconnected, and provide a balanced framework of strategic, tactical and operational matters. The VSM approach aims for balance across these systems, and ensures nothing is missed or unduly prioritised at the expense of others. Research has shown that the 5 systems are equally as applicable to investigating the performance of a country as they are to a single delivery unit in an organisation, or an individual person.

Below, we illustrate these 5 systems using examples of local government crisis response based on early experiences from COVID-19. Our examples are illustrative only, and further analysis through resilience partnership insights, workshops, surveys and the like, will identify further aspects to address for each system.

How the 5 systems build a resilient system

System 1 – Delivery of operations

System 1 is the system's delivery function that is composed of many (semi-)autonomous delivery units (e.g. cells for: shielded people, logistics, homelessness, businesses). System 1 details that resilience is needed in: delivery approach; managing of effective and efficient on-site delivery; autonomy of operating units; adjusting delivery using real-time feedback from beneficiaries.

¹ Applying systems thinking at times of crisis <https://systemsthinking.blog.gov.uk/author/dr-gary-preece/>

COVID-19 example: Delivery of operations

The efforts to make our communities resilient through response, recovery and renewal activities have been wide-ranging. In response, enabling community resilience included:

- supporting the shielded population;
- involving spontaneous volunteers;
- receiving donations from businesses;
- supporting mutual aid groups;
- providing small grants to community organisations;
- enabling appropriate governance to the system.

In recovery, delivery may include:

- supporting voluntary organisations in grant-writing;
- encouraging spontaneous volunteers to join established organisations;
- seeking new, unmet needs to be addressed.

In renewal, delivery may include:

- tackling inequalities which undermine community resilience;
- the regional role of voluntary sector partners in enabling new capabilities to be developed.

Examples of questions that address the resilience of the delivery of operations

- What is the status, role and compatibility of partners in delivering response, recovery and renewal effort to a health-led crisis?
- What partner is best placed to lead the activities that builds resilience and how are these partners selected, empowered and respected?
- Where can real-time feedback from service beneficiaries be acquired to adjust delivery?

The delivery units in System 1 are coordinated by System 2 to ensure they complement each other and provide the desired benefit.

System 2 – Coordination and communication of operations

System 2 aims for productive collaboration between System 1 delivery units through effective communication and scheduling to avoid confusion, conflict, and competition which could lower performance. System 2 details that resilience is needed in: scheduling resources to deliver services; communicating effectively internally; notifying senior leaders quickly of unresolvable problems.

COVID-19 example: Coordination and communication of operations

Facilitating alignment across COVID-19 operations (e.g. local government and health systems) helps to reduce confusion and maximise effectiveness. Alignment can be developed by:

- sharing objectives and communicating responsibilities;
- agreeing ways to collaborate to achieve objectives;
- agreeing a common starting place through sharing data and establishing a commonly recognised information picture.

One alignment challenge during COVID-19 is that that most Local Resilience Forums do not share common geographic footprint with the local health system which makes cross-boundary working more complex.

Examples of questions that address the resilience of coordination and communication of operations

- How clearly is performance expectation communicated to delivery units?
- How is the demand for shared resources resolved, and how effective is this?
- What coordination challenges (e.g. partner alignment) and existing structural issues (e.g. geographic boundaries) can be addressed to ease delivery of future health-led emergencies?

System 2 deals with the daily communication to, and coordination of, delivery units, always under the monitoring of System 3 which deals with wider management of that delivery.

System 3 – Management of processes, systems and planning, including audit

System 3 manages the system to ensure the effective use of resources in delivering the vision, and meeting targets, of the system. System 3 details that resilience is needed in: management structure; planning operations; sustainable resource management; corporate risks; supporting functions; continuity of service; regular performance monitoring; auditing; and, learning from itself and others.

COVID-19 example: Management of processes, systems and planning, including audit

A focus of current discussions in the resilience community is how local government can learn from their response to COVID-19 to prepare for potential outbreaks and second waves. As we mentioned in Week 12, learning needs an effective process to analyse the response and co-create and validate sophisticated learning. The analysis of lessons should be equally sophisticated so nuanced lessons from different people are understood. Learning lessons could include five activities:

- surveys to collect broad views;
- individual discussions to capture detailed understanding;
- analyses of by respondent-type;
- facilitated group discussions to build agreement;
- facilitated action planning on how to address the lessons.

Examples of questions that address the resilience of the management of processes, systems and planning, including audit

- How do we identify and validate relevant lessons in a way that is effective and acquires evidence-based learning about system performance?
- How do we embed learning from events and exercises in system improvement?
- How do we share lessons across the system (e.g. guidance, peer reviews)?

System 3 is supported by other systems, including the intelligence that comes from System 4 which enables management to direct effort according to the expected future demands and wider implications.

System 4 – Intelligence

System 4 provides insight to what is happening in the system's wider environment that may impact the system so merits monitoring or response. System 4 details that resilience is needed in the: use of external and internal data for resilience; creation of strategic collaborations for resilience; and, exploring of the social/physical environment.

COVID-19 example: Intelligence
There was a desire in local government for more data on the effects of COVID-19 to inform their response and recovery. Some local governments built their own data capture and analysis functions which used internal and publicly available data to build an informed picture for planners through the Multi-Agency Information Cell. Many organisations use The Manchester Briefing as a source of intelligence about how other countries respond and recover.
Examples of questions that address the resilience of intelligence
<ul style="list-style-type: none"> - What is the role of national intelligence systems in supporting local resilience (e.g. government data, national/local analysis, government scientific advisory groups)? - What intelligence functions and data are available to support local resilience (e.g. the role of think tanks, research centres, and local government analysis units)? - Is there a need to formalise working arrangements between all strategic partnerships to encourage collaboration and what would be the correct structure for this?

System 4 delivers information to System 5 thereby enabling leaders to foresee wider issues and provide policy, culture, and wider representation to the whole system.

System 5 – Strategy, vision and leadership

System 5 is the ‘brain’ of the system – providing direction and cultural norms to Systems 1-4 to ensure they act as one system. System 1 details that resilience is needed in the: strategy and vision for resilience; and, leadership in aligning the organisation behind this direction.

COVID-19 example: Strategy, vision and leadership
The presence of effective leadership for COVID-19 was important in aligning the public behind a clear vision to manage the spread of the virus. In England, the strategy was set by the national government as “stay at home > protect the NHS > save lives” and, later, as “stay alert > control the virus > save lives”. These clear calls for public action were initially helpful in crystallising the expectation and associated rationale. However, as lockdown began to ease, leaders attempted to tailor these messages to address different audiences (e.g. workers, shielded people, bubbles) adding nuances that clouded the initial clarity. This uncertainty was compounded by the different messages from the four nations of the UK, the expanding interpretation of the rules under close scrutiny, and message fatigue in the public.
Examples of questions that address the resilience of strategy, vision and leadership
<ul style="list-style-type: none"> - What is the vision for resilience at national, regional and local levels, and how can this be supported by legislation, guidance, standards, and collaboration? - Where is leadership needed to support implementation of the vision through an integrated approach to emergency planning (e.g. subsidiarity, bringing public and private sectors together, emergency commissioning)? - How can health response structures and local resilience partnerships align to collaborate on future health-led emergencies?

System 5 could be the gold commander, the strategic coordinating group, or the Office of the President or Prime Minister – yet it needs strong connection to Systems 1-4 to have ground truths on delivery, coordination, management and intelligence to perform well.

Conclusion

The Viable System Model can be used to reflect on the system by understanding the resilience of Systems 1-5. This takes us away from the performance of individual organisations and into considering the performance of the system as a whole. Here, the system may be a country, a region/province, a local resilience partnership, a city, a collection of organisations, a delivery unit within a small organisation. For each of these examples the same principles hold true; delivery being coordinated and supported by management, informed by intelligence, and led by policy.

The VSM shows the need for resilience across 5 systems which raises the question of who decides what is ‘enough resilience’, where systems can find information about ‘resilience’ and how to achieve it. In many sectors², a *National Centre of Excellence* provides advice across all 5 systems to support local implementation. For example, providing (System 1) education and skills training for delivery, (2) coordinating response and recovery, (3) guidance on managing preparedness of resilience, (4) coordinate research capabilities and data analysis, (5) lobbying and representation. A *National Centre of Excellence for Resilience* could help to establish what fit-for-practice means, how it is achieved and implemented, and how resilience can be further strengthened through sharing lessons, peer review, effective debriefs, key enablers, and international comparison. With this in mind, is there a role for a *National Centre of Excellence for Resilience* to support resilient systems for crisis and emergency response?

In next week’s briefing, “Developing resilient systems for crisis and emergency response”, we will describe the 5 systems of VSM in more detail. This will explain more of what the systems contain and introduce some of the useful system features of the theory. We will introduce this in the context of one application of viable systems – to structure the analysis of our experiences of COVID-19. A debrief or lessons learned activity could be structured around the 5 systems to systematically explore the response provided by systems. This will set the scene for Part 3 which we will consider how debriefs can analyse the performance of these 5 systems to identify strengths and opportunities.

² For example, in cybersecurity (petras-iot.org), retrofit (retrofitacademy.org/coe), teaching mathematics (ncetm.org.uk), teaching language pedagogy (ncelp.org)

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 the gap in resources available to some children to support their online working, the development of online memorials for those who have lost their lives to COVID-19, and potential resentment regarding differing experiences of coping with the pandemic. Economic lessons consider business regeneration through utilising the donations, skills, knowledge and resources in the private sector, and addresses the reduction of staff and skills availability as a result of COVID-19. Infrastructure lessons focus on maintaining the supply and donation of blood to support ongoing critical needs. Environmental lessons consider analysis of wastewater and sewer data to monitor their relationships with COVID-19 transmission. Communications lessons focus on utilising community knowledge and capacity to communicate, and provide appropriate resources to vulnerable people. Governance and legislation includes lessons on efficiently and effectively testing large number of the population for COVID-19 through pooled testing, and ensuring there is capacity to cope with concurrent emergencies.

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Recovery: Categories of impact	Actions	Country/ Region	Source
Humanitarian Assistance			
Vulnerable people	<p>Consider the impacts of the ‘digital divide’ on children’s ability to learn at home during lockdown. With many schools closed, and young people adapting to learning remotely from home, access to the internet and digital devices has become imperative. As a result there is a growing divide between children who have internet access and those who do not. In Spain, disadvantaged students are 14% less likely to get online, compared to students who were not disadvantaged. Additionally, disadvantaged students in the country were without a tablet, a laptop or any way of linking into online platforms, and many disadvantaged families were not confident with technology when it was provided to them. In some cases teachers have resorted to using class WhatsApp groups, as most households had access to a mobile phone. To support online learning from home consider:</p> <ul style="list-style-type: none"> ▪ Training teachers, students and their families to use online platforms and technology (and not assuming that they already have those skills) ▪ The availability of technology at home (e.g. mobile phones) and alternative teaching/communication methods such as using WhatsApp ▪ Partnerships with internet providers to support disadvantaged families with the cost of internet access ▪ Partnering with software and technology firms to support disadvantaged children to gain access to hardware such as tablets and software ▪ Donation campaigns through schools to collect old phones, laptops and tablets that can be refurbished and distributed 	<p>Spain</p> <p>UK</p>	<p>https://uk.reuters.com/article/us-health-coronavirus-spain-education-in/generation-covid-the-spanish-learners-lost-to-lockdown-idUKKBN23U1EP</p> <p>https://english.elpais.com/society/2020-03-17/with-spain-in-lockdown-virtual-education-replaces-the-traditional-classroom.html</p> <p>https://www.bbc.co.uk/news/uk-england-53323405</p> <p>https://www.nationalgrid.com/uk/stories/community-spirit/laptop-donation-enables-lockdown-learning</p>

Recovery: Categories of impact	Actions	Country/ Region	Source
Community engagement	<p>Consider creating online ‘books of remembrance’ for your city to commemorate those who have lost their lives to COVID-19. Consider how to develop a space to remember and honour people who have died in your city and their stories, by developing an online memorial site with photographs, and some words from family and friends. Consider how to gather accurate information on identified deaths from COVID-19:</p> <ul style="list-style-type: none"> ▪ Confirm the death with a third party, such as a news organization or city agency - directly tie the cause to COVID-19 ▪ Take contributions from victims’ families and confirmation by an immediate family member or next of kin ▪ Check victim details, such as last known address and age e.g. through voter registration data ▪ Partner with institutions that can help provide up-to-date lists of the deceased ▪ Use reports from news organizations, paid obituaries from online sources (e.g. Legacy.com) and local news publications ▪ Check verified posts from victims’ families on social-media platforms, such as Twitter and Facebook ▪ Check announcements from victims’ private and public-sector employers and unions <p>Check official releases from city and state agencies, e.g. Police Department</p>	USA	New York: https://projects.the.city.nyc/covid-19-deaths/

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Recovery: Categories of impact	Actions	Country/ Region	Source
Economic			
Business regeneration/ rejuvenation	<p>Consider ‘asks’ to the private sector in the response to COVID-19. Throughout the response to the pandemic, many private sector companies have offered donations, skills, knowledge and resources to support local and national efforts to tackle effects of the virus. Businesses have a considerable role to play in recovery and renewal as they continue to support their local communities, supply chains, staff, and wider stakeholders. Advice from the World Health Organization suggests to consider asking the private sector to:</p> <ul style="list-style-type: none"> ▪ Protect against COVID-19 by: <ul style="list-style-type: none"> ○ Informing stakeholders on protecting staff and communities at work, protecting jobs and livelihoods, tackling mis-information ○ Protecting businesses through: business continuity plans, supply chain continuity, maintaining essential infrastructures and services, protecting jobs, acting responsibly towards suppliers ▪ Participate in the COVID-19 response by: <ul style="list-style-type: none"> ○ Producing essential supplies, repurposing production capabilities towards making essential supplies, providing in-kind contributions, making available supplies and services ○ Providing financial support to coordinated charity drives, supporting NGO and community needs <p>More information on each ‘ask’ is available in the WHO guide along with links to other resources and information.</p>	All	WHO: https://www.who.int/docs/default-source/coronavirus/who-asks-to-private-sector-covid-19-may-2020.pdf

Recovery: Categories of impact	Actions	Country/ Region	Source
Workforce/ staffing	<p>Consider the reduction of staff/skills availability from the effects of COVID-19. During COVID-19 many training facilities that equip staff with specialist skills have been unable to work effectively so accreditation has not been possible. Furthermore, medical fitness for work certificates may have expired and not been renewed due to the pressures on the healthcare system. Across many sectors (e.g. emergency services, construction, healthcare), these effects could have consequences for the availability of staff who have the required skills/training and are permitted to work; a problem accentuated by the departure of skilled staff during the crisis. Consider:</p> <ul style="list-style-type: none"> ▪ How your workforce's skills profile has changed as a result of the effects of COVID-19 e.g.: <ul style="list-style-type: none"> ○ training centres stopping training new recruits, meaning there is a lack of new staff in the recruitment pipeline ○ expiration of staff's specialist qualifications /registration, meaning they are not permitted/qualified to deliver usual activities ○ granting of medical eligibility to work during the crisis, and impacts on staff ability to work ○ staff being made unemployed or retiring during the crisis ○ staff who have contracted COVID-19 and who are unable to return to normal duties ▪ Putting temporary waivers in place to enable workers to continue despite their skills expiring ▪ How staff whose qualifications have expired during COVID-19 can be re-accredited ▪ How to ensure staff are medically fit to work ▪ How to address and overcome the immediate impacts of a shortage of accredited staff ▪ How to mitigate the multi-year impacts on your sector from COVID-19's disruption to skills, training and staff loss 	<p>Germany</p> <p>USA</p> <p>UK</p>	<p>Fire Department</p> <p>https://www.cms.gov/files/document/summary-covid-19-emergency-declaration-waivers.pdf</p> <p>https://www.cscs.uk.com/applying-for-cards/covid-19/</p>

Recovery: Categories of impact	Actions	Country/ Region	Source
Infrastructure			
Supply chains	<p>Consider how to maintain a safe and adequate blood supply during COVID-19 pandemic. Researchers believe that the main threat to the blood supply is not COVID-19 itself, but the unintended consequences of social distancing on blood donations. This has resulted in uncertain patterns of demand for blood and reductions in donations. Consider:</p> <ul style="list-style-type: none"> Monitoring the supply and demand in hospital based and transfusion services so sufficient blood stocks are maintained to support ongoing critical needs e.g. for major trauma Mitigating (theoretical) transmission of COVID-19 from asymptomatic individuals e.g.: <ul style="list-style-type: none"> Persons donating blood must inform donation centres if they develop a respiratory illness within 14 days of the donation Persons should refrain from donating blood if they have travelled to areas with high community transmission Persons who have recovered from diagnosed COVID-19 should not donate blood for 14 days after full recovery How to mitigate staff and donor exposure to COVID-19 through appropriate PPE and sanitation How to mitigate donor decline through clear, proactive and consistent communication strategies to address and overcome donor anxiety which often stem from misinformation Systems to enable re-entry of COVID-19 infected donors to donation centres after full recovery <p>More information from the WHO can be found here: https://www.who.int/publications/i/item/maintaining-a-safe-and-adequate-blood-supply-during-the-pandemic-outbreak-of-coronavirus-disease-(covid-19)</p>	All	<p>https://www.who.int/publications/i/item/maintaining-a-safe-and-adequate-blood-supply-during-the-pandemic-outbreak-of-coronavirus-disease-(covid-19)</p> <p>https://www.thelancet.com/journals/lanhae/article/PIIS2352-3026(20)30186-1/fulltext#seccestitle30</p> <p>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7176270/</p>

Recovery: Categories of impact	Actions	Country/ Region	Source
Environmental			
Waste management	<p>Consider screening sewage and wastewater to monitor the correlation between sewer data and COVID-19. Wastewater-based epidemiology groups in Australia, the Netherlands, Sweden, and the USA have already reported detecting traces of COVID-19 in wastewater. Although COVID-19 is not known to infect humans through sewage or wastewater, similar diseases can, and so monitoring the behaviour of COVID-19 in these environments is important. Consider integrating sewer surveillance and wastewater inspections into systems for COVID-19 monitoring:</p> <ul style="list-style-type: none"> ▪ Develop a 'dashboard' of data to assess the correlations between all collated COVID-19-related indicators as seen in the Netherlands ▪ Provide information on potential transmission pathways and improve the early warning of new outbreaks by understanding the relationships between: wastewater analysis, the number registered infected people, and societal or behavioural traits 	Netherlands Australia Sweden USA	<p>https://www.dutcwatersector.com/news/sewer-surveillance-part-of-dutch-national-covid-19-dashboard</p> <p>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7191284/</p>

Recovery: Categories of impact	Actions	Country/ Region	Source
Communications			
Targeted communication	<p>Consider how to effectively utilise community knowledge and capacity to communicate, and provide resources to vulnerable people. In Melbourne (Australia), residents of a tower block on hard lockdown put together an information sheet for the predominantly non-English speaking community to explain the government's measures. The information sheet was translated into ten written, and five oral languages within 24 hours. The information sheet was then distributed among residents within the tower via text and WhatsApp and to community networks to help disseminate government messaging to communities more widely. Consider:</p> <ul style="list-style-type: none"> Assessing whether your organisation has information translated sufficiently for the communities it interacts with How to effectively disseminate information to marginalised communities, and the networks most adept at doing this How to engage with networks that can access marginalised people in their communities, through religious or social networks to assess if needs are being met and if information is being received and understood The efficiency of utilising community networks to identify different languages and cultures, and their proficiency in translating key public health messages 	Australia	<p>Department of Justice and Community Safety, Victoria</p> <p>https://www.theguardian.com/australia-news/2020/jul/06/melbourne-towers-residents-translated-covid-19-information-sheet-into-10-different-languages-in-24-hours</p>

Recovery: Categories of impact	Actions	Country/ Region	Source
Governance and legislation			
Risk assessment	<p>Consider how to simultaneously test large numbers of people for COVID-19 through pooled testing. The basic idea of pooled testing is that instead of testing samples from individuals one at a time, samples from multiple individuals (pools) would be mixed together at a testing facility, and tested as one sample. If the test comes back negative the whole pool is clear. If the test is positive, the pool can be tested individually instead. Pooled testing is a means to test more people faster, using few tests, and for less money, and has long been used to test large asymptomatic populations for disease e.g. to screen for sexually transmitted diseases, and to test donated blood for Hepatitis B and C, Zika virus and HIV. Consider:</p> <ul style="list-style-type: none"> ▪ The cost saving benefits of pooled testing over testing each individual - schools and businesses saddled with testing costs could lower costs by as much as 75% ▪ The scalability of pooled testing – batched testing of pools can provide data covering large areas such as schools and businesses ▪ Pooled testing could ramp up the number of coronavirus tests while lowering testing costs, especially in low-prevalence areas 	USA	<p>https://theconversation.com/group-testing-for-coronavirus-called-pooled-testing-could-be-the-fastest-and-cheapest-way-to-increase-screening-nationwide-141579</p> <p>https://healthpolicy.usc.edu/research/getting-americans-back-to-work-and-school-with-pooled-testing/</p>

Recovery: Categories of impact	Actions	Country/ Region	Source
Emergency planning	<p>Consider having spare capacity in your organisation to cope with concurrent emergencies. Spare capacity is expensive when it is not being used so, in many cases, systems are lean and focus on maximising their utilisation, ongoing value for money, efficiency and return on initial investment. However, this reduces ability to rapidly access capacity and to react quickly in emergency situations. During the early stages of COVID-19 in different countries we witnessed the attempt to delay the impact of the virus so that the system could create needed capacity in areas of healthcare. This time was used to create spare capacity by freeing up beds, sourcing equipment and supplies expected to be needed, preparing staff, identifying processes to pause or reduce to redeploy resources to more critical activities, retrain staff in other critical activities. As countries analyse the potential of future waves of the pandemic, consider:</p> <ul style="list-style-type: none"> What important services are/have been stretched to (or exceed) maximum capacity during the response e.g. healthcare (intensive care), schools (number of socially distanced pupils in classrooms) Where demand for important services could exceed available capacity during recovery and Renewal e.g. provision of mental health support, financial advice, unemployment services, retraining Where spare capacity should be built into the system so that an appropriate response can be rapidly provided to emergencies e.g. ongoing response to COVID-19, concurrent emergencies, future outbreaks of the virus How spare capacity can be created, protected, and prioritised for rapid use when needed The need for spare capacity on an ongoing basis after the crisis lessens 	<p>Germany</p> <p>USA</p>	<p>Fire Department</p> <p>https://www.nga.org/wp-content/uploads/2020/05/NGA-Memo-Concurrent-Emergencies-FINAL.pdf</p> <p>https://www.mckinsey.com/business-functions/organization/our-insights/reimagining-the-office-and-work-life-after-covid-19</p>

Briefing C: Supporting children with autism and their parents during COVID-19

The COVID-19 pandemic has been a challenging time for everyone, especially in trying to adjust to new routines and living and working environments³. This may be particularly true for children with autism and their parents, as children with autism have trouble adjusting to, coping with, and understanding change². To help with this, help parents to explain the current situation in clear and simple ways and can help children with autism to adjust to the 'new normal'. One way of doing this is to provide parents with access to materials that frame COVID-19 as a germ that can make people sick, so it is important to stay away from others and not touch things².

Advise parents to reiterate important rules to children with autism is also important to help them cope, such as²:

- Washing hands well and often (for at least 20 seconds)
- Not touching their nose, mouth, and eyes
- Keeping at least 6 feet away from other people
- Wearing a cloth face covering or face mask in public places

Face coverings may be difficult for autistic children, some parents have had successes in attaching the ear loops on masks to their child's favourite hat with buttons to reduce sensitivity⁴. Make authorities (such as transport providers, Police) aware of "Facemask Exemption Cards" that have been produced by organisations for parents to print out for those who cannot wear a mask^{5, 6}. Local government can support parents of children with autism by working with respected specialist organisations to advise parents e.g. one encouraging mask wearing⁷:

- Demonstrate using the face mask on a preferred object or person, such as a stuffed animal, a doll, or a family member
- Allow the person to choose among different types of fabric face masks to find one that is most comfortable
- Start by practicing wearing the face mask for short durations of time, allowing for breaks when needed
- Plan initial outings in low-demand environments that are quiet and calm, so that the individual can experience success wearing the face mask
- Use a printed photo or digital photo of the individual wearing a face mask as a visual cue to wear the mask before outings

³ <https://kidshealth.org/en/parents/coronavirus-autism.html>

⁴ <https://spectrumlocalnews.com/nc/triangle-sandhills/news/2020/07/04/face-masks-create-new-challenges-for-people-with-autism-or-sensory-disorders>

⁵ <https://www.autism-anglia.org.uk/facemask-exemption-card>

⁶ <https://www.washingtonpost.com/lifestyle/2020/05/11/some-autistic-people-cant-tolerate-face-masks-heres-how-were-managing-with-our-son/>

⁷ <https://www.health.harvard.edu/blog/helping-people-with-autism-spectrum-disorder-manage-masks-and-covid-19-tests-2020061020089>

In addition to these changes, losing the daily routine that going school provides adds an additional layer of complexity for children with autism, and puts them at risk of not receiving the social care and support they require⁸. While, some children may have found home schooling difficult, the time spent away from school may have resulted in the development of a new routine at home where they feel safe⁹. As such, returning to school may cause anxiety and distress. Local government should inform teachers that some ways of reducing these anxieties include:

- Providing a visit to the school before it reopens if possible, to help children familiarise themselves with their environment and staff again
- Encouraging homes to introduce changes that are made in school at home e.g. explain social distancing measures, ask for photos of new classroom layouts to show children
- Asking parents for information about your child during COVID-19 so they have an understanding of their needs and how these may have changed due to COVID-19 restrictions

COVID-19 has also been a challenging time for parents of children with autism. One parent in the UK stated that support for them and their child had been reduced to occasional phone calls and they felt like they had been “left to struggle alone”¹⁰. They also stated that they were repeating the same or similar activities with their child from before lockdown and that it felt like their child’s development had stalled. They stated that increased resources from their child’s support worker such as a timetable of activities and development would have helped and made the experience of self-isolation and lockdown “less distressing”⁹.

Providing specialised phone lines and centralised hubs with resources for parents is vital, to ensure their well-being and that of their children, via reliable information and support¹¹. Local government can help employers to realise that parents also need to find ways to balance work and childcare responsibilities this can include¹⁰:

- Arrange to work from home to ensure supervision, or childcare sharing arrangements with friends and family
- Prepare information about the child’s support needs and successful learning and behaviour strategies for anyone caring for the child
- Develop an emergency contact list, and discuss it with friends and family. Include names and numbers of your personal autism support network, as well as medical providers
- Contact local organizations who may be able to offer support
- Look through the child’s medical records or evaluations related to autism as these may have recommendations on areas to focus on and can help you with making learning plans while schools are closed
- Reach out to others to maintain social support for the whole family e.g. social media, social media groups for autistic people and their families, and other virtual support groups that provide online resources for finding empathy and ideas while self-isolating or in lockdown

⁸ <https://gemreportunesco.wordpress.com/2020/03/30/how-is-the-coronavirus-affecting-learners-with-disabilities/>

⁹ <https://www.autism.org.uk/services/helplines/coronavirus/updates/education-and-school/back-to-school-guide.aspx>

¹⁰ Parent of a child with autism, UK

¹¹ <https://www.autismspeaks.ca/media-request-contact-us/news/news-press-releases/covid-19-information-and-resources/>

Briefing D: Useful webinars

Taken place in the past week	Webinar Title	Link to presentation
14.7.2020	Is remote working the new future of work?	https://www.facebook.com/alliancemanchesterbusinessschool/videos/is-remote-working-the-new-future-of-work/741328336621698/
16.7.2020	Cities on the Frontline Speaker Series: 'Resilient Housing'	https://medium.com/@resilientcitiesnetwork/coronavirus-speaker-series-sharing-knowledge-to-respond-with-resilience-5a8787a1eef5
Coming up		
Date	Webinar Title	Link to registration
31.7.2020	Post-COVID: The skills challenge for construction	https://register.gotowebinar.com/register/2869520147322800651
5.8.2020	Test and Trace - development and rollout, and the future of the COVID-19 contact tracing app - speakers: Hong Kong, Taiwan and Isle of Wight Council	https://www.westminsterforumprojects.co.uk/book/Key-priorities-for-developing-a-COVID-10-contact-tracing-app
5.8.2020	The Emergency Planning Society - Dr Chris Cocking. Exploration of the social psychology of human behaviour during the COVID-19 pandemic	https://us02web.zoom.us/webinar/register/WN_zz3_IQ_Q_2C-LIJD1sxQ