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**FACULTY OF
PUBLIC HEALTH
MEDICINE**
ROYAL COLLEGE OF
PHYSICIANS OF IRELAND

National Clinical Review on the Impact of COVID-19 Restrictions on Children and Guidance on Reopening of Schools and the Normalisation of Paediatric Healthcare Services in Ireland

**National Clinical Programme for Paediatrics and
Neonatology**

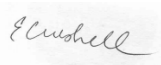
Clinical Design and Innovation, Health Service Executive

August 2020
Final Version

Developed by:	National Clinical Programme for Paediatrics and Neonatology	Publication date:	27 th August 2020
Document Reference Number:		Revision Date:	21st August 2020

Acknowledgements

The *National Clinical Review on the Impact of COVID-19 restrictions on Children and Guidance on Reopening of Schools and the Normalisation of Paediatric Healthcare Services in Ireland* has been prepared by the National Clinical Programme (NCP) for Paediatrics and Neonatology within the Clinical Design and Innovation Team (CDI), Office of the Chief Clinical Officer (CCO) of the Health Service Executive (HSE) in collaboration with the Faculty of Paediatrics. We thank all those who contributed to the development of the document.



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Foreword

This National Clinical Review Document was developed in May/June 2020 following extensive consultation with Child Health Professionals with a deep and wide understanding of the needs of the child. The document has been updated in August 2020 to reflect more recent developments. It has been written to describe the impact of the COVID-19 lockdown measures on children and what needs to be done now.

In essence the document explores where we have come from, where we are now, and where we should be in the coming months. It is our collective opinion that the two key adverse consequences for all children across the State are the prolonged closure of the schools and the curtailment of services to children - specifically paediatric medical services, GP services, and multidisciplinary community support services. We feel that there needs to be a recalibration of how children are catered for in this pandemic. The document provides a template for how best to address children's needs during this difficult time. At present, children have become invisible despite the fact that they account for **25%** of the country's population. There needs to be more leadership and better co-ordination in both planning and implementation on their behalf. They need strong advocates. Children are not the face of this pandemic, but they risk being among its biggest victims.

The short turnaround time between the inception and completion of the document is a reflection of our perceived urgency to set out what next must be done to halt and reverse the adverse effects of the current restrictions.

Executive Summary

The Impact of School Closures:

1. The COVID-19 lockdown restrictions have had significant adverse consequences for children's education.
2. Children have been out of school since **March 12th 2020**.
3. If schools don't reopen before the end of August, children will have been out of school for almost 6 months.
4. **567,000** primary schoolchildren have been affected. Their educational progress has been halted.
5. Recently acquired knowledge is vulnerable to loss.
6. Primary schoolchildren are most affected because they are unable to participate in self-directed learning. They need constant support and direction.
7. The critical period for attainment of literacy skills and specifically reading is up to 8 years. Reading ability is the foundation for on-going vocabulary development and for wider educational attainment. Delays in this development will have knockon effects.
8. Interaction with their peers, teaching staff and the wider school community is important for the development of children's communication, physical and social skills.
9. Children with additional learning needs and/or special needs are disproportionately affected by the school closures. They need the structure of on-going access to their individualised learning plans supported by the special needs assistants (SNA), teachers and special education needs team within their school.
10. The effects on children with complex disabilities and their families have been profound. Many will experience regression of skills that were not easily gained.
11. Anxiety levels for children may increase due to lack of socialisation and loss of routines.
12. The State uses schools as a mechanism for the implementation of support services such as school meals, child protection issues, vaccination, dental and hearing and screening programmes – these are significant public health issues that need to be supported and protected through the school system.
13. There are added concerns about child welfare due to rise in family distress, domestic violence, parental alcohol intake and excessive time being spent by children on the internet. Educational settings are a natural area of vigilance of child welfare.

14. School is central to a child's social life and wellbeing, this is particularly true for marginalized children
15. School is the vehicle through which the State channels much of its investment in children.

The Impact on Children's Medical Care:

1. The medical services for children have been significantly disrupted by the lockdown.
2. Paediatric outpatient clinics are being re-established with a combination of face-to-face consultations, in much reduced numbers, and teleconsultations.
3. The requirement for physical distancing is causing logistical problems for both inpatient and outpatient management. The bed capacity is reduced and the numbers that can be seen at clinic are significantly reduced.
4. Paediatric elective surgery has now resumed. The throughput is reduced because of the additional preparation and cleaning between cases.
5. In many hospital locations, Paediatric accommodation, staff and equipment were acquired by adult services. Although the pandemic curve has been flattened, a number of these facilities have yet to be returned in some hospitals
6. School immunisation programmes were suspended which has led to a significant backlog.
7. Community child health services have been severely curtailed as have routine health screening clinics by public health nurses
8. Child mental health services including CAMHS have been curtailed

COVID-19 Data and Children:

1. In Ireland, children under 4 years of age account for less than one per cent of COVID-19 cases and those aged 5-14 account for less than 2 per cent of cases in the population.
2. The clinical course of COVID-19 has been milder in children. Irish data for the two-week period from 5th of August to the 18th of August reports that no child required hospitalisation due to COVID-19 infection.
3. It is suggested that children may have a more innate response to the virus compared with adults. The other possibility is that they have acquired a cross-immunity from exposure to other coronavirus infections.
4. A Kawasaki-like inflammatory Syndrome (PIMS-Paediatric Inflammatory Multisystem disorder) has occurred in a number of Irish children. All cases have made a full recovery. Its relationship to COVID-19 is unclear.

5. The UK and other countries have similarly reported low COVID-19 infectivity and morbidity rates in children.
6. The available data, points to lower child-to-child and child-to-adult transmission rates compared with adult-to-adult transmission rates.
7. An evidence summary undertaken by HIQA concluded that children are not substantially contributing to the household transmission of COVID-19.
8. Thus far, studies indicate that transmission amongst children in a school environment is also very low.
9. Preliminary data from Europe, where at least two-thirds of schools have reopened, indicate that school settings, do not appear to drive infection rates.
10. Child to child transmission in schools is uncommon. When a child becomes infected, the school is unlikely to be the source.

Education:

1. There must be a high-level coordinated programme put in place to halt and reverse the negative impact of the COVID-19 restrictions on children.
2. The educational losses suffered by all children and in particular those with special needs must be addressed.
3. There must be a commitment to reopening schools on time in August/ September if possible (unless circumstances change substantially) so that children can recommence their education, rebuild their relationship with their teacher and classmates, and prepare for the next year.
4. Consideration should be given to extending the school year to make up for lost time.
5. Principals and teachers must be supported and provided with appropriate and clear guidance on in-school social distancing measures and implementation of same. Furthermore guidance to support and protect vulnerable/ at risk pupils and staff must be available.
6. Child friendly education and guidance on hand hygiene, cough etiquette etc. should be practiced.
7. Department of Education will need to ensure schools facilitate school health team visits as soon as they reopen for immunisations, hearing and vision screening etc.

Medical:

1. There must be a systematic, coordinated, national approach to the restoration of children's health services.

2. A task force should be established to direct and implement the 'catch up' and normalization of medical services for children.
3. Additional resources and staff across the health system, where applicable, must be provided to address backlogs across all areas of child health provision.
4. All Paediatric accommodation, staff, and equipment that were transferred to the adult services must be returned at all centres.
5. The postponed OPD appointments need to be acted on quickly. Reduced capacity due to social distancing must be taken into account when planning OPD services; this may require extra clinic sessions. Innovation will be required e.g. off-site clinics, outreach, telemedicine etc.
6. Similarly, due to requirements to distance between beds, children's wards will lose inpatient capacity (up to 20% in some units) which will be particularly problematic in winter.
7. There is a need to invest in the upgrade of technology in the health, education and disability services to support new ways to address children's needs in the short medium and long term e.g. video consulting and remote prescriptions etc. Modern technology is not a cure-all but deficits in available technology are a barrier to smart and effective use.
8. Supporting families to avail of respite services and reinstatement of all family support workers.
9. The anticipated rise in mental health needs and challenges of children and young people as a consequence of the COVID-19 restrictions must be addressed and plans put in place to mitigate the negative effects experienced by children. It is also expected that CAMHS referrals will increase upon returning to school after such prolonged absence.
10. Community child health clinics, CAMHS and HSCP (Health and Social Care Professionals) services (Speech and Language Therapy, Occupational Therapy, physiotherapy, dietetics etc.). need support to return to normal activity levels to avoid delays in assessment and therapies.
11. Immunisation backlogs need to be addressed in every region with adequate resourcing provided for immunisation teams to deal with backlogs.
12. The waiting lists for elective and day case surgery will require additional sessions and resources to tackle the backlog. Protection for elective surgery to continue through the winter to avoid cancellations due to capacity difficulties.
13. The waiting lists for radiology and other diagnostic investigations must be tackled.

14. More isolation facilities must be made available, infrastructural changes will be needed such as partitions in open wards etc.
15. Detailed “**Winter Planning**” is necessary across all aspects of children’s health care e.g. the approach to a child with fever in the community (*who is unlikely to have COVID-19 but must they be swabbed? Children may have multiple coryzal episodes per winter*), to ED facilities, elective surgery and ward accommodation and capacity must be addressed in advance of the usual autumn/ winter surge in paediatric respiratory viral illness.

Introduction

The COVID-19 pandemic lockdown has placed the greatest restrictions on the lives of children seen in modern times. The curtailments have impacted on all their activities. They have become invisible casualties of the COVID-19 pandemic. They were confined within their homes with a prolonged separation from their extended family and friends. This is the longest school closure in the history of the State. Day-on-day there are increasing concerns about the collateral damage being caused by the lockdown. Public notices excluding children from shops and supermarkets and commentary indicating that they are considered vectors of COVID-19 infection has been a damaging and upsetting rhetoric directed at children in the early phase of the pandemic. We are in uncharted territory; school closures of this duration are rare in developed countries. Even during the Second World War schools remained open in the UK.

The developmental nature of providing infant and child health is such that opportunities missed can be lost permanently. Many interventions are time critical in nature such as occupational therapy, speech and language therapy, physiotherapy and dietetics in infancy for a premature child to prevent complications associated with cerebral palsy, cleft surgery, speech development, nutrition monitoring and intervention for a child not growing

This review has been undertaken for three reasons.

- 1 The first is to quantify the adverse effects that the lockdown has had on children. It will examine the educational, psychological, emotional, and medical consequences.
- 2 The second is to explore the possible ways in which the restrictions can be lifted and monitored.
- 3 The third is to set out what additional measures and resources need to be put in place in order to make up the losses and setbacks that children have suffered as a result of this unprecedented lockdown.

The two major concerns that we have addressed are the closure of schools and the restrictions and postponements of Paediatric, GP, and community health services for children.

The Impact of the Lockdown on Children

The first restrictive measures introduced to tackle the COVID-19 crisis included the closure of schools on March 12th 2020. These restrictions were extended from March 27th 2020 when Ireland was placed on lockdown with all non-essential trips from home banned, closure of all non-essential shops and all gatherings outside the immediate household prohibited.

Impact of prolonged school closure and lockdown on children's mental health and wellbeing

The evidence of psychological effects of lockdown on children is evolving. Studies from China indicate that **22.7%** of children reported depressive symptoms one month after lock-down due to the COVID-19 pandemic and over half of children were moderately or very worried about being infected with COVID-19.

A report from Italy and Spain shows that **85.7%** of parents reported adverse changes in their child's emotional wellbeing during lockdown. More than 30% of parents reported boredom, irritability, increased worrying, feelings of loneliness and restlessness in their children. As highlighted by the charity Young Minds in the UK, **83%** of adolescents and young people under 25 felt their mental health had been negatively impacted by the pandemic. Almost a quarter had not been able to access mental health supports. This has been recognised in Ireland also, by the HSE, and a range of websites highlight the supports available at present but face to face CAMHS appointments have been reduced.

School closure and impact on Children

1.0 All schools in Ireland closed at 6pm on March 12th, 2020

The closure of the schools is the measure that has had the greatest single societal impact. It affects all children. School is central to every aspect of a child's development and wellbeing. From a young age children spend a large proportion of their time in the school setting. It is where children are educated, make friends, learn social skills and participate in sport and cultural activities. School is the vehicle through which the State channels much of its investment in childhood.

2.0 Based on 2018 data, 567,000 primary school children have been taken out of the education system

The closure has involved **3240** primary schools and **37,341** primary school teachers. **140,000** three and four year olds have been removed from Montessori schools, **362,899** secondary school children

had their education curtailed and examinations suspended. There are **722** post primary schools and **28,474** post primary teachers. This data illustrates the vast numbers of teachers that would be normally centrally involved in the education and development of the nation's children.

3.0 The consequences for children are a major concern

Children's academic progress will undoubtedly be affected; however, the consequences for the 10% of children who have an intellectual disability (1-3%) or other learning challenges (such as dyslexia, ADHD, hearing or visual impairment etc.) are of even greater concern. Schools and skilled teachers are necessary for their complex needs. Regression is a real concern for this group of children. Major skills such as alternative communication and day to day support around eating and swallowing difficulties are provided through special schools will be lost by the suspension of this learning for this prolonged period. Furthermore, the reluctance of a number of parents to allow agencies' staff to enter their homes and provide care for Children with Life Limiting Disease and Children with Complex Needs was highlighted as an issue during the shutdown.

4.0 The primary school child is the group of greatest concern

There has been an underestimation of the loss of peer social contact for the younger age groups. The sudden withdrawal from their peers and teachers is both confusing and difficult to comprehend. They do not have the psychological maturity to interact with their friends or teachers (for those available to do so) through alternative means such as phone/video conferencing/educational apps. At this stage of their development they require supervision, guidance, and direction to support both new learning and the consolidation of previously learned skills and concepts. The majority of parents are unable to provide this in the home.

5.0 Secondary school students are also under pressure

Secondary pupils may be more technologically capable to engage with virtual education and stay in contact with each other, but this is an inadequate substitute for the classroom and in-person interactions with friends, both central to their development. State exam students have described the negative effects which were associated with the uncertainty surrounding their exams and the proposed calculated grades system and the impact which all these uncertainties have had on their mental health. The cancellation of the Leaving Cert may result in life changing consequences for some individuals. Furthermore mental health supports usually provided by schools are now not easily accessible.

6.0 New knowledge recently learned is vulnerable to loss

All child specialists are aware that even short absences from school are damaging, let alone long periods over many months. A four- week Canadian teachers strike had a significant impact on the affected children. The impact was equivalent to moving an average child down to the bottom 30 per cent of children.

7.0 In this country, child health professionals have always placed a high priority on the need to continue a child's education at all costs

The loss of more than 2 weeks of school is considered by paediatricians as significant for any schoolchild. The value and importance of continued education, despite being hospitalized, is reflected in the school-in-hospital programme which has been in place since the 1920s (and employs 21 teachers in the larger paediatric centres). As a result, a child admitted to hospital for medical treatment for any length of time is able to continue to their schooling through the designated full-time hospital schoolteachers.

8.0 In order to achieve their academic potential, all children need to be educated in a classroom in close proximity to their teacher

On-line teaching is no substitute particularly for primary school children and those with special needs. Lessons taught in this way are a poor substitute for the synergy and learning environment of the normal teacher-led classroom. It also comes with an expectation that all families have access to the technology needed to access this mode of learning. This puts many children at a disadvantage if they don't have access to such technology or the space to learn.

A recent Sutton Trust research report found that only 30 per cent of children participate in on-line education. Among working class children the rate is as low as 16 per cent. Middle-class parents are more confident about helping their children and more likely to have the necessary equipment and space. There is a real worry that children from deprived backgrounds will be further disadvantaged during the period of school closure. It is disheartening for parents to watch a child slipping backwards from a milestone that he/she has achieved. A parent/ guardian may be home schooling a number of their children at different learning stages and therefore more than one curriculum to cover. Parents working remotely may not be in a position to dedicate time to their child's education needs as much as they would like/need to. This online mode of education delivery is not an appropriate or equitable alternative and serves to widen the education gap.

9.0 Families in the home dealing with the everyday stressors of COVID

Parents are trying to balance jobs while supervising small children or school work, everyone at home all the time without their "normal" activities to de-stress (e.g. gym, sporting activities, meeting friends etc.); parents trying to do work calls while children are around; financial worries; worries

about paying mortgages into the future; the impact of lack of extended family support by grandparents in particular who have been cocooning and unable to provide the normal support and distraction to family life.

10.0 Some homes are not safe for children

Many homes and families are now under extra stress, they may have experienced illness and bereavement and financial distress. 27% of parents are drinking more alcohol than they usually do according to a CSO survey in April. These pressures combined with a stay at home policy and job insecurity makes many homes fraught environments for children at present. Childline has reported a **26%** increase in calls during the period and the Policing Authority report “a rapid and sustained” increase in the number of children reporting domestic violence to child protection services. They also expressed concern about the increased risk of on-line abuse through online engagement with adults or peer-on peer bullying as children spend increased time on the internet every day. In China, reports of domestic violence reportedly tripled during the lockdown period.

11.0 Schools and teachers provide more than education to children

The school community provides an opportunity for social and physical development and is often considered a haven for children subjected to abuse in the home. School plays a crucial role as safety net providers particularly for marginalised and vulnerable groups, including young people with special needs.

Many children receive their breakfast and/or main meal at school and these are important opportunities for optimizing their nutritional intake. As such, school closures may exacerbate food insecurity for those families living in food poverty and compromise a child’s growth and development through reduced access to good, quality nutrition. Teachers and SNAs are a key referral source of child protection concerns to Tusla with one quarter of all referrals received from schools. .Vulnerable children may now have no contact with adults outside their own homes

12.0 The friends that children make at school are an important part of their socialisation and development

These friendships cannot be understated. They help develop their conversational skills, interpersonal skills, and their emotional self-regulation. As children enter post-primary education friendships become a very influential part of their lives

13.0 Education can encourage children to become advocates

By talking to others about how to prevent the spread of viruses at home, in school, and in their community children can become advocates for disease prevention

14.0 It is irrefutable that the short and long-term consequences of the school closures on children will be proportional to the length of time they are away from school

Schools are scheduled to reopen fully at the end of August/early September as per Minister Norma Foley. The pathway for the reopening of schools has been set out by the Department of Education and supported by HPSC guidelines.

Children will have had a continuous 6 month period without formal in school education, the biggest disruption to schooling and education in the history of the State. Children need to engage in meaningful activities to develop personal skills in the area of self-efficacy. The deprivation of one of their primary occupations (school) cannot continue. Occupational deprivation is described as “a state of preclusion from engagement in occupations of necessity and/or meaning due to factors that stand outside the immediate control of the individual”.

15.0 Important contacts with school health teams have been missed

Planned visits to schools for health contacts were suspended and staff were redeployed to COVID related activities.

16.0 Children have a right to play

United Nations Convention on the Rights of the Child (UN, 1989) states all children have a right to play. Play is a fundamental part of life and children need play to develop physically and mentally and to learn how to function in society. (International Play Association (IPA), 2014)

Effects of school closures on children with educational or developmental difficulties

For young people with intellectual disability or neurodevelopmental disorders such as Autism Spectrum disorders, change in routine may exacerbate distress, anxiety and mental health issues. It may be hard for some young people to understand the situation and the necessity for restriction. Behaviour that challenges may present an even more difficult situation for families in lockdown without the support of school (and indeed other services that may be supported in the school setting, or linked services such as respite services). School routines cannot be provided in the family home, particularly when there are other children, and parents attempting to work. The families are increasingly reporting that due to the absence of routine, children are left very confused and bored and this has led to behaviour and emotional regression and family distress. School closures will likely widen the educational gap even further between children with educational difficulties and those without.

- 1.0** There are **7,728** children attending special schools. In addition, there are **6,229** children attending special classes in mainstream primary schools. There are a total of 1628 special classes.
- 2.0** There are **37,500** children being supported by **15,950** Special Needs Assistants (SNAs).
- 3.0** SNAs and the special education needs teams are the bedrock of the support services for children with additional education needs. They are essential in ensuring that these children can participate in education. Many SNAs were re-deployed in community based services; they are now urgently needed back in the school setting.
- 4.0** It has been a challenging time for children with Autism. Parents have reported significant regression in areas such as eating, sleeping, toileting and difficult behavior. With the loss of their daily structures to their day, the children and their parents feel abandoned, despondent and forgotten. One parent described *‘a near fatal accident and multiple escapes from home’*.
- 5.0** The cohort of children with physical disabilities require services such as outpatient medical, dental and HSCP clinics, videofluoroscopy, botox injections, elective surgeries to be opened as soon as possible.
- 6.0** A vast network of education and support has been removed from this vulnerable population. Many parents worry that their child’s education level and functional abilities will regress.
- 7.0** School provides respite for parents who are often required to provide high levels of care to their children 24/7, including the administration of medications and specialised feeds. The closure of special schools has removed a key support network to these families increasing the risk of parental exhaustion and burn-out. Paediatricians are reporting that many families are having difficulty coping. The significant knock on effect for all family members of having a very dysregulated, busy, distressed family member with autism at home with no break is extremely challenging to manage.
- 8.0** School is an important safety net for children with special needs.
- 9.0** The July Education Programme is a funding arrangement for schools to provide further special needs education in the month of July. It applies to special schools and mainstream primary schools with special classes catering for children with autism. There is also a July Programme for pupils with a severe/profound general learning disability. This important Programme was at risk of being suspended by the COVID-19 restrictions. The Programme did proceed but with reduced capacity
- 10.0** As well as education, the special school and pre-school setting is used to facilitate therapy (speech and language, physiotherapy, behaviour management and occupational therapy).

Following the normal 2-month school holiday period, it is a regular observation that children have plateaued or regressed in some skills, e.g. increased spasticity due to lack of daily physiotherapy leading to regression in mobility and potentially permanent joint contracture. A 6 month absence of basic interventions may lead to permanent loss of abilities and skills.

- 11.0** Online teaching is not an option for most children with a disability. The parents of children with a disability are also linked through the school and provide support for each other. Parents who were cocooning with children with special medical needs found themselves in the difficult position of being full time carer and teacher and being forced to abandon any hope of continuing their child's education in order to just manage the demands placed on the family by COVID.
- 12.0** Many of the non-teaching school staff in special schools – nurses, SNA's, cleaning, and cooks etc. were redeployed to other services. Their expertise is required to reopen school and pre-school settings.

Effects of school closures on marginalised children.

1.0 School closures are widening the gap of social inequity

Not all children have access to the necessary devices or internet facilities required to participate in online education, particularly those from lower Socio Economic Status (SES) backgrounds. Parents who have literacy or numeracy difficulties or who do not speak English as a first language are disadvantaged in supporting their child's learning at home. Thus, the lockdown will further widen the gap of social disadvantage for children and young adults.

2.0 Children living with housing insecurity, in emergency accommodation or Direct Provision are disproportionately affected by school closures

Finding suitable quiet space to complete homework has long been a challenge for children living in hotels, hostels, Direct Provision centres or overcrowded conditions. This barrier is even more significant now that all schoolwork must take place at home. Virtual teaching may not be an option for many of these children. These already vulnerable children are disproportionately affected by school closures. Children in Direct Provision feel most included in society while at school.

3.0 School closures also disproportionately affect single-parent households

Single parents living alone with children may struggle in trying to balance work, shopping and supervision of play and educational activities without access to alternative caregivers.

4.0 For many children, school is their major opportunity to participate in outdoor play

Outdoor play is beneficial for children's physical and psychological wellbeing. School closures negatively impact children who do not have easy access to safe recreational spaces to play outdoors.

Impact of the lockdown on children's healthcare

- 1.0** The second major impact on children is the access to non-emergency medical services. There are concerns that parents may not bring infants for scheduled vaccinations. This is now largely reversed and services are returning to normal. Furthermore it was reported that reduced numbers of pregnant women attended for pertussis vaccination to prevent life-threatening infant pertussis infection however this too is now beginning to return to pre-COVID state.
- 2.0** Many routine elective surgical procedures were deferred. Medical investigations including radiology and laboratory tests were also deferred.
- 3.0** Out-patient clinics have been severely curtailed for both new and return patients. Prior to this crisis over 200,000 children were waiting on health care appointments for hospital and community. There can no longer be large clinics of 30+ children attending. Waiting lists will undeniably increase. The concern is that they will become insurmountable unless additional staff, space and resources are rapidly provided.
- 4.0** In some co-located centres, Paediatric Departments had relinquished space, staff and facilities over to adult services in anticipation of the surge in adult service activity most notably one Paediatric Inpatient and Emergency Department (ED) (at CHI at Tallaght) which has been transferred to another site; and a purpose-built, 8-bedded Paediatric ED was converted to an adult area. These changes have had a particular impact on children with chronic conditions who are frequent attenders and require immediate access to a paediatric unit and a health team that is familiar with the management of their condition. It is expected by the end of August, that these facilities will be returned to Paediatrics.
- 5.0** Due to the age profile many GPs are themselves vulnerable to COVID-19 and have justifiably been cautious about seeing children with respiratory symptoms, sometimes instead referring directly to paediatric ED which is not sustainable as the winter respiratory viruses emerge.

- 6.0** All School Immunisation programmes ceased when schools closed in early March. At the point of school closures, approximately one third of junior infants had not received their school visit for MMR and 4 in 1 vaccines and 90% had not received HPV2 and MenACWY in first year of second level school. From June, CHO immunisation teams are holding catch-up vaccination clinics to try to complete the immunisations that were missed during school closures. However, this will require parents to have confidence in attending the clinics and they will potentially have to travel some distance to attend the clinics. It will inevitably lead to fewer uptakes than the school based immunization program and those without transport may be disadvantaged.
- Immunisations provide vital personal and population protection from serious infectious diseases. The lower coverage of MMR is of particular concern as measles outbreaks are still ongoing in other parts of Europe and could be imported to Ireland very easily. On school reopening, the Department of Education must advocate that school health teams are facilitated to catch up on missed visits and to provide a service to those eligible.
- 7.0** School based hearing and vision screening and dental visits were also curtailed.
- 8.0** Community Medicine Child Health clinics were cancelled in all areas during the lockdown as staff were redeployed to Public Health and other duties. All regions now have extended waiting lists where many children with time sensitive conditions are likely to wait months to be reviewed. In Cork/ Kerry there are **2500** children awaiting Child Health clinic appointments. In many regions clinic space was utilised for COVID related work and may not be available in the short term for resumption of services. The process is slow and will lead to reduction in numbers that can be reviewed over a given time. The delays will lead to late diagnosis and management of time sensitive conditions.
- 9.0** Routine Child Health screenings performed by Public Health Nurses (PHNs) were postponed in the Community during COVID peak activity. This affects both preschool and school age children. Public Health Nurses provide child health screening, developmental surveillance, key health messages and support to parents from birth. While public health nurses have been visiting new babies and their parents after their discharge from maternity hospitals, most other scheduled reviews were paused for some time. This will lead to delayed assessment, diagnosis and management of developmental conditions, hip dysplasia, undescended testes, time sensitive vision defects, hearing difficulties, growth, communication and behavior conditions.

- 10.0** Early Intervention services and School age Disability services were severely curtailed. Delayed early intervention and therapy for children with developmental delay is an on-going concern and clearly will have long lasting adverse effects.
- 11.0** The importance for child development cannot be underestimated. The reduction in the services of HSCPs such as primary care/community physiotherapy, mental health supports, Occupational Therapy, Speech and Language Therapy, psychology, dietetics, will significantly add to already unacceptable waiting lists for assessment and therapy. While the Irish Association of Speech and Language Therapists (IASLT) welcome developments in telehealth technologies as an alternative Speech and Language Therapy (SLT) support, it is concerned that growing waiting lists and breaks in service will have adverse effects on a child's communication and educational potential.
- 12.0** Children with confirmed disability are unable to access essential services such as seating clinics, hands-on therapy assessments and intervention. Some services are exploring the option of virtual therapies but in many situations this is a poor alternative.
- 13.0** Children's respite services mostly closed during the crisis. It is widely recognised that respite services are essential to support the families of children with disability. In many cases, nursing home care packages were stopped, often at the request of parents due to concern regarding the risk that nurses and healthcare assistants may transmit COVID-19 to the medically vulnerable child. The absence of these essential supports increased the burden on parents and siblings who often take on a significant role in caring for the child with chronic illness or disability
- 14.0** While social work services have continued to see and assess children presenting in medical settings, the usual community services are not available to provide the same monitoring and support to children in difficult circumstances. Reduced capacity in Social Work across all service sectors needs to be addressed in the context of concerns identified about child safety, domestic abuse and the need for increased family support. The impact on children from a child protection perspective cannot be understated.
- 15.0** Social distancing measures can have a big impact on children in particular where a loved one is seriously ill or dying. Being restricted from visiting or seeing seriously ill family members (e.g. parents or grandparents) or having more limited access to preparatory grief work in these exceptional times can have lasting effects on children's experience of grieving.

The rationale for school closures and the curtailment of medical services

- 1.0** The decision to close schools was made in the early phase of the pandemic when our knowledge and understanding of the disease and its epidemiology was scant. Much of our response was based on plans for a future influenza pandemic. Influenza is known to be spread by children and school closures play an important part in control of spread of influenza in the community. It was not known which groups in society were most likely to contract COVID-19 and data regarding morbidity and mortality was limited. In these circumstances the blunt tool of complete lockdown was justified at the beginning of the crisis.
- 2.0** Initially, the data was very noisy, but now it is coming into better focus. Week-on-week our knowledge and understanding of the disease has increased. We can make better sense of things. We now know what is important. Children under 15 represent < 3% of cases reported thus far. Evidence suggests that they are less likely to spread infection even within the household; however this is still not definitive. They follow a more transient course. They are not super spreaders. Most children affected have a mild form of the disease and are often asymptomatic.
- 3.0** Emerging evidence indicates that severe disease is rare in children, even in those with multiple and complex medical co-morbidities. Reports from London and New York indicate that children with cancer are also not becoming seriously unwell. This is a very important consideration. Over-protection of all children, risks long-term educational and social harm due to protracted isolation. Instead of a blanket ban, individualized risk assessment should be undertaken by the child's medical team, in consultation with the child and their parents/caregivers to determine which children, if any, should continue to be cocooned.
- 4.0** The data on COVID-19 and mortality is reassuring. International data confirms that mortality rates in children are very low. In one Europe-wide study incorporating data from 81 institutions across 21 European countries, 363 children <19 years had required hospitalization (13% of whom required intensive care) and 4 deaths occurred. The most recent August report from the UK Chief Medical Officers indicated that the infection fatality rate (proportion of those who are infected who die) for those aged 5 to 14 is estimated at 14 per million, lower than for most seasonal flu infections.
- 5.0** A rare Kawasaki-like inflammatory syndrome (PIMS-Paediatric Inflammatory Multisystem disorder) possibly related to COVID-19 in children has been widely reported in the media

and is causing concern among parents as children with this condition can be very sick and may require intensive care. While few of the affected children have tested positive for the virus on swabs, the majority have tested positive for COVID-19 antibodies and thus it may represent a delayed inflammatory response to the virus. The children are older than usual cases of Kawasaki and to date all cases seen in Ireland have recovered. It occurs in previously well children who do not have underlying medical problems and as such at present it is unpredictable as to who may develop PIMS.

Assessment of the risks of lifting the lockdown for children:

- 1.0** The public needs **clear advice and guidance** on how best to navigate through the vast amount of information that confronts them. Paediatricians and professional bodies need to be available to assist parents on how to best weigh up the risk-benefit options for their child.
- 2.0** Similarly teachers need guidance and reassurance that it is safe for them (and for their families) to return to school and as they consider the options in reopening schools.
- 3.0** In the UK, the teachers requested guidance and information regarding low rates of infectivity in children, social distancing, availability of testing and the protection of vulnerable staff.
- 4.0** It is acknowledged that the lifting of restrictions before a vaccine has been created is associated with some risk. However, this risk will become increasingly unavoidable. It is about determining what level of risk is acceptable. We know that we must strive to restore children's lives to normal. The current restrictive strategy can't continue much longer. It has the potential to cause long-lasting harm.
- 5.0** Following a one-month lockdown, Denmark allowed children between two to 12 years of age back in day-cares and schools on April 15th 2020. Denmark began its plans for reopening schools with the publication of a report by the Statens Serum Institut (SSI), the country's infectious diseases agency, modeling the likely effect of reopening, based on worst-case scenario that children spread the infection at the same rate as adults and lacked the ability to socially distance (assumptions that we now know to be untrue). This report provided

reassurance that any resulting increase in numbers of infections would be small and not overwhelm the healthcare system.

- 6.0** Five weeks after school reopening, Danish health authorities say the move did not cause a spike in cases among students or staff. While R_0 (the basic reproduction number or number each infected person infects on average during the course of their illness) increased, crucially it still remained <1 . The virus did not proliferate in the community. ECDC Guidance circulated on the 6th of August 2020 states that investigations of cases identified in school settings suggest that child to child transmission in schools is uncommon and not the primary cause of SARS-CoV-2 infection in children.
- 7.0** **Decision makers must be equipped to recognize when the tipping point has been reached for children. At that point the damage being caused by the lockdown will outweigh the benefits of protection from the virus.**
- 8.0** As of the 20th August 2020 HPSC epidemiology of COVID-19 in Ireland report there were 27,540 cases of COVID-19 infection, 721 of these in children < 15 years of age. Children and adolescents aged up to 18 years, although representing 25 per cent of the population account for less than 5% of the COVID-19 cases.
- 9.0** The UK's Scientific Advisory Group for Emergencies (SAGE) report on May 22nd stated that there were 3 (0.008%) deaths in children under 15 years out of a total of 36,675 COVID-19 deaths. In a modeling exercise it calculated that as of June 1st 2020, the likelihood of a child catching the virus at school was 1.46% compared with 0.61% if they remained at home. The modeling exercise projected that by September 1st the corresponding figures are predicted to be 0.15% and 0.06%
- 10.0** Children are unlikely to be drivers of the epidemic as they do not appear to transmit infection as readily as adults. HIQA's most recent report dated 21st of August concluded from an analysis of available studies that transmission from child-to-adult or child-to-child does occur in household and educational settings, but reported transmission rates for children remain low. Few definitive cases of virus transmission from children have been published to date. Of the six studies on educational settings available, three (from Ireland, Finland and Singapore) reported no transmission from children and three (from Australia, South Korea and Israel) reported transmission.
- 11.0** An Irish review of the 1025 school contacts (924 children and 101 adults) of 3 children (all aged >10 years, 1 in primary, 2 in secondary school) and 3 school workers did not identify any cases of transmission.

- 12.0** We have factual data, we have modeling based on the factual data, and we have opinion. Decision-making bodies must at all times be aware of the factors being used to reach their decisions.

Pathways to the reopening of schools:

- 1.0** According to the WHO, maintaining safe school operations or reopening schools after a closure requires many considerations but, if done well, can promote public health
- 2.0** We now have in place the 3 WHO preconditions for the reopening of schools.
- 1.1 The epidemic is under control
 - 1.2 The health system can cope with a resurgence of cases
 - 1.3 Test and trace mechanism is well established and available in the event of an increase in infection rates.
- 3.0** Schools have reopened in most European countries by now with varying degrees of restrictions with regard to distancing and class size. By July 2020, 67% (21 of 31) EU/EEA countries had reopened their primary schools.
- 4.0** Sweden and Iceland never closed their schools. Infection rates were low. The 0-9 year old age group accounted for only 0.5% of cases.
- 5.0** The Netherlands reopened its schools on May 11th; similarly there was no increase in the infection rate.
- 6.0** When children become infected the most common source is a parent 56%, another individual 40%, and another sibling only 4%.
- 7.0** The directive for primary schools in Ireland is that there should be 1 metre social distancing for 9-12 year olds but no social distancing for children less than 9 years. Each class is divided into 4 pods, usually 5-6 per pod. Teachers are advised to wear a mask or a visor if they are close to the children but if they are at a 2 metre distance it is not necessary. Many teachers prefer not to wear a mask because children rely to some extent on lip reading and facial expressions. Play times are staggered in order to prevent congestion in the entrances and hallways. Schools have received a works enabling grant, an additional cleaning grant, and additional aid to support the physical arrangements in the school.
- 8.0** The Department of Education will be making decisions in regards to the opening up of schools and ways to address educational losses. It is acknowledged that implementation of any changes to the school calendar such as extending the school year to allow education

‘catch up’ etc. is the responsibility/ remit of the Department of Education and as such an area beyond the scope of clinicians.

- 9.0** “Winter planning” needs to start in relation to schools; come the winter we will face influenza which is known to be spread by children. We need to plan for rising rates of COVID-19 and influenza in the community and further widespread school closures should be avoided. A school influenza vaccination programme following the Ministers recent announcement in May of free influenza vaccine for all children aged 2-12 yrs., has been agreed by the Department of Health. Clear school and parent guidance will be necessary on school exclusion for children with colds etc. HPSC and HSE are collaborating in relation to guidance on assessment, decision making pathways and testing criteria for children
- 10.0** School related health services such as routine dental visits and vaccinations should also be reinstated immediately upon reopening of school
- 11.0** The Royal College of Paediatrics and Child Health (RCPCH) stated on May 22nd, 2020, that the balance of risks for children and young people is that a return to school is in their best interests.
- 12.0** In July 2020, The European Academy of Paediatrics called for schools to reopen for children of all ages to optimize their psychological, educational and health development. This call was endorsed by the national paediatric societies of 25 countries across Europe.

The Normalisation of Paediatric Medical Services:

- 1.0** It is essential that all Paediatric facilities, staff, and equipment are returned to Paediatric Departments with immediate effect to ensure that adult services are not prioritised at the expense of infants and children.
- 2.0** Community child health clinics and public health nurse screening clinics need to be fully reinstated and may need extra resourcing to catch-up on missed appointments. Outpatient services have been steadily reopening. There has been variation between hospitals. The current social distancing directives mean that fewer children can be seen at a clinic.
- 3.0** OPD catch up could be achieved by increasing the number of sessions. This will require innovative solutions, in combination with additional medical, HSCP and nursing resources. Significant recent strides have been made in telemedicine and IT support should continue to enable further development.

- 4.0** Emergency Department (ED) attendances have increased to usual numbers, likely indicating an increase in parents' confidence in attending the ED. The patterns and numbers of children attending ED needs to be monitored e.g. for delayed presentations and for a rise in domestic accidents, as reported during lockdown in Italy.
- 5.0** The backlog for elective surgery day-case surgery and elective medical investigations needs to be quantified. Strategies are required to catch-up on cases that have been postponed during the lockdown and, where possible, to clear waiting lists before acute services become overwhelmed during what is anticipated to be an extremely busy winter.
- 6.0** Hospital psychological medicine and CAMHS services need to be fully resourced to respond to the crisis needs of children and young people.
- 7.0** Bed capacity will need to be increased before winter to avoid cancellations of elective work.
- 8.0** Surgical list numbers may need to be reduced to allow for the additional time needed for intubation procedures, social distancing, and cleaning between cases.
- 9.0** Pre-admission phone consult to be made to ensure that no child with COVID-19 symptoms is electively admitted for surgery.
- 10.0** Detailed surgical planning is essential as late cancellations are unsatisfactory because patient/family may have had to cocoon for a number of days and have undergone COVID testing.
- 11.0** Radiology waiting lists need to be addressed. Additional sessions and consideration of use of non-HSE sites may be required. There is concern about the delay in accessing video fluoroscopy swallow studies and it will not be possible to outsource some such specialized paediatric studies.
- 12.0** It is imperative that any deferred hip ultrasound screening is dealt with as soon as possible.
- 13.0** Parents and GPs should be provided with regular updates of what medical services are open and how to access them.
- 14.0** The resumption of the Immunisation Programme will be delivered in Community settings which may lead to reduced vaccine uptake rates for 2019/20 cohort. If COVID restrictions continue in schools this will also lead to reduced vaccine uptake rates for 2020/21 cohort. Parents of children who have 'missed' their immunisation appointment should be contacted as a matter of urgency and parents must be reminded of the importance of childhood immunisations

References and Resources:

- Bennett, S., Shafran, R., Coughtrey, A., et al *Psychological interventions for mental health disorders in children with chronic physical illness: a systematic review* Archives of Disease in Childhood 2015; **100**:308-316
- Bhopal S, Bagaria J, Bhopal R, *Children's mortality from COVID-19 compared with all-deaths and other relevant causes of death: epidemiological information for decision making by parents, teachers, clinicians and policymakers*, <https://www.bmj.com/content/369/bmj.m2439/rr>
- Bressan S, Gallo E, Tirelli F, et al. *Lockdown: more domestic accidents than COVID-19 in children*. Archives of Disease in Childhood Published Online First: 02 June 2020. doi: 10.1136/archdischild-2020-319547
<https://adc.bmj.com/content/early/2020/06/01/archdischild-2020-319547>
- Central Statistics (CSO). *Social Impact of COVID-19 Survey April 2020* Office.
<https://www.cso.ie/en/releasesandpublications/ep/p-sic19/socialimpactofcovid-19surveyapril2020/>
- Costello EJ, Copeland W, Angold A. *Trends in psychopathology across the adolescent years: what changes when children become adolescents, and when adolescents become adults*. J Child Psychol Psychiatry. 2011; 52(10):1015-1025. doi:10.1111/j.1469-7610.2011.02446.x
- Crawley E, Loades M, Feder G, et al. (2020) *Wider collateral damage to children in the UK because of the social distancing measures designed to reduce the impact of COVID-19 in adults*. BMJ Paediatrics Open 2020; 4:e000701. doi:10.1136/bmjpo-2020-000701
- Department of Education and Skills (July 2020) *Reopening of our primary and special schools*.
<https://www.gov.ie/en/publication/a0bff-reopening-our-primary-and-special-schools/>

National Clinical Review on the Impact of COVID-19 Restrictions on Children and Guidance on Reopening of Schools and the Normalisation of Paediatric Healthcare Services in Ireland

- European Centre for Disease Prevention and Control (August 2020) *COVID-19 in children and the role of school settings in COVID-19*. <https://www.ecdc.europa.eu/en/publications-data/children-and-school-settings-covid-19-transmission>
- Fegert, J.M., Vitiello, B., Plener, P.L. et al. *Challenges and burden of the Coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health: a narrative review to highlight clinical and research needs in the acute phase and the long return to normality*. *Child Adolesc Psychiatry Ment Health* 14,20 (2020). <https://doi.org/10.1186/s13034-020-00329-3>
- Fitzgerald E et al, *Trends in Mental Health Presentations to a Paediatric Emergency Department*, *Ir Med J*; Vol 113; 2 (20- 24)
- Gilligan, R (2020) *Why children must be the focus as lockdown eases*. https://www.tcd.ie/news_events/articles/why-children-must-be-the-focus-as-lockdown-eases/
- Gotzinger F, Garcia BS, Julian A, Lanaspá M, Lancella L, Carducci FC. *COVID-19 in children and adolescents in Europe: a multinational, multicenter, cohort study*. *Lancet Child & Adolescent Health* 2020;4:653-661 <https://www.thelancet.com/action/showPdf?pii=S2352-4642%2820%2930177-2>
- GOV.UK. Statement from the UK Chief Medical Officers on schools and childcare reopening. <https://www.gov.uk/government/news/statement-from-the-uk-chief-medical-officers-on-schools-and-childcare-reopening>
- Gunnell D, Appleby L, Arensman E, et al. *Suicide risk and prevention during the COVID-19 pandemic*. *Lancet Psychiatry*. 2020; 7(6):468-471. doi:10.1016/S2215-0366(20)30171-1
- Health Information and Quality Authority. *Evidence summary of potential for children to contribute to transmission of SARS-CoV-2*. <https://www.hiqa.ie/reports-and-publications/health-technology-assessment/evidence-summary-spread-COVID-19-children>
- Health Information and Quality Authority. *Evidence summary for spread of COVID-19 by Children*. <https://www.hiqa.ie/sites/default/files/2020-08/Evidence-Summary-for-spread-of-Covid-19-by-children-.pdf>
- Health Protection and Surveillance Centre (August 2020) *Epidemiology of COVID-19 in Ireland (18/08/2020)* https://www.hpsc.ie/az/respiratory/coronavirus/novelcoronavirus/casesinireland/epidemiologyofcovid-19inireland/COVID-19_Daily_epidemiology_report_20082020%20-Website.pdf
- Heavey, L, Casey, G., Kelly, C., Kelly, D., McDarby, G. *No evidence of secondary transmission of COVID-19 from children attending school in Ireland, 2020* https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.21.2000903#html_fulltext.
- Holt, S., Elliffe, R. (2020) *Child domestic abuse like Covid-19, respects no boundaries*. <https://www.irishexaminer.com/breakingnews/views/analysis/child-domestic-abuse-like-covid-19-respects-no-boundaries-1002285.html>
- HSE. *Mental Health supports and services during coronavirus*. <https://www2.hse.ie/services/mental-health-supports-and-services-during-coronavirus/>
- International Play Association: *Promoting the Rights of the Child*. <https://ipaworld.org/>
- Irish Times (2019) *More than 200,000 children on waiting lists for health care services*. <https://www.irishtimes.com/news/health/more-than-200-000-children-on-waiting-lists-for-health-care-services-1.4107210>

National Clinical Review on the Impact of COVID-19 Restrictions on Children and Guidance on Reopening of Schools and the Normalisation of Paediatric Healthcare Services in Ireland

- John Hopkins Bloomberg School of Public Health. *Filling in the Blanks: National Research Needs to Guide Decisions about Reopening Schools in the United States*. https://www.centerforhealthsecurity.org/our-work/pubs_archive/pubs-pdfs/2020/200515-reopening-schools.pdf
- Kieling C, Baker-Henningham H, Belfer M, Conti G, Ertem I, Omigbodun O et al. *Child and adolescent mental health worldwide: evidence for action*. The Lancet. 2011; 378(9801):1515-1525.
- Kraemer, S. (2010) *Liaison and co-operation between paediatrics and mental health*, Paediatrics and Child Health, 10.1016/j.paed.2010.02.012, 20, 8, (382-387)
- Lee J. *Mental health effects of school closures during COVID-19* [published correction appears in Lancet Child Adolesc Health. 2020 Apr 17;]. Lancet Child Adolesc Health. 2020; 4(6):421. doi:10.1016/S2352-4642(20)30109-7
- Lynch, F., Kehoe, C., MacMahon, S., McCarra, E., McKenna, R., D'Alton, A., Barrett, E., Twohig, A., McNicholas, F. (2016) *Paediatric Consultation Liaison Psychiatry Services (PCLPS) -what are they actually doing?* Irish Medical Journal
- Minihan, E., Gavin, B., Kelly, B., & McNicholas, F. (2020). *Covid-19, Mental Health and Psychological First Aid*. Irish Journal of Psychological Medicine, 1-12. doi:10.1017/ipm.2020.41
- National Suicide Research Foundation. *Self-Harm. Latest Findings from the National Self-Harm Registry Ireland*. <https://www.nsrfl.ie/statistics/self-harm/>
- Orgilés, M., Morales, M., Delveccio, E., Mazzechi, C., J.P. Espada. *Immediate psychological effects of the COVID-19 quarantine in youth from Italy and Spain*. <https://psyarxiv.com/5bpfz/> NPR 2020
- RCPCH-COVID-19 - talking to children and families about returning to school: guiding principles <https://www.rcpch.ac.uk/resources/covid-19-talking-children-families-about-returning-school-guiding-principles>
- RCPCH-COVID-19-research evidence summaries. <https://www.rcpch.ac.uk/resources/covid-19-research-evidence-summaries#epidemiology>
- SAGE: The Independent Scientific Advisory Group for Emergencies. *Independent SAGE Report 3: When Should a School Reopen? Final Report May 28 2020*. <https://www.independentsage.org/government-failing-to-follow-own-school-advice-review-by-independent-sage/>
- Statens Serum Institut. <https://en.ssi.dk/>
- The Independent Scientific Advisory Group for Emergencies (SAGE). *Should Schools Reopen? Interim Findings and Concerns*. May 22 2020. <https://www.independentsage.org/read-the-independent-sage-report-on-schools/>
- Tusla Update on Services during COVID-19. <https://www.tusla.ie/news/tusla-update-on-services-during-covid-19/>
- United Nations Office of the High Commissioner. *Convention on the Rights of the Child*. <https://www.ohchr.org/en/professionalinterest/pages/crc.aspx>
- United Nations Policy Brief: *The Impact of COVID-19 on children* 15th April 2020 https://unsdg.un.org/sites/default/files/2020-04/160420_Covid_Children_Policy_Brief.pdf
- Wayman, S. (2020) *How will the COVID 19 era affect our youngest citizens?* <https://www.irishtimes.com/life-and-style/health-family/parenting/how-will-the-covid-19-era-affect-our-youngest-citizens-1.4256418>
- Whiteford, G. (2010). *When people cannot participate: occupational deprivation*. In C.H. Christiansen & E.A. Townsend (Eds.) *Introduction to occupation: the art and science of living* Second Edition. (Pp.303-328) Upper Saddle Creek, NJ: Prentice Hall.

National Clinical Review on the Impact of COVID-19 Restrictions on Children and Guidance on Reopening of Schools and the Normalisation of Paediatric Healthcare Services in Ireland

- WHO. *Mental health and COVID-19*
[http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/novel-coronavirus-2019-ncov-technical-guidance-OLD/coronavirus-disease-covid-19-outbreak-technical-guidance-europe-OLD/mental-health-and-covid-19%](http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/novel-coronavirus-2019-ncov-technical-guidance-OLD/coronavirus-disease-covid-19-outbreak-technical-guidance-europe-OLD/mental-health-and-covid-19%20)
- WHO. Suicide Prevention https://www.who.int/health-topics/suicide#tab=tab_1
- World Economic Forum (August 2020) *COVID-19 is widening the education gap. This is how we can stop it.*
<https://www.weforum.org/agenda/2020/08/we-must-resist-covid-19-widening-us-education-gap/>
- Xie X, Xue Q, Zhou Y, et al. *Mental Health Status Among Children in Home Confinement During the Coronavirus Disease 2019 Outbreak in Hubei Province, China.* JAMA Pediatr. Published online April 24, 2020.doi:10.1001/jamapediatrics.2020.1619
- Young Minds. *Coronavirus: Impact on Young People with Mental Health Needs.*
<https://youngminds.org.uk/about-us/reports/coronavirus-impact-on-young-people-with-mental-health-need>
<https://www.youtube.com/watch?v=kwnxoURPFg&feature=youtu.be>
- https://www.rcpch.ac.uk/sites/default/files/2020-06/open_letter_re_schools_reopening_2020-06-17.pdf

Document Review Process:

National Clinical Programme Expert Review Group	May 2020
Paediatric Clinical Advisory Group (CAG), Faculty of Paediatrics, RCPI	May 2020
National Clinical Advisory Group Lead (NCAGL), HSE	June 2020
HSE Chief Clinical Officer (CCO) CAG	June 2020
Resubmitted to HSE CCO CAG (updated reflecting feedback)	July 2020
Submitted to Faculty of Paediatrics Board	July 2020
Document updated	August 2020
Submitted to Chief Clinical Officer	August 2020