

Review of transmission of Covid-19 associated with schools in Cwm Taf Morgannwg.

Background:

Clusters of cases, including in school settings, have been identified, assessed, monitored and actioned through a multi-agency Cluster Oversight Group across Cwm Taf Morgannwg (CTM), Chaired by a Consultant in Public Health in the Cwm Taf Morgannwg Local Public Health Team. This has enabled an assessment of risk in different settings and a coordinated approach to advice, support, inspections and enforcement. It also reports to the CTM Incident Management Team to assist in understanding of risks associated with different settings.

Evidence presented since September has shown that school settings were, in the main, well managed and controlled, there was little evidence of in-school transmission, good adherence to guidance and generally well controlled environments. This has been evidenced by small numbers of cases, spread throughout schools years, high numbers of contacts identified in bubble or year groups, but little onward transmission. Cases have been generally community acquired from household members, but associated with the school attended. Where there was evidence of in-school transmission, this was often between staff where the primary control measures were breached. In addition there has been evidence of transmission in special schools associated with breaches in social distancing or use of PPE. There is some uncertainty about transmission in friendship and social groups as they often meet inside and outside of the school environment. Where transmission was evident in was attributed to poor social distancing and breaches of guidance.

In addition, an Educational Settings meeting is held weekly with Directors of Education, Local Education Authority Staff (LEA) staff, representatives of pre-schools settings, further education settings and the university this is a forum to share advice, guidance, good practice and identify any issues of concern for further action. This is a well-attended forum, promotes consistency of approach, close working across the settings in an active learning environment with a resultant high level of trust and confidence in this sector.

Introduction

As incidence in the community and schools increased following the firebreak in Wales, which ended on 8th November 2020, a question was raised to the Director of Public health from MPs and AMs: *“are we moving from community acquired transmission, evident is cases in the school environment to transmission in the school environment?”*

To gain some insight into this it was agreed that the three Local Authorities (LA's) within the region, Bridgend, Merthyr Tydfil and Rhondda Cynon Taf, would look at a sample of schools and also collate some qualitative intelligence of transmission in these settings. They would look at case records on the CRM system used by the Test Trace Protect Service to identify the likely route of transmission where that was possible.

To be representative the sample would need to include a random sample of each type of school, including special schools, looking at transmission between pupils, pupils and staff and staff to staff. It was agreed between the LA's that quantitative data would be examined for a random sample of 2 secondary and 2 primary schools within each LA.

Results

It was evident that cases in both pupils and staff increased, alongside community incidence through November and December. The number of positive cases in pupils and staff is low compared to the total numbers attending and working in the schools. Of particular note is:

- The primary and special schools have a noticeably higher proportion of cases in staff than secondary schools.
- The primary and special schools have a noticeable number of staff that have been identified as a contact within the school prior to becoming a positive case themselves
- In the final week of the school term there were an increasing number of primary school children testing positive.
- The secondary schools have a noticeably higher number of cases attributed to a known community exposure to a positive case. This accounts for approximately half of cases. The source infection is unknown in most other cases.
- In some schools (particularly secondary settings) there continues to be a large number of contacts identified per case, which are then required to self-isolate. This would suggest a significant amount of staff and pupils at the location in close proximity to one and other. This may be representative of bubbles that are too large and therefore detrimental to the benefit of the primary control measures.
- Of those identified as contacts of cases, only 14% went on to test positive.
- Qualitative intelligence from education colleagues suggests that where cases occur they are often associated with established friendship and social groups.
- Consideration should continue to be given to the role of increased community transmission being the main driver of school reported cases.
- The principle of school bubbles, allowing pupils to mix without social distancing presents a challenge in managing behaviours outside school. Pupils who spend time in close contact within the school setting often continue the same behaviour outside of the setting increasing the opportunity for the virus to spread.

Risk factors:

- Staff car sharing without wearing suitable face masks has been found to contribute to spread of infection.
- Staff such as lunch time supervisors, breakfast club supervisors and cleaners have been found to have several jobs; including across several different schools, and in some cases, as care staff in residential care homes.
- A number of cases have been linked to agency teaching staff, who work across more than one school setting.

- The colder weather conditions, less ventilation and more time indoors are likely to contribute to increased transmission
- The increased level of infection within the community is associated with increased cases in local schools.
- The increase in transmission of the virus with the new variant of the disease is not known
- Breaches in control measures: donning of PPE and maintaining social distancing, are not adhered to in primary schools between staff and pupils as they are in secondary schools. This could be a contributory factor to the number of positive cases in staff that are noted in Primary schools.
- Staff-to-staff transmission should also be considered as a possibility of the increased number of cases in staff in special and primary schools. In these settings, there is usually more than one member of staff per classroom due to the presence of teaching assistants and learning support officers
- Confusion on the different requirement for social distancing for school aged children in and out of school

Other issues:

Increasing incidence has implications on current cleaning regimes (72 hrs after identification before contractors will enter and clean classrooms and risk assessments associated with safety of the buildings) and is therefore something that needs to be considered.

Conclusions

With schools predominantly closed, except to vulnerable children and the children of key workers, there are currently no clusters associated with schools.

The review of school cases suggests that:

- Approximately half of cases can be accounted for by community acquisition, mostly from a household member index case.
- Where cases are identified in a school setting they are usually associated with a smaller social/friendship groupings both inside and outside school
- Remaining cases could not identify a clear source of transmission. There is no clear evidence of wider in-school transmission, outside of these smaller social/friendship groups social groups
- Higher case rates in schools are associated with higher community transmission
- There were higher rates noted in primary school staff who are likely to have more than one adult in classroom areas, some Learning support Assistants in more than one bubble and no PPE worn e.g. in corridors as with secondary schools.

- There was evidence of transmission in one special school that identified poor practice in social distancing as a critical factor in transmission.
- It was noted that cases increased towards the end of the Autumn term, in line with increases in community incidence. This could be exacerbated by colder weather and poorer ventilation.
- Overall, cases and contact remained low, as a proportion of all pupils and staff, indicating effective control measures in place.

There is a high degree of confidence in compliance, in the main, with effective engagement of the education sector including the Local Education Authorities, Schools and pupils.

Recommendations

There are a number of areas where recommendations for improvement can be made:

1. There have been some areas of concern identified in school environments where practice in use of PPE is diverging between schools and local authorities, inconsistency in cleaning regimes, products and contact times, concerns about the ease of introducing Lateral Flow Tests in the school environment and practicalities associated with this. As such it is requested that a review and update of guidance for schools be undertaken to provide greater clarity.
2. Bridgend CBC has requested a number of primary and special schools within in which there has been a high number of cases amongst staff to review their risk assessments, identify improvements that could be made to infection prevention control measures, particularly during the interaction of staff. Feedback from this review should be reported to the IMT.
3. Improvements to the uploading of school contact records for 2021 would ensure a clearer picture of contact groups in TTP going forward.
4. Further improvements to PPE provision for staff unable to maintain a social distance (e.g. primary school staff) in particular should be considered going forward.

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