



The following information resources have been selected by the National Health Library and Knowledge Service Evidence Virtual Team in response to a request to collate the best available evidence and guidance on the following question: emergency public health response to COVID-19 across Europe? The resources are listed in our estimated order of relevance to practicing healthcare professionals confronted with this scenario in an Irish context. In respect of the evolving global situation and rapidly changing evidence base, the Evidence Team has provided link-outs to continually updating sources of information rather than prescriptive or static statements of evidence; it is therefore advised to use the hyperlinks in this document to ensure that the information you are disseminating to the public is the most current, valid and accurate.

SUMMARY

Most individual European countries have not published a country specific COVID-19 action plan; instead, they are following WHO advice and activating their general pandemic plan: eg Germany. Britain is one of the few countries with a published action plan. There are some excellent resources available via the European Centre for Disease Prevention and Control.

European Centre for Disease Prevention and Control

SUMMARY. Several useful resources in section “Public Health Area | Prevention and Control” including:

[Novel coronavirus \(SARS-CoV-2\) - Discharge criteria for confirmed COVID-19 cases¹](#)

This report answers the following working questions:

- What is the duration of SARS-CoV-2 virus shedding in bodily fluids of symptomatic patients after remission of symptoms?
- What is the duration of SARS-CoV-2 virus shedding in bodily fluids of asymptomatic patients?
- Which tests are available to document the lack of infectivity in a previously diagnosed infection?
- What is the longest documented transmission from an asymptomatic person?

ECDC provides a desk review of existing guidance documents and protocols from national and international organisations and a convenient search of peer-reviewed publications.

[Resource estimation for contact tracing, quarantine and monitoring activities for COVID-19 cases in the EU/EEA²](#)

Guidance for wearing and removing personal protective equipment in healthcare settings for the care of patients with suspected or confirmed COVID-19

The general objectives of the document are to present the minimal set of personal protective equipment (PPE) required for managing suspected or confirmed COVID-19 cases.

[Resource estimation for contact tracing, quarantine and monitoring activities for COVID-19 cases in the EU/EEA³](#)

¹ <https://www.ecdc.europa.eu/en/publications-data/novel-coronavirus-sars-cov-2-discharge-criteria-confirmed-covid-19-cases>.

² <https://www.ecdc.europa.eu/en/publications-data/resource-estimation-contact-tracing-quarantine-and-monitoring-activities-covid-19>.



Guidance for wearing and removing personal protective equipment in healthcare settings for the care of patients with suspected or confirmed COVID-19

The general objectives of the document are to present the minimal set of personal protective equipment (PPE) required for managing suspected or confirmed COVID-19 cases.

Checklist for hospitals preparing for the reception and care of coronavirus 2019 (COVID-19) patients⁴

This checklist has been developed to support hospital preparedness for the management of COVID-19 patients. The elements described in the list may not be applicable to all hospitals and may need to be adapted to the specific characteristics of the hospital, the individual national health system, legislation and community where the hospital is located.

Elements to be assessed have been divided into the following areas:

- Establishment of a core team and key internal and external contact points
- Human, material and facility capacity
- Communication and data protection
- Hand hygiene, personal protective equipment (PPE), and waste management
- Triage, first contact and prioritisation
- Patient placement, moving of the patients in the facility, and visitor access
- Environmental cleaning

For each area mentioned above, the elements or processes were identified and the items to be checked are listed below.

A procedure for the self-auditing of compliance with this checklist should be considered.

Public health management of persons, including health care workers, having had contact with COVID-19 cases in the European Union - first update⁵

A contact of a COVID-19 case is a person not currently presenting symptoms, who has, or may have been in, contact with a COVID-19 case. The associated risk of infection depends on the level of exposure, which will, in turn, determine the type of monitoring. Establishing the level of exposure can be difficult and requires the case to be interviewed.

The purpose of managing COVID-19 case contacts is:

- to identify symptomatic contacts as early as possible for isolation and treatment
- to facilitate prompt laboratory diagnostic testing

³ <https://www.ecdc.europa.eu/en/publications-data/resource-estimation-contact-tracing-quarantine-and-monitoring-activities-covid-19>.

⁴ <https://www.ecdc.europa.eu/en/publications-data/checklist-hospitals-preparing-reception-and-care-coronavirus-2019-covid-19>.

⁵ <https://www.ecdc.europa.eu/en/publications-data/public-health-management-persons-including-health-care-workers-having-had-contact>.



[Infection prevention and control for the care of patients with 2019-nCoV in healthcare settings⁶](#)

[Interim guidance for environmental cleaning in non-healthcare facilities exposed to SARS-CoV-2⁷](#)

World Health Organization

[COVID-19 Technical Guidance: Country Readiness⁸](#)

Includes draft operational planning guidance and a national capacities review tool for novel coronavirus.

Centres for Disease Control and Prevention

[Interim US Guidance for Risk Assessment and Public Health Management of Persons with Potential Coronavirus Disease 2019 \(COVID-19\) Exposures⁹](#)

Great Britain. Department of Health

[Coronavirus Action Plan¹⁰](#)

⁶ <https://www.ecdc.europa.eu/en/publications-data/infection-prevention-and-control-care-patients-2019-ncov-healthcare-settings>.

⁷ <https://www.ecdc.europa.eu/en/publications-data/interim-guidance-environmental-cleaning-non-healthcare-facilities-exposed-2019>.

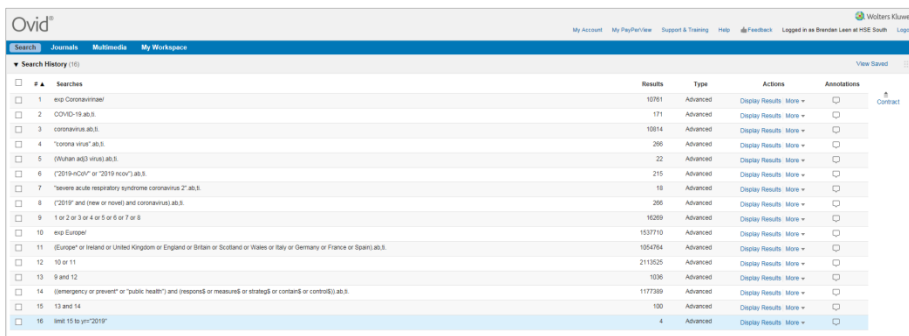
⁸ <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/country-readiness>.

⁹ <https://www.cdc.gov/coronavirus/2019-ncov/php/risk-assessment.html>.

¹⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/869827/Coronavirus_action_plan_-_a_guide_to_what_you_can_expect_across_the_UK.pdf.

Embase Search Strategy

SUMMARY. No useful information as at 11/03/2020. Some partially relevant abstracts included below for reference.



#	Searches	Results	Type	Actions	Annotations
1	exp Coronavirus/	10761	Advanced	Display Results More	<input type="checkbox"/>
2	COVID-19.ab.3.	171	Advanced	Display Results More	<input type="checkbox"/>
3	coronavirus.ab.3.	10814	Advanced	Display Results More	<input type="checkbox"/>
4	"corona virus".ab.3.	266	Advanced	Display Results More	<input type="checkbox"/>
5	(Wuhan a3) vti(4).ab.3.	22	Advanced	Display Results More	<input type="checkbox"/>
6	("2019-nCoV" or "2019 nCoV").ab.3.	215	Advanced	Display Results More	<input type="checkbox"/>
7	"severe acute respiratory syndrome coronavirus 2".ab.3.	19	Advanced	Display Results More	<input type="checkbox"/>
8	("2019" and (new or novel) and coronavirus).ab.3.	266	Advanced	Display Results More	<input type="checkbox"/>
9	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8	16269	Advanced	Display Results More	<input type="checkbox"/>
10	exp Europe/	133710	Advanced	Display Results More	<input type="checkbox"/>
11	(Europe* or Ireland or United Kingdom or England or Britain or Scotland or Wales or Italy or Germany or France or Spain).ab.3.	1054764	Advanced	Display Results More	<input type="checkbox"/>
12	10 or 11	211025	Advanced	Display Results More	<input type="checkbox"/>
13	9 and 12	1036	Advanced	Display Results More	<input type="checkbox"/>
14	(emergency or prevent* or "public health") and (respond* or measure* or strategi* or control*).ab.3.	1177369	Advanced	Display Results More	<input type="checkbox"/>
15	13 and 14	100	Advanced	Display Results More	<input type="checkbox"/>
16	limit 15 to ym<2020*	4	Advanced	Display Results More	<input type="checkbox"/>

Corman et al. Detection of 2019 novel coronavirus (2019-nCoV) by real-time RT-PCR¹¹

Background The ongoing outbreak of the recently emerged novel coronavirus (2019-nCoV) poses a challenge for public health laboratories as virus isolates are unavailable while there is growing evidence that the outbreak is more widespread than initially thought, and international spread through travellers does already occur. **Aim** We aimed to develop and deploy robust diagnostic methodology for use in public health laboratory settings without having virus material available. **Methods** Here we present a validated diagnostic workflow for 2019-nCoV, its design relying on close genetic relatedness of 2019-nCoV with SARS coronavirus, making use of synthetic nucleic acid technology. **Results** The workflow reliably detects 2019-nCoV, and further discriminates 2019-nCoV from SARS-CoV. Through coordination between academic and public laboratories, we confirmed assay exclusivity based on 297 original clinical specimens containing a full spectrum of human respiratory viruses. Control material is made available through European Virus Archive - Global (EVAg), a European Union infrastructure project. **Conclusion** The present study demonstrates the enormous response capacity achieved through coordination of academic and public laboratories in national and European research networks.

¹¹ <http://www.ncbi.nlm.nih.gov/pubmed/?term=31992387>.



Stoecklin et al. First cases of coronavirus disease 2019 (COVID-19) in France: surveillance, investigations and control measures, January 2020¹²

A novel coronavirus (severe acute respiratory syndrome coronavirus 2, SARS-CoV-2) causing a cluster of respiratory infections (coronavirus disease 2019, COVID-19) in Wuhan, China, was identified on 7 January 2020. The epidemic quickly disseminated from Wuhan and as at 12 February 2020, 45,179 cases have been confirmed in 25 countries, including 1,116 deaths. Strengthened surveillance was implemented in France on 10 January 2020 in order to identify imported cases early and prevent secondary transmission. Three categories of risk exposure and follow-up procedure were defined for contacts. Three cases of COVID-19 were confirmed on 24 January, the first cases in Europe. Contact tracing was immediately initiated. Five contacts were evaluated as at low risk of exposure and 18 at moderate/high risk. As at 12 February 2020, two cases have been discharged and the third one remains symptomatic with a persistent cough, and no secondary transmission has been identified. **Effective collaboration between all parties involved in the surveillance and response to emerging threats is required to detect imported cases early and to implement adequate control measures.**

Martin et al. Planning and preparing for public health threats at airports¹³

The ever-increasing speed and scope of human mobility by international air travel has led to a global transport network for infectious diseases with the potential to introduce pathogens into non-endemic areas, and to facilitate rapid spread of novel or mutated zoonotic agents. Robust national emergency preparedness is vital to mitigate the transmission of infectious diseases agents domestically and to prevent onward spread to other countries. Given the complex range of stakeholders who respond to an infectious disease threat being transmitted through air travel, it is important that protocols be tested and practised extensively in advance of a real emergency. Simulation exercises include the identification of possible scenarios based on the probability of hazards and the vulnerability of populations as a basis for planning, and provide a useful measure of preparedness efforts and capabilities. In October 2016, a live simulation exercise was conducted at a major airport in Ireland incorporating a public health threat for the first time, with the notification of a possible case of MERS-CoV aboard an aircraft plus an undercarriage fire. Strengths of the response to the communicable disease threat included appropriate public health risk assessment, case management, passenger information gathering, notification to relevant parties, and communication to passengers and multiple agencies. Lessons learned include: o Exercise planning should not be overly ambitious. In testing too many facets of emergency response, the public health response could be deprioritised. o **The practical implementation of communication protocols in a real-time exercise of this scope proved challenging. These protocols should continue to be checked and tested by desk-top exercises to ensure that all staff concerned are familiar with them, especially in the context of staff turn-over.** o The roles and responsibilities of the various agencies must be clear to avoid role confusion. o Equipment and infrastructure capacities must be considered and in place in advance of an actual incident or test, for example whether or not cell phone signals require boosting during a major event. **Importantly, exercises bring together individuals representing organisations with different roles and perspectives allowing identification of capabilities and limitations, and problem solving about how to address the gaps and overlaps in a low-threat collaborative setting.**

¹² <http://www.ncbi.nlm.nih.gov/pubmed/?term=32070465>.

¹³ <http://www.ncbi.nlm.nih.gov/pubmed/?term=29514664>.



Produced by the members of the National Health Library and Knowledge Service Evidence Team.[†] Current as at 11 March 2020. This evidence summary collates the best available evidence at the time of writing. Emerging literature or subsequent developments in respect of COVID-19 may require amendment to the information or sources listed in the document. Although all reasonable care has been taken in the compilation of content, the National Health Library and Knowledge Service Evidence Team makes no representations or warranties expressed or implied as to the accuracy or suitability of the information or sources listed in the document. This evidence summary is the property of the National Health Library and Knowledge Service and subsequent re-use or distribution in whole or in part should include acknowledgement of the service.

The following PICO(T) was used as a basis for the evidence summary:

P Population person location condition/patient characteristic	COVID-19 Europe
I Intervention length location type	Emergency public health response
C Comparison another intervention no intervention location of the intervention	
O Outcome	Optimal patient outcome. Containment of infection.

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