



ACUTE RESPIRATORY INFECTIONS (ARI) GUIDANCE WEBINAR

Winter preparedness: are we ready?

07th December 2023



ARI GUIDANCE WEBINAR

Winter preparedness: are we ready?

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- The winter challenge
- The opportunity
- How we are trying to realise this opportunity for winter 23-24.
 - Guideline for Acute Respiratory Infections (ARI)
 - Pathways for access to early diagnosis (PCR – multiplex testing and antigen testing for COVID-19)

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OPPORTUNITY: Antivirals, the emerging evidence

- Emerging evidence supports *early use of Paxlovid for COVID-19 to reduce risk of hospitalisation.*
- WHO recommendations:
WHO update to [Therapeutics and COVID-19: Living guideline, 10 November 2023](#) provides new pharmacokinetic evidence for nirmatrelvir-ritonavir (Paxlovid) and molnupiravir, which supports existing recommendations for patients at high risk of hospitalization. New recommendations were also added for moderate risk of hospitalization for nirmatrelvir-ritonavir, and for moderate and low risk of hospitalization for molnupiravir and remdesivir.
This confirms a **strong recommendation for Paxlovid** (Nirmatrelvir-Ritonavir) for those at highest risk of hospitalisation.
- Rapid review by RGDU – on effectiveness of antivirals for prevention and treatment of influenza and COVID-19; pre-publication stage.
- EU commissioner for health recognises the importance of increasing the awareness of clinicians to consider the *early use of available antiviral treatments for COVID-19, RSV and influenza to prevent progression to severe disease.*
- [HSE Interim guidance](#) – updated just yesterday supports early prescribing of Paxlovid.

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Acute Respiratory Infection (ARI) Guidance

07 December 2023



Review process

Guidance document developed in **2021** by a subgroup of PICT and updated annually.

Working group convened in October 2022 to develop two additional algorithms requested by DNHP (*input from AMRIC/ICGP/Microbiology/Public Health*). Signed off AC-SARI **January 2023**.

Guidance and algorithms reviewed and updated in **November 2023**. Consultation process for documents included representation HPSC, NHP Office (CPHMs), AMRIC, ICGP, ADPHs, Resp-Sig, CST group.



Summary of updates to Guidance (*Guidance on testing for Acute Respiratory Infection (ARI) in Residential Care Facilities* (RCF) – Winter 2023/2024 V1.4* 13/11/2023)

Residents

- Testing in RCFs to include **multiplex PCR testing for COVID-19 and influenza as a minimum**. Where multiplex testing is not available, testing for flu and COVID-19 should be undertaken simultaneously using appropriate swabs. NVRL tests for multiple pathogens and other labs may already be testing for multiple pathogens on multiplex PCR systems.
- When an outbreak is suspected in an RCF, notify facilities IPC team and the Area Public Health Team. PHRA should be undertaken which will direct the management of outbreak. **Testing of up to 5 symptomatic residents is generally recommended.**
- When infection with more than one respiratory pathogen is suspected in the facility, **additional testing of symptomatic individuals may be required following a clinical or public health risk assessment**. This will be assessed on a case-by-case basis. PHRA will determine steps to be taken if additional testing is required.
- It is advisable that swabs are taken on site by trained staff and that only one swab should be taken per symptomatic resident to test for both influenza and COVID-19 (as a minimum). Only one swab should be taken unless the laboratory providing the service is not able to provide testing for both influenza and COVID-19 on the same sample.



Summary of updates to Guidance (*Guidance on testing for Acute Respiratory Infection (ARI) in Residential Care Facilities* (RCF) – Winter 2023/2024 V1.4* 13/11/2023)

Residents

- For symptomatic residents, it is recommended that a deep nasal or nasopharyngeal sample is taken **using a swab specified as appropriate by the laboratory** providing the testing service.
- The RCF should ensure **sufficient supplies of viral swabs are ordered** as soon as possible. RCF may seek immediate advice from the NVRL/local laboratory (depending on local arrangements) regarding access to viral swabs
- Advice on steps to take if results of the test **are positive** for COVID-19 and/or positive/possible/probable influenza
- Additional testing with antigen tests, or PCR where confirmation is required, may be used to guide clinical decisions, for example, if required to determine eligibility to be considered for targeted treatment for COVID-19, or antiviral treatment or prophylaxis against influenza.
- Testing of asymptomatic residents is not appropriate as there is no reason to believe that testing of those who are asymptomatic will assist in managing the outbreak.
- If the results of these tests are negative for both COVID-19 and influenza, conduct a clinical risk assessment and discuss with Public Health to determine if further testing should be undertaken.



Algorithm *Guidance on testing for ARI in RCFs*

Algorithm: Guidance on testing for Acute Respiratory Infection (ARI) in Residential Care Facilities* (RCF) Version 1.2 02/11/2023



Algorithm Management of adults and children presenting with symptoms of ARI at Primary Care facilities

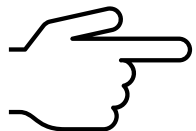
Algorithm: Management of adults and children presenting with symptoms of acute respiratory infections (ARI) at Primary Care Facilities when influenza is circulating Version 1.4 14/11/2023



Guidance documents and resources

ARI Guidance 2023:

- [Guidance on testing for Acute Respiratory Infection \(ARI\) in Residential Care Facilities* \(RCF\) – Winter 2023/2024 V1.4 13/11/2023.](#)
- [Algorithm: Guidance on testing for Acute Respiratory Infection \(ARI\) in Residential Care Facilities* \(RCF\) Version 1.2 02/11/2023](#)
- [Algorithm: Management of adults and children presenting with symptoms of acute respiratory infections \(ARI\) at Primary Care Facilities when influenza is circulating Version 1.4 14/11/2023](#)
- [Public Health & Infection Prevention & Control Guidelines on Prevention and Management of Cases and Outbreaks of COVID-19, Influenza & other Respiratory Infections in Residential Care Facilities V1.12 17.07.2023.](#)
- Request (RGF004) for new algorithm *Guidance on testing for Acute Respiratory Infection (ARI) in acute hospital settings Winter 20xx/ 20yy*

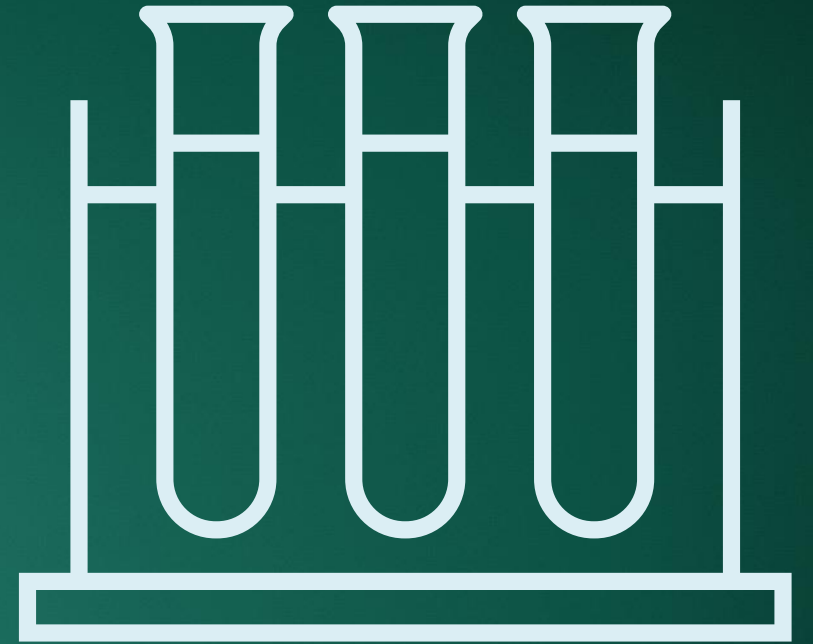


Available here www.hpsc.ie/a-z/respiratory/influenza/seasonalinfluenza/guidance/



Respiratory Virus Testing Capacity and Practices in Acute Hospital Settings in Ireland in 2023

Key findings from a National Laboratory Survey



The survey was conducted in July 2023



HPSC team: Adele McKenna, Maureen O'Leary, Lisa Domegan, Joan O'Donnell

Of the 40 hospital laboratories invited to participate, 30 (75%) responded to the survey.

- Respiratory virus testing is widely available in the acute hospital setting in Ireland, with all 30 responding laboratories (100%) testing for SARS-CoV-2, 29/30 (97%) for influenza and 27/30 (90%) for RSV
- 28 laboratories (93%) reported using multiplex RT-PCR testing for SARS-CoV-2, influenza and RSV, including 25 (83%) testing for all three viruses, SARS-CoV-2, influenza, RSV, and 3 (10%) testing for SARS-CoV-2 and influenza only
- Two laboratories (7%) not currently using multiplex RT-PCR testing are planning to introduce it during the 2023/2024 winter season
- 17/28 (61%) doing multiplex RT-PCR testing reported using the Xpert Xpress CoV-2/Flu/RSV plus multiplex RT-PCR assay. All 28 laboratories reported using more than one multiplex RT-PCR assay
- Singleplex testing to test for SARS-CoV-2 is used by 19 laboratories (63%). No laboratories test for influenza or RSV using singleplex tests



Overview of respiratory virus testing in acute hospital laboratories in Ireland

- In addition to RT-PCR testing, 10/30 responding laboratories (33%) reported using Rapid Molecular Methods for testing of SARS-CoV-2, influenza and RSV
- Most laboratories are testing for SARS-CoV-2 on a daily basis all year around including an out of hours service. Testing for influenza and RSV occurs on a daily basis in the winter (including an out of hours service) but occurs less frequently during the summer
- Twelve (40%) laboratories reported testing specimens from nursing homes and residential care facilities, including 11 (37%) that reported testing specimens from both sources
- One third (10/30) of responding sites also use near-patient testing (NPT) to test for SARS-CoV-2, influenza and RSV
- 8/10 hospital sites carrying out NPT use molecular methods (80%), and only 3/10 sites (30%) used antigen-based NPT methods testing for SARS-CoV-2 only
- Most laboratories (24/30; 80%) refer specimens to the National Virus Reference Laboratory for additional testing, primarily for surveillance purposes at the request of HPSC (17/24; 71%), but also for additional subtyping of influenza A (14/24; 58%)

1. Non-responders to the survey will be followed up to confirm if they test for respiratory viruses and if so, whether they use multiplex PCR testing for this purpose.
2. A laboratory survey of respiratory virus testing capacity is repeated every three years, to monitor respiratory virus testing availability and practices
3. Future iterations of the survey collect data on the reasons for laboratories continuing to use singleplex tests.
4. Future iterations of the survey clarify confirmation and notification practices for symptomatic cases of SARS-CoV-2, influenza and RSV detected via molecular based NPT
5. Adequate funding and capacity be made available for acute hospital laboratories to ensure all such laboratories in Ireland are using multiplex PCR and other rapid diagnostic technologies to test for multiple pathogens (SARS-CoV-2, influenza and RSV as a minimum) on a year-round basis.
6. Additional work be undertaken to better understand the testing pathway for specimens from nursing homes and residential care facilities and to inform recommendations to strengthen this testing pathway if needed.
7. Future surveys to include questions that collect data on multiplex testing capacity within each hospital i.e. the volume of PCR tests which can be undertaken by the laboratory each day in both the winter and summer periods.

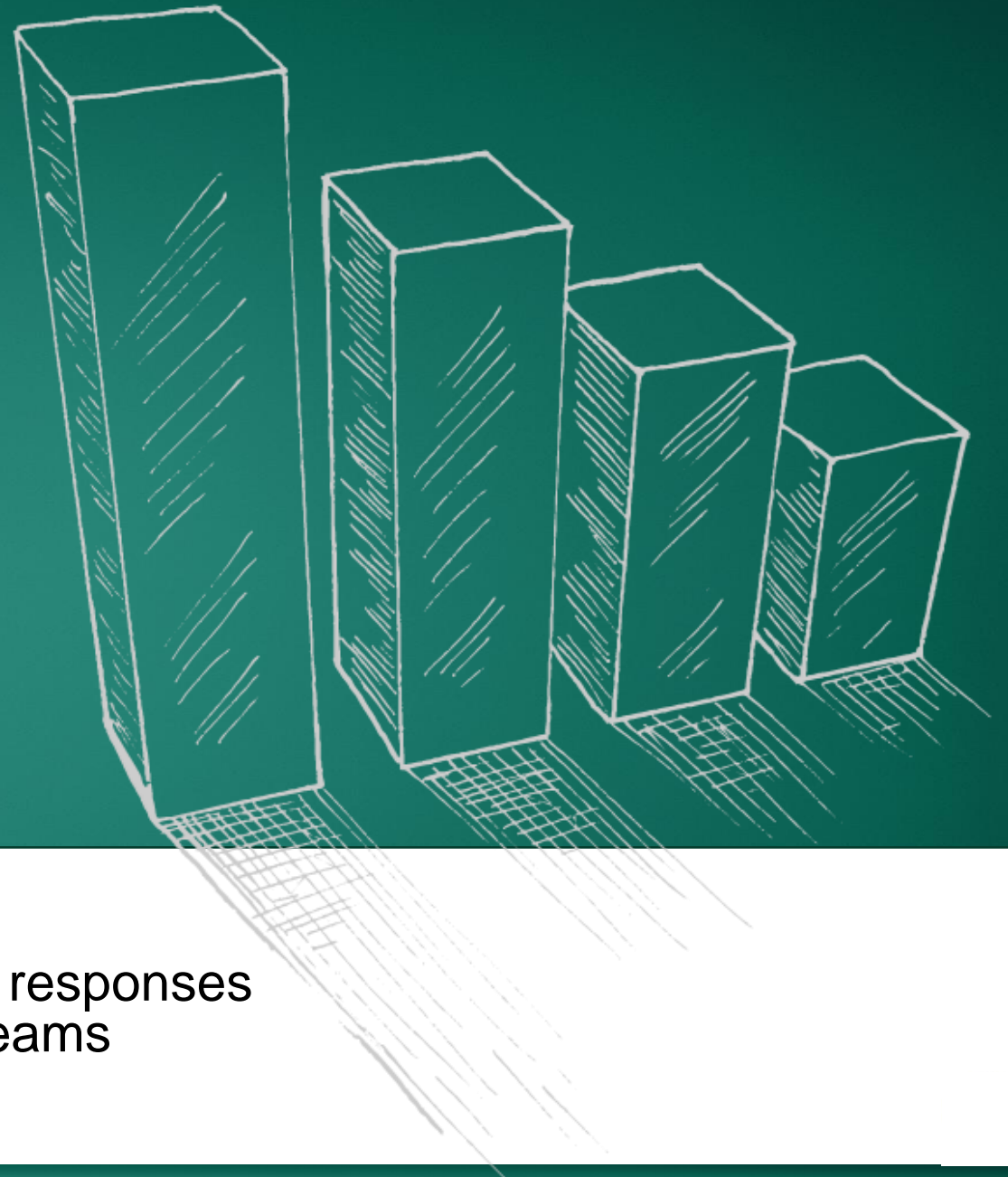


Acknowledgements

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- In addition, we would like to thank Dr. Jeff Connell and Charlene Bennett (National Virus Reference Laboratory), Dr Patrick Stapleton (University Hospital Limerick), and Mairead O'Hanlon, Roisin Duffy and Dr. Stephen Murchan (HPSC) for their help in developing the survey questionnaire.

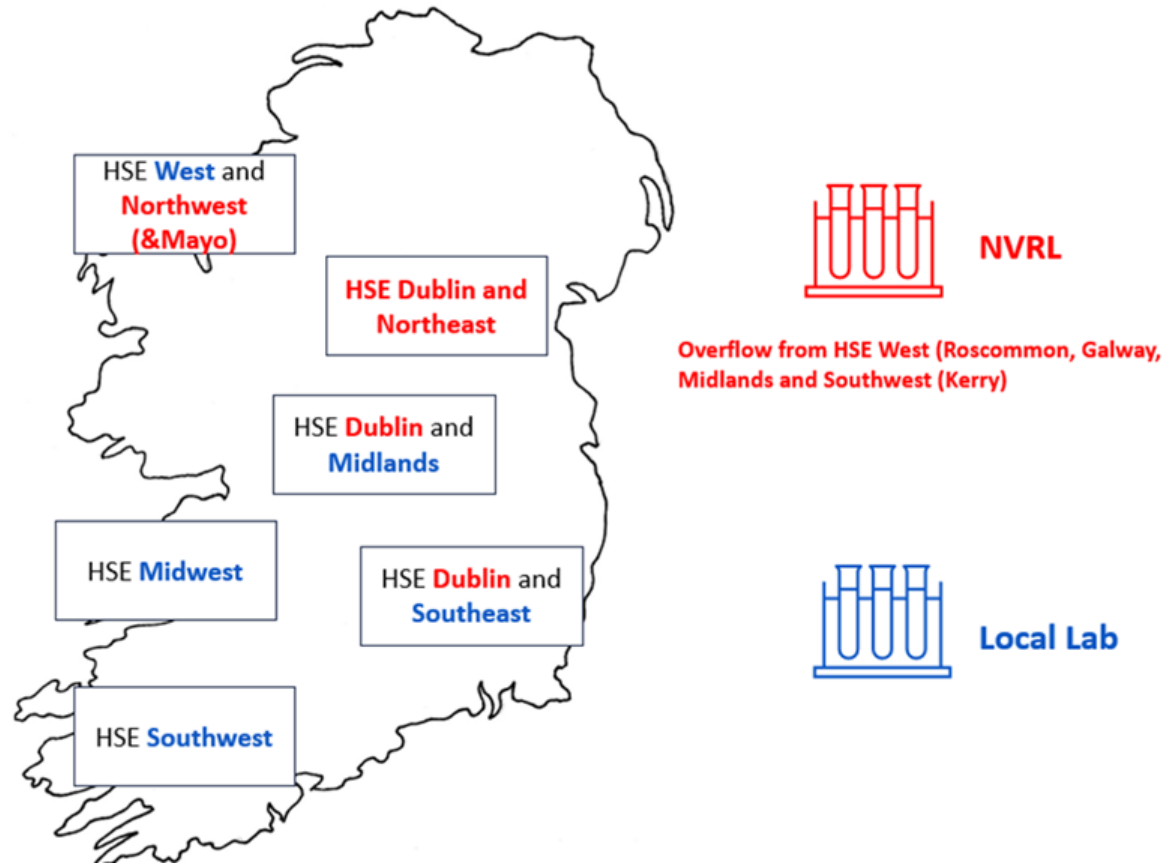


Nursing Home respiratory virus testing practices



Key findings from the survey and responses from regional Health Protection teams

HSE Results from regional Health Protection teams



NVRL directly

Dublin area (CHOs 6,7,9)
Northeast
Northwest and Co. Mayo

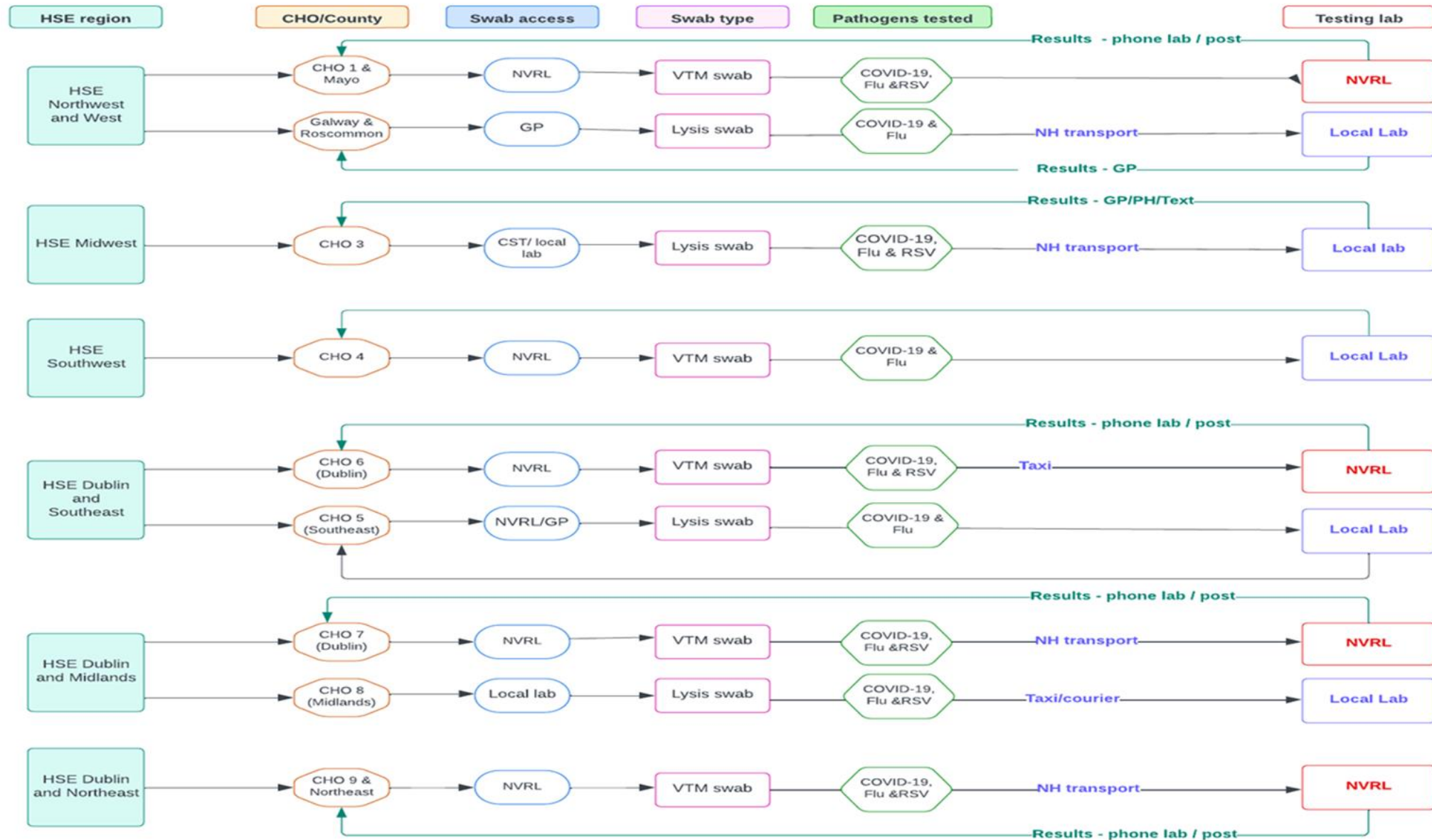
NVRL via local hospital

Northeast

Local acute hospitals

Northeast (for urgent results)
West
Midwest
Southwest
Southeast
Midlands

Nursing home respiratory virus testing pathways nationwide



Swabs

- The RCF can request swabs online at <https://nvrl.ucd.ie/swabs>. At the bottom of this page there is a **Order swab now** button which they need to select which will take them to the order form . Once the order form is completed with the relevant details they need to select the **Next Page** button which takes them to the different swab types available. They need to select the **Copan Swab Collection Device for Viral Molecular Testing** and input the number of swabs required. The maximum number they can order is 10. There is a **Preview** button at the bottom of this page which allows them to review the details of their order. If all is correct they select the **Submit** button. The NVRL will fill their order and send the swabs to the address on the form.
- Copan swab from NVRL website -[Copan \(copangroup.com\)](https://www.copangroup.com)
- A video re NP swab collection- [Stream \(videodelivery.net\)](https://www.videodelivery.net)

Request Forms

- The RCF can download the **General Request Form** for use at <https://nvrl.ucd.ie/info>
- Some of the RCFs still use the SARS CoV-2 REQUEST FORM which is acceptable but they must ensure to **request ARI – multiplex testing** on this form.



Thank you

Questions and/or comments to:

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