Technical Advisory Group

Consensus Statement The use of face coverings in childcare and educational settings for under 18s

27 May 2021
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Consensus Statement

This statement summarises

- the current evidence regarding use of face coverings within childcare, school and college settings;
- identifies areas of uncertainty where there are evidence gaps;
- and offers a robust evidence based risk assessment approach to address the overall risks and benefits to children, young people and staff.

Recommendations

- Noting that there is the potential for harms to children, young people and staff of the sustained use of face coverings throughout the day, their use should respond to the evolving nature of the pandemic and emerging evidence. Their usage should reflect both low as well as high community prevalence and the changing conditions around the virus.

- Decisions about the use of face coverings should take account of the full range of the hierarchy of control interventions in place within a school setting to control the spread of the virus. In situations of low community prevalence, the harms associated with the use of face coverings may well outweigh the overall benefits. These harms may include a false sense of security impacting compliance with other infection control measures, reduced communication between teacher and student interfering with pedagogy and resulting in diminished learning outcomes, to respiratory or epidermal discomfort. We should therefore consider steps towards a localised and risk based, co-produced approach to the use of non-pharmaceutical interventions (NPIs) such as face coverings; looking to balance the harms associated with prolonged use in classrooms, against the perceived benefits of protecting from virus transmission.

- Before the end of the current academic year 2020-2021, and in preparation for September 2021, there should be an assessment of the actual risks at the local level of removing face coverings in favour of other methods for risk management and control. This should be co-produced and take account of local transmission rates whilst giving weight to the views of learners/children, as well as staff and other stakeholders.

- A range of measures, including successful vaccination coverage of the Welsh population, the programme of asymptomatic testing of learners and staff, and enhanced contact tracing, have combined to provide improving resilience within communities, with the purpose of shielding from the current and future waves of virus spread. Given a changing risk context in terms of transmissibility and
susceptibility, it is important to take an evaluative and reflective approach to the overall impact of interventions within childcare, schools and Further Education (FE) settings.

- There are likely to be new variants of the virus in the future and a dependence on all the measures currently in place may not be sustainable in the longer term, alternatives should be considered, developed and implemented to allow for the effective operation of childcare, school and FE settings in spite of external conditions.

- Additional data analysis and research/modelling should be commissioned, of specific school age cohorts to address key identified unanswered questions relating to the balance between infection control and effective education for school and FE students under 18. This should include an updated estimate of the effect on R of all age groups up to 18 during school and college opening.

- Additional assessment should be made of the relative harms associated with the long term use of face coverings within education settings.

Evidence on the use of face coverings

Face coverings as source control for droplets and aerosols:

In July 2020 NERVTAG produced a paper setting out the role of aerosol transmission in the spread of Covid-19. This stated that the highest risk of aerosol transmission is when people are in close proximity (less than 2m), although there is also a possibility of aerosols carrying the virus remaining suspended in the air for a period of time in poorly ventilated spaces. There is also evidence that activities such as loud speech or singing have also been associated with a higher risk of transmission. The paper recognises good ventilation as a primary measure for controlling the risk of airborne disease transmission. A well ventilated space reduces the concentration of viral load in the air and hence the probability of infection. Alongside this, as a means of source control it stated that most type of face coverings are likely to reduce the dispersion of respiratory droplets and small aerosols that carry the virus into the air from an infected person; and that they provide some protection for the wearer against exposure to droplets (less protection against small aerosols). The Centre for Disease Control (CDC) has produced guidance reinforcing a layered approach to reduce exposure to SARS-CoV-2, the virus that causes COVID-19. It explains methods for improving ventilation as part of this approach, to reduce the spread of disease and lower the risk of exposure. In addition to ventilation improvements, a multi layered approach includes physical distancing, wearing face coverings, hand hygiene and vaccination.

Regarding the risk of contamination of face coverings, discussions at SAGE 57 in September 2020 concluded that the reduction in transmission risk due to reduced droplet and aerosol emissions from wearing a face covering significantly outweighs any potential for enhanced risk of transmission through inadvertent contact with a contaminated face covering and this is likely to be the case regardless of the duration that the face covering is worn (medium confidence). These risks can however be mitigated by simple measures such as increased handwashing and use of hand sanitiser, surface cleaning, and proper disposal of face coverings (high confidence). Effectiveness of face coverings could decline with increased duration of use; however,
this would still provide more protection to others than an infected person not using a face covering.

World Health Organisation and UNICEF advice:

The WHO advise that people always consult and abide by local authorities on recommended practices in their area and convened a multidisciplinary expert group to review evidence on Covid-19, its transmission in children and the limited available evidence on the use of coverings by children. Based on this and other factors such as childrens’ psychosocial needs and developmental milestones, WHO and UNICEF advise the following: Children aged 5 years and under should not be required to wear masks. This is based on the safety and overall interest of the child and the capacity to appropriately use a mask with minimal assistance. WHO and UNICEF jointly advise that children aged 12 and over should wear a mask under the same conditions as adults, in particular when they cannot guarantee at least a 1-metre distance from others and there is widespread transmission in the area.

Previous TAC evidence papers:

Face coverings were introduced within the school setting in Wales in November 2020 following the firebreak implemented in late October. An evidence review of the firebreak and its impact on children and young people found that school based controls that are coproduced and planned to promote adherence, are essential to maintain infection control and limit transmission rates in preschool, schools and FE under age 18. Introduced via operational guidance the use of face coverings was limited to staff and learners in secondary schools and colleges, in all areas outside the classroom. In February of this year, this was extended to include their use within the classroom where social distancing cannot be maintained; and to include staff at primary schools. They are not mandatory and recommended if social distancing cannot be maintained and should be worn anywhere on the school estate, including in the classroom by staff at primary and secondary schools and secondary school learners. The exception is at mealtimes and when they are outside, unless the school risk assessment indicates that additional measures are needed, e.g. on a school yard where there are a large number of learners in a relatively small space without separation of contact groups (such as when waiting to enter school). Frequent putting on and taking off of face coverings is not recommended as this can risk contaminating hands and face; if learners are outside for a short period it may be easier to keep face coverings on. Learners should not wear face coverings when running round, playing football or other active games. Most recently in May this year, the CMO reiterated advice reinforcing the use of face coverings on a risk assessed basis. The use of face coverings would appear to provide some reassurance to the wearer as a recent Survey Report (yougov.com) found that circa 60% of the respondents would keep wearing face coverings after final restrictions are lifted. Crucially for the context of this paper however, this sample does not appear to include children or young people.

Previous TAG advice on the use of face coverings has stated that that the policy for face coverings should also clearly communicate the need to adhere to pre-existing advice on protective behaviours i.e. hand hygiene, social distancing and seeking a test/self-isolating if symptomatic, to reduce transmission. The advice explained how face coverings come with the inherent risks of not being worn properly; of cross-contamination (highlighting the necessary importance of hand hygiene and the avoidance of face touching); of unsafe or ineffective disposal of contaminated
waste to avoid onward contamination. It also reconfirmed that they should be worn in addition to good ventilation, social distancing and hand hygiene; acting as one part of a suite of interventions to interrupt transmission.

Furthermore, the use of face coverings in schools, FE and childcare settings is a balance between the potential benefits of reducing harm from the spread of virus loaded droplets and aerosols; and the risk of harms to children, young people and staff that could be associated with wearing face covering. For example, discomfort of the wearer; inappropriate handling and fomite spread; interruption and an inability to hear and communicate; the negative social impact of impaired ability to respond to facial expression. A recent focus group undertaken by Children in Wales aimed at capturing feedback from young people on face coverings concluded that the use of face coverings had “…highlighted that disabled children and young people were being targeted for not wearing face coverings and that often hidden disabilities were highlighted even more so. (Participants also stated that) They felt that teachers were not consistent with the rules and this did not provide a good example to students and there had been significant impacts on their learning, particularly in regards to communication, grades and assessments (as a result of the use of face coverings). (In summary) Young people feel that the policy on wearing face coverings in school should end soon, however overall, they expressed that they trusted the experts advising Welsh Government and that they were best placed to make this decision when it is most safe to do so to protect children, young people and teaching staff from COVID-19.”

Current areas of uncertainty:

Studies of face coverings have been largely observational and ecological studies, without the granularity or specificity that addresses the issue that rates of virus are lower in children. Also that they are considered less likely to transmit virus during time in controlled school environments. The result is a lack of direct evidence of the value of face coverings in all the contexts specific to children and young people.

Given a situation of low background virus rates, it is not likely that NPIs further down the hierarchy of controls will contribute much to overall safety when used in addition to ventilation and distancing. Therefore an approach that promotes effective risk assessment and the balancing of the potential harms as well as the benefits of each intervention may be more appropriate. In rising or uncertain rates of virus spread (especially in the light of emerging or new variants) a precautionary approach that takes into account the overall risks and benefits of imposing any range or combination of NPIs may be more appropriate.

Principles of Risk assessment:

Risk assessment must take into account the setting and context; the community affected especially with regard to equalities; prevailing background virus transmission rates including variant transmissibility; the ‘hierarchy of controls’ approach to Covid-19 risk management in the short and longer term; and effective communications to influence behaviour and adherence to scientific advice.

Wales is currently at level 2 of coronavirus controls. Background rates of virus are low, but there is uncertainty about the risk posed by the VOC 21April02 variant (B.1.617.2, first identified in India) from regions of England or Northern Ireland into Wales. Uncertainty about the level of risk leads to the advisability of a precautionary
principle, based on the ongoing monitoring of background rates and any evidence of uncontrolled community spread in Wales.

Childcare, school and college settings should continue to take a risk based approach, using the most effective aspects of the hierarchy of controls (Figure 1 below and Annex A), and balancing the overall risks and benefits to children, young people and workers. Risk assessments should be completed by those people responsible for managing the risk within an organisation using a structured and systematic approach to consider the following key areas:

- Exposure to SARS-CoV-2 from surfaces (contact transmission);
- Exposure to SARS-CoV-2 from people (short range droplet transmission);
- Exposure to SARS-CoV-2 from the air (aerosol transmission).

The use of face coverings given the balance of these benefits and harms, must be carefully titrated against a backdrop of changes to prevalence within the community and outbreaks in schools. In situations of low background prevalence, face coverings the harms associated with the use of face coverings may well outweigh the overall benefits. Via their FOI process, Scottish Government have published their approach to risk assessment and the use of face coverings which could prove useful as a framework for moving forward.

Using the hierarchy of risk controls to maintain safety:

The use of face coverings as a non-pharmaceutical intervention (NPI) to control the spread of the Covid-19 virus should form part of a wider suite of preventative measures with several reviews into their effectiveness as a measure to contain the virus\(^1\). In terms of principles, there are three main ways in which measures can reduce transmission of COVID-19 (from most to least effective):

a. Reducing the likelihood that people who are infectious mix with others.

b. For those potentially infectious people who are not isolated, reducing the likelihood that they enter higher risk settings or situations.

c. Decreasing the transmission risk from a potentially infectious person in any given environment.

Following this hierarchy of risk controls approach (Figure 1 below, and Annex A), there are environmental interventions that will likely have a greater impact on reducing virus spread. Administrative controls such as staggered start and finish times, one way systems, environmental controls such as increasing ventilation by opening windows (where possible) and operating outdoors (where appropriate) offer means of minimising contacts and dispersing aerosols that may contain the virus. The effectiveness of ventilation in many settings will be strongly influenced by user behaviour; as a result clear messaging is needed about the reasons for interventions and how to best implement them. Other measures such as emphasising the

\(^1\) https://www.cdc.gov/mmwr/volumes/70/wr/mm7021e1.htm
https://science.sciencemag.org/content/early/2021/05/19/science.abg6296
https://www.bmj.com/content/369/bmj.m1435/rr-40
importance of self-isolation upon symptoms or receipt of a positive test (elimination) should also be considered along with use of face coverings (PPE).

**Situational Context of risk in Wales**

Since returning to face-to-face teaching we have implemented mass asymptomatic testing programmes in school and college settings to enhance infection control and maintain the confidence of students, parents and staff; recognising that people can be asymptomatic for a period when they could be circulating within the wider population.

Routine and regular testing is a key factor for limiting the spread, identifying early and isolating appropriately so as to limit the spread across the community or import into the education setting. Related to this is controls on social mixing and reducing the number of daily face to face contacts, especially outside the controlled educational environment, to reduce risks of infection. This includes on journeys to and from schools, and during extracurricular activity or gatherings in formal and informal educational situations. The weekly summary of contact tracing in Wales provides management information collected as part of the contact tracing process associated with an incidence; and is a key tool in tracking the spread of the virus.

A longer term intervention is the mass vaccination of the adult population which currently includes young people aged 18 and above, except for certain 16+ who are extremely clinically vulnerable or have specified underlying medical conditions. The vaccination programme, subject to supply, aim to offer everyone in the current 10 priority groups their first dose of the vaccine by the end of July; and planning is currently being taken forward for Phase 3 of the Vaccine programme – from August onwards. This phase will see those who have already have 2 vaccines receive a booster as vaccine wanes. The Medicines and Healthcare products Regulatory Agency (MHRA) has not yet authorised the use of any COVID vaccines in those under the age of 16. We, alongside the other UK nations, are guided both by the MHRA’s licensing regime and the expert advice of the Joint Committee on Vaccination and Immunisation (JCVI). We are continuing to follow the current JCVI advice to vaccinate all adults in order of the risk COVID-19 poses to them. In the absence of regulatory approval or advice from the JCVI we cannot routinely extend vaccination to children under 16. However, the JCVI are considering the clinical evidence to determine whether all children should be vaccinated or whether vaccination is best offered to certain groups of children, determined by their age or clinical risk factors. We expect the JCVI to provide this advice towards the end of July. We are actively considering how NHS Wales can promptly operationalise any JCVI recommendation to vaccinate children under 16. There is also some commentary on the need to vaccinate the younger cohorts to avoid Covid-19 becoming ‘a young person’s disease’ and essentially setting young people at a greater disadvantage where they remain the exposed portion of society as a result.²

As reported by Public Health Wales at 22:00 on 25 May 2021, 2,112,647 first doses and 1,037,749 second doses of Covid-19 vaccine had been given in Wales and recorded in the Covid-19 Welsh Immunisation System. Whilst subject to the risk of emerging and future variants of concern and the possibility of vaccine escape, PHE have recently published a study stating that 2 doses of the COVID-19 vaccine are effective at preventing severe disease against the B.1.617.2 variant first identified in

India; which potentially indicates an opportunity for improved resilience within the population and a move from a pandemic response toward an endemic response in our planning and mitigation measures.

**Figure 1:** Hierarchy of controls, Source: [SAGE: Principles for Managing SARS-CoV-2 Transmission Associated with Further Education, September 2020](#)

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### Sources of evidence relating to community transmission risk

The weekly [TAC summary of advice](#) sets out the current position on case numbers including both PHW and SAGE estimates of the reproduction number; as well as providing updates on TTP performance and the status of variants of concern. The most recent update states that whilst overall figures remain low and continue to decrease at a national level, there is increasing heterogeneity at a regional level in terms of weekly change, albeit from a low level in absolute numbers. Whilst case numbers in Wales remain low currently, with 28 cases detected in Wales as at 19 May, the proportion of cases which are VOC21APR-02 (B.1.617.2, first identified in India) has increased significantly in some areas of the UK nations. There is strong evidence this variant is more transmissible than B.1.1.7 (high confidence) and could become the dominant variant in Wales, with early evidence (low confidence) of a degree of reduction in protection from vaccines and natural immunity. Road-map analysis modelling at SAGE has previously suggested a 40-50% transmission advantage compared to the dominant variant could result in a substantial resurgence of hospitalisations, similar to or larger than previous peaks. As such, this variant represents a newly identified risk that requires careful consideration and early action to prevent uncontrolled growth and wider community transmission in Wales.
References:

- Advice on coronavirus from the Technical Advisory Cell | GOV.WALES
- Alert level 2: summary | GOV.WALES
- Coronavirus (COVID-19) symptoms in children - NHS (www.nhs.uk)
- Coronavirus disease (COVID-19): Children and masks (who.int)
- COVID-19 Hierarchy of Controls | Environment, Health and Safety (cornell.edu)
- EMG/NERVTAG: SARS-COV-2: Transmission Routes and Environments
- EMG/SPI-B/SPI-M: Reducing within- and between-household transmission in light of new variant SARS-CoV-2, 14 January 2021
- EMG: Application of physical distancing and fabric face coverings in mitigating the B117 variant SARS-CoV-2 virus in public, workplace and community - 13 January 2021
- EMG: Risk Estimation to inform risk assessment - 7 May 2020
- Fifty-seventh SAGE meeting on COVID-19 - 17 September 2020
- Freedom of Information request- Face coverings for children aged 5 - 11 (www.gov.scot)
- NERVTAG/EMG: Duration of wearing of face coverings - 15 September 2020
- NERVTAG/EMG: Role of aerosol transmission in COVID-19 - 22 July 2020
- PLOS ONE, Children’s emotion inferences from masked faces: Implications for social interactions during COVID-19, December 2020
- Public Health Wales Covid-19 Surveillance Dashboard - Public | Tableau Public
- SAGE TFC: Principles for managing SARS-CoV-2 transmission associated with higher education - 3 September 2020
- SAGE: Children’s Task and Finish Group: update to 17 December 2020 paper on children, schools and transmission, 10 February 2021
- SAGE: NPIs table (pivot) - 21 September 2020
- SPI-B Managing infection risk in high contact occupations - 15 June 2020
- SPI-B: Consensus statement on the reopening of large events and venues (S0703) - 19 August 2020
- Survey Report (yougov.com) 7 May 2021
- Technical Advisory Cell: use of face coverings in the context of COVID-19, June 2020
- Technical Advisory Group: advice on return to school, July 2020
- Technical Advisory Group: face coverings for children and young people in education settings, 26 August 2020
• Technical Advisory Group: updated advice on face coverings, 14 August 2020
• Technical Advisory Group: variant of concern and education in Wales, 7 January 2021
• Test, Trace, Protect (contact tracing for coronavirus (COVID-19)) | GOV.WALES
• Trends Neurosci Educ., Masked education? The benefits and burdens of wearing face masks in schools during the current Corona pandemic, Sep 2020
• Vaccines highly effective against B.1.617.2 variant after 2 doses - GOV.UK (www.gov.uk)
• Variants: distribution of cases data - GOV.UK (www.gov.uk)
Annex A – Hierarchy of controls to reduce risk of Coronavirus spread

Hierarchy of coronavirus risk controls in children’s, school and college settings: in descending order of effectiveness:

1. **ELIMINATION AND CONTAINMENT** aim to physically remove or contain the hazard

   - Limit school operations by closure
   - Limit numbers onsite by rota attendance on different days
   - Online/remote learning
   - Child or worker does not go to childcare/school with covid symptoms
   - Child or worker gets a test as soon as covid symptoms occur, and isolates until test result
   - Child or worker does regular asymptomatic LFD testing, reported online
   - Child or worker does not go to school/childcare if LFD positive, follows up with same day PCR
   - Child or worker cooperates with Contact Tracing by self-isolation and testing as advised
   - Child or worker takes both vaccine doses as soon as recommended
2. **SUBSTITUTION/REDUCTION** aim to replace the hazardous activity with a less hazardous one

- Blended learning or Instruction
- Simulation suite to reduce external contacts (eg training in hairdressing, healthcare)
- Individual food bags rather than communal catering
- Maintain Social Distancing 2m

3. **ENGINEERING CONTROLS** aim to isolate people from the hazard

- Plexiglass barriers on buses or taxis
- Modified care, teaching or work spaces- arrangement of desks and chairs
- Demarcation lines and barriers
- Limit number of daily contacts through school cohorts or ‘bubbles’
  Enhanced cleaning, sanitation/and disinfection
- Outdoor activities or lessons
- Increase indoor ventilation

4. **ADMINISTRATIVE CONTROLS** aim to change the way people work

- Social Distancing under 2m
- Regular handwashing and sanitising
- Reduce shared fomite surfaces including shared books and papers
- Limit time spent and/or numbers in rooms before ventilation
- One way systems to reduce face to face contact
  Staggered or modified school or working day to reduce contact between school cohorts or ‘bubbles’
- Workforce planning and teams to maintain operational capacity
- Training and signage to promote adherence
  Effective communications and feedback on improvements for community safety
- Remove unnecessary restrictions when it is safe, in order to promote adherence to necessary ones

5. **PERSONAL PROTECTIVE EQUIPMENT** aim to protect the worker from residual exposure through use of PPE

- FFP3 respirators
- Fluid resistant surgical face masks
- Eye protection
- Gloves and aprons
- 3 layer cloth face Coverings