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Advice to the National Public Health Emergency Team: Reduction of the minimum age for the application of mask wearing requirements and recommendations - Updated advice

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**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Advice to the National Public Health Emergency Team:

Reduction of the minimum age for the application of mask wearing requirements and recommendations – Updated advice

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About the Health Information and Quality Authority

The Health Information and Quality Authority (HIQA) is an independent statutory authority established to promote safety and quality in the provision of health and social care services for the benefit of the health and welfare of the public.

HIQA's mandate to date extends across a wide range of public, private and voluntary sector services. Reporting to the Minister for Health and engaging with the Minister for Children, Equality, Disability, Integration and Youth, HIQA has responsibility for the following:

- **Setting standards for health and social care services** — Developing person-centred standards and guidance, based on evidence and international best practice, for health and social care services in Ireland.
- **Regulating social care services** — The Chief Inspector within HIQA is responsible for registering and inspecting residential services for older people and people with a disability, and children's special care units.
- **Regulating health services** — Regulating medical exposure to ionising radiation.
- **Monitoring services** — Monitoring the safety and quality of health services and children's social services, and investigating as necessary serious concerns about the health and welfare of people who use these services.
- **Health technology assessment** — Evaluating the clinical and cost-effectiveness of health programmes, policies, medicines, medical equipment, diagnostic and surgical techniques, health promotion and protection activities, and providing advice to enable the best use of resources and the best outcomes for people who use our health service.
- **Health information** — Advising on the efficient and secure collection and sharing of health information, setting standards, evaluating information resources and publishing information on the delivery and performance of Ireland's health and social care services.
- **National Care Experience Programme** — Carrying out national service-user experience surveys across a range of health services, in conjunction with the Department of Health and the HSE.

Foreword

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a highly infectious virus which has caused hundreds of millions of cases of COVID-19 since its emergence in 2019, with a considerable level of associated mortality. Despite the high uptake rates of the COVID-19 vaccine in Ireland, SARS-CoV-2 remains a significant public health concern due to its high basic reproduction rate, the limited evidence of effective treatment approaches, and emerging variants of concern.

The National Public Health Emergency Team (NPHE) oversees and provides national direction, guidance, support and expert advice on the development and implementation of strategies to contain COVID-19 in Ireland. Since March 2020, HIQA's COVID-19 Evidence Synthesis Team has provided research evidence to support the work of NPHE and associated groups and inform the development of national public health guidance. The COVID-19 Evidence Synthesis Team which is drawn from the Health Technology Assessment Directorate in HIQA, conducts evidence synthesis incorporating the scientific literature, international public health recommendations, and existing data sources as appropriate.

From September 2020, as part of the move towards a sustainable response to the public health emergency, HIQA provides evidence based advice in response to requests from NPHE. The advice provided to NPHE is informed by research evidence developed by HIQA's COVID-19 Evidence Synthesis Team and with expert input from HIQA's COVID-19 Expert Advisory Group (EAG). Topics for consideration are outlined and prioritised by NPHE. This process helps to ensure rapid access to the best available evidence relevant to the SARS-CoV-2 outbreak to inform decision-making at each stage of the pandemic.

The purpose of this report is to outline the advice provided to NPHE by HIQA regarding the policy question: "Should the minimum age for the application of mask wearing requirements and recommendations be reduced?" This report is an update of the advice submitted to NPHE on 8 April 2021. In the context of limited research evidence, the advice reflects the findings of a facilitated discussion with the HIQA COVID-19 EAG considering key issues regarding this policy question.

HIQA would like to thank its COVID-19 Evidence Synthesis Team, the members of the COVID-19 EAG and all who contributed to the preparation of this report.

A handwritten signature in black ink, appearing to read 'M. G.', is located at the bottom left of the page.

Dr Máirín Ryan

Deputy CEO & Director of Health Technology Assessment

Health Information and Quality Authority

Version History

Version number	Date	Details
V1.0	3 March 2021	Submitted to NPHE.
V2.0	8 April 2021	Updated based on presentations and discussion at the HIQA COVID-19 EAG meeting held on 6 April 2021.
V3.0	24 August 2021	Updated based on presentations and discussion at the HIQA COVID-19 EAG meeting held on 23 August 2021.

Acknowledgements

HIQA would like to thank all of the individuals and organisations who provided their time, advice and information in support of this work.

Particular thanks are due to the Expert Advisory Group (EAG) and the individuals within the organisations listed below who provided advice and information.

Membership of the Expert Advisory Group involves review of evidence synthesis documents and contribution to a discussion which informs the advice from HIQA to NPHE. It does not necessarily imply agreement with all aspects of the evidence synthesis or the subsequent advice.

The membership of the EAG was as follows:

Dr Máirín Ryan (Chairperson)	Director of Health Technology Assessment & Deputy Chief Executive Officer, HIQA
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The advice is developed by the HIQA Evidence Synthesis Team with support from the Expert Advisory Group. Not all members of the Expert Advisory Group and Evidence Synthesis Team are involved in the response to each research question. The findings set out in the advice represent the interpretation by HIQA of the available evidence and do not necessarily reflect the opinion of all members of the Expert Advisory Group.

Conflicts of Interest

None declared.

Advice to the National Public Health Advisory Team

Background

The purpose of this report is to provide advice to the National Public Health Emergency Team (NPHET) on the following policy question:

"Should the minimum age for the application of mask wearing requirements and recommendations be reduced?"

For the purposes of this advice document, the term 'mask' is interpreted as either a disposable medical or surgical type mask, or as a reusable fabric or cloth face covering. Unless otherwise stated, this advice does not pertain to respirator masks (for example FFP2 medical masks), face shields or face visors.

In the context of limited research evidence regarding a number of key factors to inform this policy question, the advice from HIQA is informed by the expert opinion of the HIQA COVID-19 Expert Advisory Group (EAG) following a facilitated discussion of the considerations identified.

This advice serves to update advice issued to NPHET on [8 April 2021](#), which in turn was an update of advice issued on [3 March 2021](#). For both the advice issued on 3 March 2021 and 8 April 2021, it was advised that there should be no change in the minimum age for requirements and recommendations with respect to mask use in the community. However, the 8 April 2021 advice also noted that the situation was evolving and that recommendations were likely to evolve accordingly.

At the request of NPHET, the COVID-19 EAG was reconvened to discuss this policy question on 23 August 2021. A number of presentations were delivered to provide updates on the evidence with respect to issues relating to this policy question, including the:

- importance of variants of concern, and, specifically, the Delta variant, to SARS-CoV-2 transmission and to outcomes of COVID-19 in children
- epidemiological evidence regarding transmission in children
- evidence regarding the effectiveness of face masks in reducing transmission of SARS-CoV-2, particularly among children
- consideration of potential benefits and harms that may be associated with the wearing of face masks by children

- acceptability of a face mask requirement to relevant stakeholders, including, for example, children, parents and teachers
- feasibility of a face mask requirement for younger children
- examples of international recommendations regarding the use of face masks by children
- contextual considerations.

Key points from presentations given ahead of facilitated discussion

Current requirements and recommendations in Ireland

By way of introduction to the presentations, it was noted that there have been no recent changes to the requirements, recommendations and guidance with respect to the use of face masks by children in Ireland; face masks or face coverings are not currently recommended for children under the age of 13, though children over the age of 13 are expected to follow the advice for adults.

It was noted, however, that the [COVID-19 Response Plan for the safe and sustainable operation of Primary and Special Schools \(V4, August 2021\)](#) was published on 18 August 2021. This Department of Education report notes the following:

"In childcare and educational settings, the implementation of mandatory face-covering usage is challenging, as it is known that children will have a lower tolerance and ability to use the face covering properly..."

"It is not recommended that children attending primary school wear face-coverings."

Importance of variants of concern, and, specifically, the Delta variant, to SARS-CoV-2 transmission and to outcomes of COVID-19 in children

An overview was presented of recent (August 2021) data from the US and the UK, where the Delta variance of concern is currently the dominant strain of SARS-CoV-2, with respect to cases and hospitalisations of COVID-19 among children.

- In the US, cases among children have risen sharply in recent weeks. However, the hospitalisation rate among children with COVID-19 has remained relatively static since January 2021 (0.8-0.9%).

- The hospitalisation rates among children under 15 years of age in England are currently greater than those seen during the peak of COVID-19 infections this year (January 2021). As such, children in England are being hospitalised to the same extent, or more, than they were in January 2021, reflecting high levels of transmission.

An update was provided on SARS-CoV-2 variants of concern (VOCs) and variants under investigation (VOIs), with a particular focus on the Delta (B.1.617.2) variant.

- Delta is now the dominant variant in Ireland with its rise to dominance likely accelerated by the easing of restrictions that occurred around the June bank holiday weekend (week 23). However, this domination was considered inevitable given its increased transmissibility compared with previous variants.
- In [their latest risk assessment on the Delta variant](#), published on 23 July 2021, Public Health England have assessed that the Delta variant is associated with:
 - greater transmissibility compared with wild type virus and the Alpha variant (high confidence)
 - increased risk of hospitalisation compared with the Alpha variant (low confidence)
 - increased risk of reinfections compared with the Alpha variant (low confidence)
 - reduced vaccine effectiveness for symptomatic infection compared with the Alpha variant, which is more pronounced after one dose (high confidence). Limited evidence suggests that vaccine effectiveness against hospitalisation is maintained. There are no data on whether vaccine effectiveness against transmission is affected.
- A systematic review by [Irfan et al.](#) was presented. The review concluded that relative to adults, susceptibility to SARS-CoV-2 infection was lower in children under 10 years old, but risk was comparable in adolescents and those in high school (secondary school). It was noted however that studies included in the systematic review had been conducted prior to the emergence of the Delta variant.
- Preliminary Irish data from the HPSC suggest that the Delta variant does not appear to be more transmissible in children relative to adults. Moreover, the epidemiological evidence to-date suggests that children remain at low risk of

SARS-CoV-2 infection and at low risk of severe disease (regardless of the variant).

- As the adult population becomes fully vaccinated, infection may be driven into younger populations. As such, children will account for a greater proportion of infections overall, and this may result in higher numbers of hospitalisations than previously observed. However, it was noted that the risk of hospitalisation remains low in children.
- Data on T-cell epitopes was discussed in relation to immunity. Evidence suggests that the cell-mediated immune response to COVID-19 vaccines remain positive and that the existing vaccines should continue to be effective against all relevant variants of concern (VOCs) identified to date.

An update was provided with regard to the epidemiological situation in Ireland, specifically as it relates to children.

- There is currently limited Irish school experience in the context of the Delta variant.
- While Delta is more transmissible than previously circulating variants, there is currently no evidence that the modes of transmission are any different, or that the relative importance of the various modes of transmission differ. Therefore, it is reasonable to assume that the mitigation measures that were effective against Alpha will also be effective against Delta, provided such measures are in place with appropriate compliance.
- The incidence of COVID-19 in children has been notably lower than the population average throughout the pandemic, though issues with under- (and over-) ascertainment of cases in this population at various points in the pandemic were acknowledged. The percentage of cases in those aged less than 16 years rarely exceeded their share of the population, and only approached it as the percentage of cases within older adults began to decline due to vaccination. As incidence in adults declines due to vaccination, the proportion of COVID-19 cases represented by children will increase.
- A large force of infection in older adolescents (16 to 18 year olds) and young adults (19-34 year olds), who are not fully vaccinated is thought to be driving increased incidence in children ≤ 12 years old (and vaccinated older adults ≥ 65 years old).
- School openings and closures to-date have had minimal effects on population incidence as a whole, and in children and adolescents of school-going age.

This suggests that previous in-school mitigation measures were effective and or that children are less susceptible to infection and or less likely to transmit the infection to others. However, broader societal re-openings and the rise to dominance of the Delta variant have had very significant effects on incidence.

- Modelling by IEMAG suggests that if effective social contact remains close to current levels, the force of infection should start to decline from late September 2021 when more than 90% of adults are expected to be fully vaccinated. It is anticipated that there will be a long slow decline in the incidence. However, uncertainty remains regarding the relative susceptibility and transmissibility of SARS-CoV-2 in children, and these variables are important for the trajectory of the epidemic.
- The current wave was noted as having a particularly unusual pattern; the wave is characterised by a large area under the curve, indicating high infection force at least partly due to increased travel and socialisation, but which is being mitigated by the high level of vaccination.
- Social mixing at the point of school openings and closures may lead to significant, but transient, increases in incidence. This is believed to be due largely to increased interactions outside of school settings. It is anticipated that there will be at least a transient increase in incidence as schools and universities reopen in the coming weeks.

Epidemiological evidence regarding transmission in children

Presentations were given on data relating to transmission of COVID-19 among children, particularly within school and childcare facilities.

- International studies published since April 2021 were presented. These included a report from the Office of National Statistics in the UK published on 11 August 2021, and a study by Varma et al., published on 20 April 2021, which examined COVID-19 prevalence among students and staff in New York City public schools. Both studies found that the prevalence of COVID-19 in schools was similar to, or lower than, that in the wider community. These results were interpreted by the authors as suggesting that existing school mitigation efforts have been effective. Similarly, a preprint paper by Ulyte et al. was presented, which studied clusters in school children from June 2020 to April 2021, and which concluded that the majority of clusters could be explained by transmission occurring outside the school setting. Finally, a study by Paul et al. published on 16 August 2021 examined transmission of COVID-19 by children within households and found that children aged 0-8 had a higher odds of transmitting the virus than older children.

In a presentation on prevention, synthesis of data on case investigation and outbreak management within schools and childcare facilities, the following points were made:

- The importance of vaccination uptake and adherence to layered mitigation measures were reiterated. In particular, the presentation highlighted the importance of the advice that no-one with symptoms, or household members with symptoms consistent with COVID-19, should be attending school without having discussed the matter with their GP.
- Data from previous infection waves on confirmed COVID-19 cases have demonstrated substantially lower numbers of cases among children relative to adults; children are not considered to be drivers of community infection.
- Considering close contact data derived from public health processes for management of outbreaks within schools:
 - Nationally, at primary school level, 2.5% of identified close contacts have tested positive for COVID-19 over the 2020/2021 academic year. The most recent school testing data (April-June) identified a similar proportion of positive cases (2.37%) among close contacts. The national comparison for positivity amongst close contacts has varied over the year from between approximately 10-30%; therefore, the schools data are reassuring.
 - Close contact positivity data from the last 2-3 weeks of June (when Delta was the dominant circulating strain) in the primary school and childcare facility setting were no different to that experienced earlier when Delta variant was not the predominant strain in Ireland.
- Contributory factors to transmission among children continue to include attendance at school despite the presence of symptoms, and exposures relating to break times, friendship groups, and school transport.
- Considering childcare facility testing data, the proportion of close contacts testing positive between June and August was noted to have fallen from figures earlier in 2021, and ranged from 0.9% to 3.5%. While the positivity rate for the most recent week (8 August 2021 – 14 August 2021) was higher (6.06%), the number of facilities tested and numbers of those children tested were much smaller than normal. Monitoring of these weekly rates will continue.

Evidence regarding the effectiveness of face masks in reducing transmission of SARS-CoV-2, particularly among children

A presentation on the effectiveness of face masks noted the following points:

- There is currently little further clarity regarding the science underlying the effectiveness of face masks, with few significant updates since the meeting of the EAG on 6 April 2021. Observational and mechanistic evidence continues to point towards a beneficial effect, though the quantification of this effect remains highly challenging.
- A comprehensive narrative review by [Escandon et al.](#) was noted to have described the nuances of the evidence on face masks generally, amongst other public health topics, and suggested that the real effect of face masks is likely to lie between that observed in the one randomised controlled trial published on this topic in the context of COVID-19 ('DANMASK-19'), and the many corresponding observational studies published, several of which were previously presented to the EAG. This paper also noted the multifactorial nature of this policy decision, and that mask use in certain settings, including among children, may be challenging.
- An [evidence synthesis performed by Public Health Ontario](#) was presented. This review, which was published on 11 August 2021, and included literature published to 12 July 2021, noted that several studies have found that mask mandates in schools have been associated with lower incidence of COVID-19, but that the independent effect of mask use is difficult to identify.
- Two primary studies which were published since the previous EAG meeting, and which were included in the Public Health Ontario review, were presented. Both studies, [Gettings et al.](#) and [Chu et al.](#), took place in Georgia, USA, in school and summer camp settings, respectively. These showed a lower risk of infections, within the school, and onward to the household, where masks were worn by students, though these decreases were not statistically significant in either case. The study by Gettings et al. which took place within the primary school setting, did however identify a significant effect for mask use by teachers and staff members, and also for ventilation improvements. These findings echoed those of [Lessler et al.](#) which were previously presented to the EAG as a preprint publication, and which are now published. In both cases, teacher masking was significantly associated with reduced risks of COVID-19 infection, while the effect of student masking was non-significant. It was noted, nonetheless, that the studies described are insufficient for the

determination of causality and not specifically designed to assess the effect of mask use.

Consideration of potential benefits and harms that may be associated with the wearing of face masks by children

Considering the potential benefits of mask use in terms of the harms of COVID-19 that could potentially be mitigated by such an intervention, the following studies were presented:

- A study by [Duarte-Salles et al.](#), published on 28 May 2021, showed that the 30-day outcomes of COVID-19 in children, including hospitalisations, are more severe than those with influenza.
- Considering 'Long COVID' in children, several UK-based studies, including those by [Molteni et al.](#) (3 August 2021), [Stephenson et al.](#) (10 August 2021, *preprint*), and the [Office for National Statistics](#), were presented. The paper by Stephenson et al. noted that estimates for the prevalence of 'Long COVID' from 17 publications on this topic, with sample sizes of 10 or more children, ranged from 1%-51%. The matched cohort study performed by Stephenson et al. found that, among children and young people aged 11-17 who tested positive for SARS-CoV-2 versus those who tested negative, higher rates of symptom reporting occurred at three months post testing in those who tested positive. These symptoms largely included tiredness, headache and shortness of breath, though no difference in mental health symptoms were found between the SARS-CoV-2 positive and negative groups at three months post testing.

Considering the potential harms of face mask use by children, the recent review by Public Health Ontario on this topic and three primary studies published since April 2021 were presented:

- The [review by Public Health Ontario](#) considered harms under four major headings (respiratory, psychological, cognition and communication, and dermatological) and found the evidence was variable and inconclusive, and that more research is needed to assess potential negative impacts of mask wearing in children, especially for longer-term use of masks.
- A French study by [Assathiany et al.](#) surveyed both parents and paediatricians and reported that parents stated that children had said they were embarrassed by face masks, and that paediatricians had reported fog on glasses, breathing discomfort, skin rashes and headaches. However, the

authors note that the prevalence of headache, for example, was no different to pre-pandemic estimates.

- [McGwin, McGwin and Griffin](#) described the number of injuries from face masks reported by emergency departments in the US in 2020. There were about 5,000 injury presentations within all of the USA and most of these related to rashes or allergic reactions. The authors noted however that 5% of the injuries related to consuming pieces of mask or inserting pieces of masks into bodily orifices, and all of these were among children. Whether these occurred among infants or older children was not specified.
- A study by [Mickells et al.](#) surveyed teachers in the US of pupils from pre-school, kindergarten and first and second grade classes (representing children of approximately three to eight years) where face masks were mandated. The authors asked teachers to describe any adverse events or issues encountered that in their opinion were caused by the masks. There were 59 such reports out of over 1,000 responses, and included issues relating to mask fit or frustration reported among the young children due to difficulties in communicating.
- It should be noted that the above evidence relating to harms of face masks is derived from reports from surveyed parents, teachers or paediatricians, and that various biases in such reporting cannot be ruled out.

Acceptability of a face mask requirement to relevant stakeholders, including, for example, children, parents and teachers

A presentation on the acceptability of face mask requirements in young children noted the following points:

- The American Academy of Pediatrics issued statements on 18 July 2021 and 11 August 2021 in favour of mask use among all children over the age of two years in the school setting. The rationale for this recommendation included the fact that a significant portion of the student population is not eligible for vaccination. The professional organisation also stated that, with rare exception, face masks can be worn safely by all children two years of age and older, including the vast majority of children with underlying health conditions. They also noted that children two years of age and older have demonstrated their ability to wear a face mask.

A representative of the National Parents Council (NPC) Primary, the representative organisation for parents of children in primary or early education, was unable to attend the present meeting, but provided comments to HIQA ahead of the meeting,

which were communicated to members of the EAG. These comments were as follows:

- Based on the evidence available, the position of the NPC Primary is unchanged since April 2021.
- Parents have previously expressed concerns that wearing masks may increase anxiety for children and may not offer any substantial benefits.
- The NPC is not aware at this time of any increase in support among parents towards children being asked to wear masks. The NPC are prepared to facilitate a survey of parents, if that would aid the discussion.

Feasibility of a face mask requirement for younger children

Considering the feasibility of a face mask requirement for younger children, the findings of the [recent review by Public Health Ontario](#) were presented, in addition to the aforementioned study by [Mickells et al.](#), and a study by [Aaronson et al.](#)

- The review by Public Health Ontario found that amongst the available studies assessing compliance with face mask requirements, adherence had been reported to be high and was found to increase with age.
- The study by Mickells et al. asked teachers of young children (age approx. three to eight years) to report the percentage of the day for which the entire class was wearing masks appropriately. The least square mean values for this estimate ranged from 56% to 88%, with a significant trend for increased compliance with increasing child age. It was also observed that compliance increased with decreasing class size. Furthermore, in comments provided by teachers within the study, it was reported that the most challenging times for mask use were after recess (class break), after lunch, or later in the day or week. The authors offered advice on implementation of mask use in this age-group, identified that certain students may experience greater challenges than others, and suggested that effort will be required to maintain mask adherence.
- The study by Aaronson et al. assessed compliance with mask wearing among children with autism spectrum disorder or with ADHD. This study, which was set in a summer camp in a university setting and which took place outdoors at all times, suggested high levels of compliance with wearing of face coverings in the group of children studied, though this represented a setting of a high staff –to-child ratio.

Examples of international recommendations regarding the use of face masks by children

A presentation was provided on a review of international practice with respect to face mask requirements and recommendations. The following were noted:

- Documents on this topic from the ECDC, US CDC and the WHO have been updated in recent months to add nuance to certain statements, though the guidance itself has largely remained unchanged. Notably, the CDC currently recommends indoor masking by all students (aged two and older), staff, teachers, and visitors to schools, regardless of vaccination status, in school and childcare settings.
- It is difficult to compare age specifications for masks as in many places these are now recommended rather than required, vary by region and with incidence levels, and vary by setting (e.g. schools versus public transport).
- Considering school policy specifically, many countries have reviewed policies in light of planned re-opening following the summer break. At this point, other measures, such as screening for SARS-CoV-2 infection, ventilation, and vaccination, have been cited in informing approaches to mask policy. Five countries (England, Denmark, Norway, Sweden and Switzerland) have either completely or mostly removed masking requirements for all students, though Northern Ireland is retaining masks for at least six weeks following the return to school. Australia and New Zealand do not represent a similar epidemiologic situation as they are currently in lockdown, so were noted separately, but the remaining 31 countries reviewed have either retained previous guidance or relaxed times when masks are worn in school (for example, when not seated) with focus being moved to communal areas, school transport, or where distancing cannot be maintained.
- Generally, practice on face mask policy remains highly variable across 39 countries reviewed, and variability may increase further as countries, and regions within countries, adjust their guidance to take consideration of vaccination levels.
- Despite high levels of community transmission and caution in relation to the Delta variant of concern, the rollout of vaccination programmes has generally led to relaxation of approaches in relation to masking. However, in some countries, the removal of mask requirements indoors has subsequently been reversed based on resurgence of cases (for example, Israel and the USA).

- Issues surrounding mask fit and tolerance for prolonged use in younger children have been recognised by the US CDC, WHO and ECDC for their potential impact on effectiveness, and that there is a recognition of the need to weigh potential benefits against potential harms and to consider the opinions of children.

Contextual considerations

Several contextual considerations were noted ahead of the facilitated discussion. These included the:

- High proportion of the general population currently vaccinated, the recommendation in favour of vaccination of pregnant women from week 14 of gestation onwards, the opening of vaccination of those aged 12 to 15 years, and the ongoing clinical trials of vaccination in the 5 to 11 year old age-group, the results of which are expected in the coming months.
- Dominancy of the Delta variant, the ongoing easing of public health restrictions, and the increased pandemic experience of schools and parents.

COVID-19 Expert Advisory Group Discussion

The COVID-19 Expert Advisory Group (EAG) engaged in a facilitated discussion based on the presentations described above in order to address the policy question under consideration. The following points were raised in respect of the findings of the presentations:

- Contextual factors related to the upcoming primary school reopening period were noted; the role of the Delta variant was highlighted and it was noted that the prevalence of SARS-CoV-2 infection in the general population is higher now than it was at any previous school reopening period during the pandemic. However it was also considered that the context is also different now due to for example, widespread vaccination coverage in the adult population, but also easing of restrictions generally including evidence of increased travel and social contacts.
- The UK was confronted with the Delta variant at an earlier stage than Ireland, so there was a discussion regarding the applicability of UK schools outbreak data to the Irish context. It was clarified that the public health mitigation measures in place in schools and the wider community within the UK are quite different to those implemented in Ireland, and so direct comparisons are challenging.

- The clinical course of COVID-19 in children in the context of the Delta variant was clarified. Early experience with the Delta variant suggests there is no evidence of increased disease severity (including hospitalisations) in children, relative to previously circulating variants. High levels of community transmission are currently contributing to increased incidence of infection in children; therefore, the absolute risk of severe disease in children is higher now than previously observed.
- There was agreement that COVID-19 vaccine uptake should be actively encouraged in all eligible groups as this could confer protection against SARS-CoV-2 infection in young children who are not currently eligible for vaccination.
- The seroprevalence levels in children were queried. Estimates of prior infection levels in children were discussed in the context of potential under-ascertainment in this population. It was explained that seroprevalence data are unavailable for children within Ireland.
- The current guidance on exclusion from school for children who have any symptoms of COVID-19 (or who have household members that have symptoms) was discussed. There was agreement that the public health guidance outlining when children should be excluded from attending school should be clearly and consistently communicated.
- Various options for use of face masks by children were considered:
 - The potential for use of face masks by pupils in fifth and sixth classes in primary schools was suggested, as it was considered that such pupils would be capable of wearing face masks.
 - It was reiterated that the current guidance does not preclude the use of face masks by children aged less than 12 years.
 - While out of scope for this advice document, the ongoing requirement for face masks by secondary school students was discussed, with a consensus that it was premature to consider whether revisions to current policy are warranted.
- It was suggested that there was a lack of clarity regarding the goal of the intervention; it was considered unclear whether use of face masks by children is intended to reduce infections (and therefore morbidity) specifically within children, or whether their use is intended to reduce the overall burden of infection within society.

- It was acknowledged that the Delta variant is causing considerable anxiety in the public due to its increased transmissibility. However it was noted that schools are heavily mitigated environments and while evidence to date is limited, there is no evidence that increased transmissibility translates to increased transmission within school or childcare settings. Given the evolving epidemiological situation it was considered prudent that the potential requirement for use of face masks in primary school-aged children should be kept under review. It was suggested that the evidence be reviewed six to eight weeks after the schools have fully reopened.

Advice

Arising from the findings above, HIQA's advice to the National Public Health Emergency Team is as follows:

- There was a general consensus among EAG members that, as of 23 August 2021, there should be no reduction in the minimum age for requirements and recommendations with respect to mask use in the community.
- The potential benefits of a requirement or recommendation for children to wear face masks must outweigh concerns regarding potential harms associated with face mask use.
 - Although limited, the available evidence suggests that harms of face mask use in children are minor.
 - The evidence for the additional benefits of face mask use in younger age groups is of low certainty and benefits are likely to be small in the context of an existing suite of mitigation measures. Where such measures are in place, national and international evidence suggests that transmission of SARS-CoV-2 within schools and childcare facilities is limited, including within the context of more transmissible variants (for example, the Alpha variant and early experience with the Delta variant).
 - As individual circumstances vary, parents and guardians should be supported if they choose for their child to wear a face mask in primary schools or other public settings.
- Given the current high force of infection and in the context of minimising the risk of COVID-19 infection in children, the importance of the following should be clearly encouraged:
 - Continued compliance with the existing public health guidance and the recommended package of mitigation measures within settings such as schools and associated activities.
 - Adherence to the current public health advice, including during school and after school interactions.
 - Uptake of vaccination against COVID-19 in all eligible groups.
- Given the evolving situation regarding community-level transmission and uncertainty regarding the Delta variant, this advice should be kept under

review and should be informed by national and international surveillance data and relevant evidence from the literature.

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