## Annex: Children & Young People's Restoration & Recovery Planning Table of Literature

### Research from prior pandemics

<table>
<thead>
<tr>
<th>Author(s), date &amp; context</th>
<th>Sample Size</th>
<th>Specific (reliable/validated) MH measures used</th>
<th>Symptoms measured at ≥6 months post disaster</th>
<th>Key findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sprang &amp; Silman (2013).</td>
<td>586 parents</td>
<td>Yes</td>
<td>No</td>
<td>33.4% of parents who had experienced quarantine or isolation said that their child/children had started using mental health services either during or after the pandemic.</td>
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<td>Most common diagnoses: acute stress disorder (16.7%), adjustment disorder (16.7%), and grief (16.7%). 6.2% were diagnosed with PTSD.</td>
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<td>Children’s PTSD scores were significantly different between those with quarantine or isolation experience, and those without.</td>
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<td>30% of children in the isolation or quarantine group met the clinical cut-off score for PTSD.</td>
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<td>In particular, children met PTSD criteria at high rates in these subscales: avoidance/numbing (57.8%), re-experiencing (57.8%) and arousal (62.5%).</td>
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<td>Significant relationship between PTSD symptoms in parents and child within the same family. For parents that met PTSD cut-offs, 85.7% also had children which met cut-offs. If parent did not meet cut-off, only 14.3% had a child with PTSD symptoms.</td>
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</tbody>
</table>

Parents of children during the Spring 2009 H1N1 influenza pandemic across 5 US States. Targeted states with particularly high rates of paediatric illness and mortality. 20.9% of sample reported that they were ordered to isolate, 3.8% reported being quarantined, and 75% had no quarantine or isolation experience.  

[https://doi.org/10.1017/dmp.2013.22](https://doi.org/10.1017/dmp.2013.22)
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<tr>
<td>Hall-Lande et al. (2007).</td>
<td>4,746 adolescents, (mean age 14.9 years, range 11-18 years)</td>
<td>Yes – Rosenberg’s self-esteem questionnaire</td>
<td>N/A</td>
<td>Social isolation was found to be significantly associated with higher depressive scores, lower self-esteem scores, and an increased risk of suicide attempts, regardless of gender. Family connectedness was found to be a protective factor, for both boys and girls, between social isolation and suicide attempts only. For boys only, academic achievement and school connectedness were also found to be protective factors between social isolation and suicide attempts. Concluded there are some gender differences in protective factors for suicide attempts in adolescents. Family connectedness was found to be the only protective factor for girls, whilst family connectedness, academic achievement, and school connectedness all demonstrated a protective influence for boys. Neither family connectedness, academic achievement, or school connectedness demonstrated a significant protective influence on self-esteem or depression scores, regardless of gender.</td>
</tr>
<tr>
<td>Loades et al. (2020)</td>
<td>65 articles (based on 63 studies)</td>
<td>Yes</td>
<td>Yes for 18 studies</td>
<td>45 studies investigated the relationship between depressive symptoms and loneliness and/ or social isolation. Majority reported moderate to large correlations, and these associations were stronger for older youths, and for females. 2 studies reported odds ratios – finding that youth who were lonely were 5.8 to 40 times more likely to score above the clinical cut-offs for depression.</td>
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</tbody>
</table>
23 studies investigated the relationship between anxiety symptoms and loneliness and/ or social isolation. A small to moderate association was often reported, with social anxiety found to be moderately to strongly associated with loneliness/ social isolation. There was also a moderate association found between generalized anxiety and loneliness/ social isolation. But one study only found a small association between panic and loneliness.

One study reported odds ratios for anxiety symptoms – found that lonely youth were 1.63-5.49 times more likely to report being anxious.

Also found positive associations between social isolation/ loneliness and suicidal ideation, self-harm, and eating disorder risk behaviour.

Longitudinal studies – 18 studies. 12 studies found that loneliness predicted depression at a later date, whilst 1 study (n=3,088) found that loneliness did not significantly predict depression at a 1 year follow up.

Another study found that the duration of peer loneliness, but not family loneliness, predicted depression at an 8 year follow up.

Three longitudinal studies found that loneliness predicted anxiety at a later date, with one study finding a gender difference, with loneliness found to predict social anxiety at follow up in males, but not females.

Richardson et al. (2019) Investigated the role of sleep in moderating social isolation and internalizing problems

https://doi.org/10.1007/s10578-019-00901-9

Authors found medium to large associations between early adolescents social isolation and symptoms of generalized anxiety, social anxiety, separation anxiety and depression.

Sleep duration was found to significantly moderate the relationship between social isolation and generalized anxiety,
social anxiety, and depression symptoms, but not between social isolation and separation anxiety symptoms. Concluded that a longer sleep duration may be a protective factor for early adolescents for symptoms of generalized anxiety, social anxiety and depression.

Daytime sleepiness was found to moderate the relationship between social isolation and symptoms of depression only. Concluded that daytime sleepiness may be a disorder specific risk factor for depression in early adolescents.

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<tr>
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<tbody>
<tr>
<td>Brown et al. (2017)</td>
<td>36 studies included in review – total of N=3541 children and adolescents, mean age of 11.9 years</td>
<td>Not specified whether measures had to validated</td>
<td>Yes – but not clear for which specific studies</td>
<td>Pre and post PTSD symptoms - Found a large overall effect size for interventions across studies.</td>
</tr>
</tbody>
</table>

A meta-analysis of psychosocial interventions for CYP after man-made and natural disasters.

17 studies targeted children who had experienced war or terrorism, 15 studies were post-natural disasters, and 4 were post major public accidents.

The majority of the literature was from Asia and the Middle East.

Interventions - 10 studies investigated the efficacy of eye movement desensitisation and reprocessing (EMDR), 9 studies used classroom-interventions, 8 studies used CBT, and 2 studies administered KIDNET. Found no significant differences in pre and post PTSD symptoms between the types of therapy. Although KIDNET did display the highest average effect size, followed by EMDR. Classroom-based interventions showed an average effect size.

Found the profession of treatment providers, the measure of PTSD symptoms, and whether the therapy was individual or group based, each significantly moderated the results, when all studies were included.

Effect sizes were lower if teachers performed the interventions. There was no difference in effect sizes between the other professions (e.g. psychologists/ therapists, other health care professionals (i.e. nurses),
Delivery of therapy - 17 studies used trained psychologists/therapists, whilst teachers performed interventions in 10 studies.

28 studies were group interventions, and 8 reported individual interventions.

https://doi.org/10.1017/s0033291717000496

Found effect sizes were also lower when interventions were group-based compared to individual settings.

Found higher effect sizes if used general impairment as a PTSD measure as opposed to questionnaires assessing all PTSD symptoms.

But note that these moderating variables (profession of treatment providers, measure of PTSD symptoms, and whether the therapy was individual or group based) became non-significant when only RCTs analysed.

Geronazzo-Alman et al. (2019)
Distinguishing grief, depression and PTSD post 9/11

8,236 New York School children, of which 1,696 bereaved

https://doi.org/10.1016/j.jaac.2018.12.012

Bereavement was found to be significantly associated with grief, independent of PTSD and MDD.

Bereavement was not found to be associated with PTSD and MDD after adjusting for grief.

Non-loss related trauma was associated primarily with PTSD.

In the context of a disaster, grief reactions are independent from other child and adolescent related psychopathologies. These heightened grief reactions should be targeted with tailored interventions.

Goenjian et al. (2020)
Longitudinal 25 year follow up with adolescents after the Spitak earthquake.

142 early adolescents aged 12-14 years old from two cities exposed to the Spitak earthquake. Gumri city adolescents (moderate-

https://doi.org/10.1017/S0033291719003891

At the 25 year follow up, 9.1-22.4% met DSM-5 PTSD criteria.

Comparison of non-treated adolescents:
PTSD rates decreased significantly between 1 ½ years post-disaster and 25 years post-disaster for both the non-treated groups.

At the 25 year follow up, the very severe exposure group had higher PTSD rates compared to the moderate to severe exposure group, (28.3% and 14.3% respectively), although this difference was non-significant.
severe exposure) and Spitak city adolescents (very severe exposure). The Gumri group was divided into treated adolescents and non-treated adolescents.

Treated adolescents received school-based trauma/grief focused brief psychotherapy.

At 25 year follow up, Gumri treatment group (N=33), and non-treatment group (N=42). Spitak group (N=67). Total of 142 (87% of original cohort).

Found that depression scores were significantly higher for the very severe exposure group, compared to the moderate to severe exposure group, at 1 ½ years post-disaster. But at the 25 year follow up, the opposite was found – the moderate to severe exposure group had significantly higher depression scores compared to the very severe exposure group.

**Comparison of Gumri non-treated and Gumri treated groups:**

- Found a significant decrease in PTSD rates for both groups between 1 ½ years post disaster and 25 year follow up. There was no significant difference in PTSD rates between the two groups at both time points.

- But at the 25 year follow up, the treated group did have a significantly lower mean PTSD-RI score compared to the non-treated group.

- Found that depression scores were not significantly different between the two groups at 1 ½ years post-disaster. But at 25 years follow up, the mean depression score was significantly lower for the treated group compared to the not treated group.

Summary: Adolescents who received school-based treatment after an earthquake demonstrated lower mean PTSD and depression scale scores, compared to adolescents who received no treatment, at a 25 year follow up.

**Predictors of lower PTSD-RI scores at 25 years:**
- Treatment at baseline
- Higher current social support scores

**Predictors of higher PTSD-RI scores at 25 years:**
- Experiencing home destruction
- Higher PTSD-RI scores at 1 ½ years post-disaster
- Greater number of chronic illnesses
- Worsening adversities

**Predictors of lower PCL scores at 25 years:**
| Gordon-Hollingsworth et al. (2018). | 59 studies included, with 88,045 young people aged 6-18 years old. | Yes | Risk factors for PTSD that were found to have a small to medium effect sizes:  
- older age  
- female gender  
- rural locale  
- previous trauma  
- having a family member or knowing someone other than a family member who was injured or killed during the natural disaster  
- witnessing another’s death or injury  
- sustaining a personal injury oneself  
- high subjective trauma severity  
- greater perceived fear/threat related to the trauma  
Risk factors for PTSD that were found to have a medium to large effect size:  
- endorsement of negative life events  
- greater use of negative coping  
- the presence of anxiety post-trauma  
- the presence of depression post-trauma |  
- Higher social support scores  
- Treatment  
Predictors of higher PCL scores at 25 years:  
- Higher number of chronic illnesses  
- Worsening adversities  
Predictors of lower CES-D scores at 25 years:  
- Higher social support  
Predictors of higher CES-D scores at 25 years:  
- Home destruction  
- Worsening adversities  
- Higher number of chronic illnesses  
- Higher SAD symptom count at 1 ½ years post disaster  
- Yes  
- but not specified how many studies met this criterion etc.  
- 59 studies included, with 88,045 young people aged 6-18 years old.  
- 59 studies included, with 88,045 young people aged 6-18 years old. |
| Source | Information for School Crisis Teams on Responding to Natural Disasters | Unknown | N/A | N/A | Risk Factors for Poor MH Outcomes:
- MH Prior to Crisis
- Bereavement
- Injury to Self/Family
- Threat to Life
- Separation from Family (esp. Younger Children) |
|---|---|---|---|---|---|
| Lazarus et al. (2003) | Information for School Crisis Teams on Responding to Natural Disasters | Unknown | N/A | N/A | Protective Factors for PTSD that were found to have a small to medium effect size:
- Father Having a Higher Level of Education
- Greater Use of Positive Coping
- Higher Levels of Perceived Social Support
Moderation Results Suggested that the Relationship Found between Older Age and PTSD Post-Disaster are Potentially Moderated by the Time Point at Which Young Person’s PTSD Symptoms are First Evaluated. |
| McDermott et al. (2004) | Psychological Needs of CYP After Omagh Bomb in Northern Ireland 1998. | 130 CYP referrals, aged under 18 years old | Not specified – but did use ICD 10 diagnostic criteria | Only referral rates post 6 months | Between August 1998 (time of disaster) and May 2001, there were 130 CYP referrals to the Community Trauma and Recovery Team (CTRT). Majority of the referrals were within 6 months - 1 year of the disaster. Only 18% of referrals were received > 1-year post disaster. 83/130 referrals were female, and 47 were male. More boys were referred later compared to females. There was an even spread of age ranges for boys, whereas girls tended to be older. In the 0-8-year age group, 60% of referrals were male, and 40% female. In the 8-14 age group, similar numbers of males and females. In the 14-18-year age group, 77% were female, and 23% were male. |
Adolescents made up 60% of referrals.

17.6% of CYP referrals were bereaved as a result of disaster.

Major diagnostic category was PTSD (47%) – of which 63.9% female and 44.7% male.

8 of 23 bereaved CYP received PTSD diagnosis. Found a significant association between being bereaved by the disaster and a diagnosis of PTSD.

13.3% had a diagnosis of clinical depression – 17/18 of these were female.

3% had a diagnosis of anxiety.

15% had more than one diagnosis.

Most common interventions were psychodynamically informed psychotherapy and CBT.

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### Research into bereavement

<table>
<thead>
<tr>
<th>Author(s), date &amp; context</th>
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<th>Specific (reliable/validated) MH measures used</th>
<th>Symptoms measured at ≥6 months</th>
<th>Key findings</th>
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</thead>
<tbody>
<tr>
<td>Kaplow et al. (2014)</td>
<td>63 children who had suffered a caregiver bereavement</td>
<td>Yes</td>
<td>No</td>
<td>Compared children who had experienced an anticipated death of a caregiver due to illness, with children who had experienced a sudden natural death of a caregiver. Found a significant difference in children’s maladaptive grief reactions</td>
</tr>
</tbody>
</table>
of primary caregiver was 88.9 days. 79.4% of children had experienced death of biological father.

https://doi.org/10.1002/jts.21877

| (mean age 7.76 years, range 3-13 years) and 38 surviving caregivers took part in overall study | But only 41 children (aged 7 years+) completed MH measures | between the two groups. Children who lost a caregiver due to an anticipated death displayed higher levels of maladaptive grief reactions compared to children who lost a caregiver due to sudden natural death. Also found a significant difference in children’s self-reported PTSS scores between the two groups. Children who lost a caregiver due to an anticipated death displayed higher levels of PTSS scores compared to those who lost a caregiver due to a sudden natural death. No significant differences were found in the child’s depressive symptoms between the two groups. Children who lost a caregiver due to anticipated death displayed similar levels of depressive symptoms compared to children who lost a caregiver due to a sudden natural death. Results challenge the preconceived notion that anticipated deaths are less traumatic than sudden deaths. Suggest that more predictable deaths arising from natural causes may be a risk factor. |

| Pham et al. (2018) | 216 youths from 143 families who suffered parental bereavement to suicide, accident or sudden natural death, and 172 youths from 98 families who were not bereaved | Yes | Yes | Bereaved youth had a higher incidence of depression during the first 2 years after parental death. Bereavement was associated with an increased prevalence of depression, PTSD, and functional impairment, even when pre-death risk factors controlled. Found a significant interaction between incident depression and age – when controlling for pre-death risk factors, risk of developing incident depression increased in youth who were aged 12 or younger at the time of parental death. Found bereaved youth had an increased rate of PTSD, and risk of PTSD continued to increase in the first 2 years post death. This increased risk of developing PTSD remained even after pre-death risk factors were controlled for. Bereaved youths had a higher rate of clinically significant suicidal ideation (defined as a Suicidal Ideation Questionnaire score of 31 or above). But this was not significant when pre-death risk factors were controlled for. |

| 7-year longitudinal study investigating early-onset depression and impairment in youths who experienced sudden parental death | Youths were aged between 7-17 years and |

https://doi.org/10.1176/appi.ajp.2018.17070792
<table>
<thead>
<tr>
<th>Time since bereavement</th>
<th>Stikkelbroek et al. (2016). Mental health of adolescents before and after the death of a parent or sibling. <a href="https://doi.org/10.1007/s00787-015-0695-3">https://doi.org/10.1007/s00787-015-0695-3</a></th>
</tr>
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<tbody>
<tr>
<td>11 months when lost parent.</td>
<td>No significant effects of bereavement on rate of anxiety, alcohol or drug abuse, bipolar disorder, or behaviour disorders (conduct disorder, oppositional defiant disorder). Found an increased prevalence of depression in the early stages post-parental death – but over time depression rates converged to similar levels of to those of non-bereaved youth. Suicidal ideation was elevated in bereaved youth at 4 out of the 5 time points, but this was accounted for by pre-death risk factors. The sex of the deceased parent was not found to affect the prevalence of depression or other disorders. Bereaved youth had an increased rate of impairment even after controlling for demographic and pre-death risk factors. Impairment increased in bereaved youth over time.</td>
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<tr>
<td>Yes</td>
<td>Yes</td>
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ranged from within last 2 months to more than 12 months ago.

problems after bereavement for bereaved adolescents.

### Research Post-ICU

<table>
<thead>
<tr>
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</table>
| Nelson & Gold (2012)     | 9 articles  | Yes – but not all studies met these criteria  | Yes – but not all studies met these criteria | PTSD prevalence rates for children after PICU admission ranged between 5-28%.  
Prevalence rates of PTSD symptoms were much higher – ranged between 35-62%.  
Risk factors – inconsistent across studies. Age and gender have not yet (as of this paper) been found to significantly predict PTSD in PICU children.  
Some studies have found a positive association between objective (e.g. number of medical procedures) and subjective measures (e.g. child and parent perceived severity of illness) of disease severity and child’s PTSD symptoms. But not yet enough research to conclude with any certainty.  
Preliminary positive relationship between child’s PTSD symptoms and parents’ symptoms at follow up.  
Parents of children admitted to PICU - PTSD prevalence rates ranged between 10.5-21%. PTSD symptoms rates ranged between 17.9- 84%.  
Mothers may be at an increased risk compared to fathers. |

[https://doi.org/10.1097/PCC.0b013e3182196a8f](https://doi.org/10.1097/PCC.0b013e3182196a8f)
Protective factors may include education or discussion of parent’s feelings during admission.

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Description</th>
<th>Time After Discharge</th>
<th>Results</th>
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<tbody>
<tr>
<td>Stowman et al. (2015)</td>
<td>Youth and their parents completed measures in PICU and then 4-7 weeks post discharge</td>
<td>50 youths aged 9-17 years old and their parents. 30% admitted for respiratory illness/asthma, 26% for trauma, 20% for surgery and post-surgery recovery, 8% for infections and viral illness, 6% for neurologic disorder, and 10% for other reason.</td>
<td>Unknown</td>
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</table>

26% of youth (aged 9-17 years) developed substantial posttraumatic stress symptoms.
24% of parents developed substantial posttraumatic stress symptoms.
Youths acute stress disorder symptoms in the PICU predicted later youth PTSD symptoms.
Parents acute stress disorder symptoms in the PICU, as well as youths acute stress disorder symptoms, predicted later parent PTSD symptoms.
Youth anxiety, negative affect and hospital fear were found to mediate initial youth acute stress disorder symptoms.
Emerging findings from ongoing COVID-19 CYP MH studies

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<tr>
<td></td>
<td></td>
<td>• Impact on CYP- access to services</td>
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<td></td>
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<td>o Access to services</td>
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<td>o Risk of exclusion of certain groups</td>
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<td>o Drop out</td>
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<td>• Impact on CYP – symptoms</td>
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<td></td>
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<td>o Isolation</td>
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<td></td>
<td>o Impact on MH</td>
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<td></td>
<td>o Anxiety/depression/stress issues escalating</td>
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<td></td>
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<td>• Impact on CYP – aggravating factors</td>
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<td>o Closure of schools</td>
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<td>o Difficult family situations/ no safe space to receive counselling</td>
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<td></td>
<td></td>
<td>• Impact on CYP -families/care support network</td>
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<td>o Family/ carers/ parents</td>
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<td></td>
<td>o Parents’ MH impact/ feeling overwhelmed/ needing support</td>
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<tr>
<td>Family Fund (2020) UK based sample <a href="https://www.familyfund.org.uk/Handlers/Download.ashx">https://www.familyfund.org.uk/Handlers/Download.ashx</a> ?IDMF=0dcffffe-f803-41de-9a4a-ccc8fef282d4</td>
<td>2,531 families of 3,279 disabled or seriously ill children Yes – Wellbeing scale</td>
<td>50% reported reduce income due to lost employment or having to give up work and 77% reported their household costs have increased</td>
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<td>65% report their formal support has declined (60% reported CAMHS support declined; 63% reported psychiatry support declined)</td>
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<td>89% reported COVID-19 and lock down has impacted negatively on their child’s behaviours/emotions and 82% reported it had impacted negatively on their mental health</td>
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<td>72% worry about managing their child’s emotions/behaviours</td>
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<tr>
<td>Source</td>
<td>Study Details</td>
<td>Sample Size</td>
<td>Methodology</td>
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</table>
| Jiao et al. (2020) | Preliminary study conducted in Shaanxi province during the second week of February 2020. Several children confined at home at the time. Parents completed questionnaire. | 320 parents of 3-18-year olds. | Not specified— but did incorporate DSM-5 criteria | 60% worry about their own MH  
65% stated information on mental health and wellbeing would be most helpful currently (highest of all options)  
Most commonly reported symptoms: clinginess, distraction, irritability  
CYP aged 3-6 years more likely to show clinginess and fear for family members |
| Kooth (2020) | Anonymous Digital Mental Health Platform in the UK. Compared number of young people presenting issues during the COVID-19 outbreak, with the same time period in 2019. | Not known. | N/A | 34% increase in demand for MH support  
2,849% increase in family argument issues  
170% rise in sadness and depression issues  
51% increase in domestic violence issues  
31% increase in loneliness issues  
121% increase in sleep problems  
13% increase in suicidal thoughts  
49% increase in eating difficulties  
164% increase in health anxiety issues  
13% increase in psychotic symptom issues |
| Lancashire & South Cumbria NHS Foundation Trust (LSCNFT) | Data from Lancashire & South Cumbria CAMHS | N/A | N/A | 83% reduction in referrals since lock down (1380 less to date) |
### Levita (2020)
**COVID-19 Psychological Research Consortium (C19PRC) in partnership with PHE**
UK based sample recruited via Qualtrics

<table>
<thead>
<tr>
<th>Sample Details</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,002 13-24-year-olds (1,001 aged 13-18)</td>
<td>Yes</td>
</tr>
<tr>
<td>Good gender and ethnicity distribution</td>
<td>47-60% (females/males) 13-18-year olds had anxiety scores (HADS) over clinical cut-off - males more at risk</td>
</tr>
<tr>
<td>SES data unknown - unlikely to include most vulnerable groups</td>
<td>20% of 13-18-year olds had depression scores (HADS) over the clinical cut off - CYP of black/mixed race significantly higher</td>
</tr>
</tbody>
</table>

**Year**: 2020

**Partner**: PHE

**Country**: UK

**Methodology**: Online survey via Qualtrics

**Sample size**: 2,002 participants (1,001 aged 13-18)

**Gender and Ethnicity Distribution**: Good

**SES Data**: Unknown

**Findings**:
- 47-60% (females/males) 13-18-year olds had anxiety scores (HADS) over clinical cut-off - males more at risk.
- 20% of 13-18-year olds had depression scores (HADS) over the clinical cut off - CYP of black/mixed race significantly higher.

**Notes**: The study found that anxiety and depression were common among 13-18-year olds during the COVID-19 pandemic, with males being more at risk for anxiety and black/mixed race CYP being more at risk for depression.

### Liu et al. (2020)
**Conducted from February to March in Sichuan Province, China.**

<table>
<thead>
<tr>
<th>Sample Details</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>209 primary school students (in grades 5 and 6) completed questionnaire. 93 boys and 116 girls.</td>
<td>Yes – Somatic Self-rating Scale</td>
</tr>
<tr>
<td>198 college students (ranging from freshmen to seniors) completed the questionnaire – 68 boys and 130 girls.</td>
<td>Significant differences between primary students and college students regarding COVID-19 concerns. Total concern score was higher for college students compared to primary school students.</td>
</tr>
</tbody>
</table>

**Prevalence of Somatic Symptoms**:
- College students reported 34.85% prevalence rate of somatic symptoms (mild symptoms 26.26%, moderate 8.59%).
- Only 2.39% of primary school students reported somatic symptoms, and all were mild.

**Relationship Between Concerns and Symptoms**:
- For both primary and college students, there was a significant relationship between concerns score and total somatic symptoms score.
- For college students, the likelihood of reporting somatic symptoms was increased when the student had greater COVID-19 concern, particularly when concerned about necessities of daily life.
- For primary school students, concern about the threat to life and health predicted somatic symptoms.

**Notes**: The study found that college students reported higher levels of concern and somatic symptoms compared to primary school students, with college students being more likely to report symptoms when concerned about daily necessities and COVID-19.

### Orgiles et al. (2020)

<table>
<thead>
<tr>
<th>Sample Details</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,143 parents</td>
<td>No</td>
</tr>
</tbody>
</table>

**Findings**: 85.7% of parents reported changes in their child’s emotional state and behaviour:

**Notes**: The study found that 85.7% of parents reported changes in their child’s emotional state and behaviour during the COVID-19 pandemic.
| Looked at the immediate effects of quarantine in Spain and Italy. Recruited via social media. | of 3-18-year-olds | 77% concentration difficulties
52% boredom
30-40% irritability, restlessness, nervousness, loneliness, uneasiness, worries, arguing with family
20-30% more dependent on parents, more anxious, angrier, more reluctant, sadder, afraid of COVID-19, more afraid when someone leaves the house, ate more than usual
Parents’ perception of how easy it is for the family to live together predicted some of the child’s symptoms
Parents’ who perceived the COVID-19 situation as more serious rated their children more anxious, sad, nervous, lonely
| 5,000 parents of 4-13-year-olds | No | 80% of those whose child received educational, social services, or MH support (N=583/729) reported this had stopped
Highest stressor for parents of CYP with pre-existing common MH/neurodevelopmental disorder was their child’s behaviour or wellbeing
CYP behaviour a frequent stressor for parents of CYP with a SEN (over 50% vs. 2% in those whose CYP do not have a SEN)
1/2 reported their CYP was concerned family or friends would catch COVID-19
1/3 reported their CYP was worried about missing school
Just under 1/3 reported CYP worried about catching COVID-19 themselves
67-75% felt their CYP would benefit from support, advice or help regarding response to COVID-19 and isolation
Many parents reported they would like help via online written/video material or personalized online contact with a professional regarding managing their CYPs
<p>|</p>
<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Description</th>
<th>Yes/No</th>
<th>Symptoms Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xie et al. (2020)</td>
<td>Conducted in Hubei province. Children had experienced an average of 33.7 days home isolation when completed study.</td>
<td>Yes</td>
<td>23% reported depressive symptoms (study of everyday prevalence 17%)</td>
</tr>
<tr>
<td></td>
<td>1,784 primary school children (equivalent of UK Years 3-7)</td>
<td></td>
<td>29% reported anxiety symptoms</td>
</tr>
<tr>
<td>Young Minds (2020)</td>
<td>UK based sample</td>
<td>No</td>
<td>1/3 report their MH being much worse</td>
</tr>
<tr>
<td></td>
<td>2,111 adolescents with pre-existing MH difficulties (average age between 16-17, range 13-25 years).</td>
<td></td>
<td>1/2 report their MH being a bit worse</td>
</tr>
<tr>
<td>Zhou et al. (2020)</td>
<td>Conducted in China from March 8- March 15\textsuperscript{th} 2020. Across 21 provinces.</td>
<td>Yes</td>
<td>Differences in symptoms depended on region. The proportion of depressive symptoms was lower for students in cities (37.7%) compared to rural areas (47.5%). Similar for anxiety symptoms– students in cities (32.5%), compared to students in rural areas (40.4%). Depression and anxiety symptoms were less prevalent in males (41.7% and 36.2%) compared to females (45.4% and 38.4%). As school grade increased, so did the proportion of students with depressive and anxiety symptoms. 26.4% of the sample had mild depressive symptoms, whilst 10.1% had moderate symptoms. 27% of the sample had mild anxiety symptoms, whilst 7.4% had moderate symptoms. 43.7% of the sample had mild to severe depressive symptoms, and 37.4% of the sample had mild to severe anxiety symptoms.</td>
</tr>
<tr>
<td></td>
<td>8,079 Chinese students aged 12-18 years via online survey, median age of 16.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


https://doi.org/10.1007/s00787-020-01541-4
31.3% had comorbid depression and anxiety symptoms.

Prevalence of depressive symptoms ranged between 39.6%-64%. In particular:
- 53.9% reported little interest or pleasure in doing things
- 48.4% reporting feeling tired or having little energy
- 45.6% reported poor appetite or overeating

Prevalence of anxiety symptoms ranged between 34.1%-50%. In particular:
- 53.6% reported feeling nervous anxious or on edge
- 47.3% reported worrying too much about different things
- 47% reported becoming easily annoyed or irritable

Being female was a risk factor for both depressive and anxiety symptoms.

Living in Hubei province was found to be a risk factor for both depressive and anxiety symptoms.

Age was also a factor for the majority of school grades, with higher school grade students having a higher risk of depressive or anxiety symptoms.

Protective factors – awareness of COVID-19 was cited as a protective factor against depression and anxiety symptoms.