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Public Summary



**MERTHYR TYDFIL COUNTY
BOROUGH
&
LOWER CYNON VALLEY
(RHONDDA CYNON TAF
COUNTY BOROUGH)**

PUBLIC SUMMARY

BACKGROUND

Sadly, communities in Merthyr Tydfil and Rhondda Cynon Taf have seen some of the highest incidence rates of COVID-19 in the UK, along with associated illness and deaths.

In November and December 2020, a pilot of Whole Area Testing using Lateral Flow Device tests took place Merthyr Tydfil and Lower Cynon Valley with the aim of reducing the spread of Coronavirus in areas with extremely high incidence and positivity rates.

Members of the public who did not have COVID-19 symptoms were invited to attend local centres to be tested for COVID-19 using lateral flow devices (LFD). Between one in four and one in three people who have Coronavirus never show any symptoms, so it was hoped by offering whole area testing cases of COVID-19 in people who did not have symptoms and who would otherwise not come forward for testing would be identified.

AIMS

The main aims of the whole area testing pilot were:

1. To test whether or not large-scale testing using LFD tests can reduce community transmission of COVID;
2. To make testing accessible to these areas and increase uptake;
3. To prevent further transmission of the virus through contact-tracing and other measures;
4. To protect those at highest risk;
5. To empower the local community to reduce the spread of the virus to save lives, livelihoods and businesses;
6. To identify people who were needlessly self-isolating and empower them to return to usual activities;
7. To assess the impact of testing on behaviour.

IMPLEMENTATION

The pilots were introduced in November and December 2020 and were the result of an unprecedented collaboration between partners including the local authorities, Health Board, Welsh Government, the military, police and Welsh Ambulance Service, as well as schools and the Third Sector.

In the Merthyr Tydfil area, the work was led by the Local Authority in partnership with the military. In lower Cynon Valley it was led solely by the

Local Authority, with learning from the Merthyr Tydfil pilot which has started two weeks earlier.

Those invited to get tested were people who:

- Lived, worked or studied in Merthyr Tydfil County Borough or lower Cynon Valley area of Rhondda Cynon Taf County Borough;
- Were 11 years or over of age;
- Did not have symptoms of COVID-19;
- Consented to participation in the pilot;
- Consented to sharing their data with the Welsh Test Trace Protect programme ;
- Were children aged 11-17 and where consent was obtained.

Central testing stations were placed in larger areas in the community and were supported by mobile stations for smaller communities.

A pilot was also undertaken in secondary schools, a special school and a pupil referral unit in the areas to increase access and uptake for 11 – 16 year olds.

Those in further education were proactively linked into community testing facilities.

Home testing was offered to all those who were on shielding lists.

A self-isolation helpline was established to provide information and advice along with support to follow self-isolation guidance for those testing positive.

OUTCOMES

The main outcomes of the pilot were:

- Uptake was high - 22,021 people were tested in Merthyr Tydfil, representing nearly half of the target population (49%). A further 10,457 people were tested in lower Cynon Valley, which represents 56% of the target population. This is close to double that of the Liverpool and Scottish pilots;
- The test positivity rate was 2.3% in Merthyr Tydfil and 2.6% in lower Cynon Valley. The evaluation found higher positivity rates in males, younger people, people living in the most deprived areas, occupations where close contact is more likely, such as transport and hospitality, manufacturing and construction, health and social care, retail and arts and entertainment;
- Whole area testing in Merthyr Tydfil and lower Cynon Valley is estimated to have prevented 353 cases of COVID-19, 24 hospitalisations, 5 Intensive Care Unit admissions and 14 deaths;

- The pilot caused an immediate reduction in the level of COVID-19 in the area;
- When taking into account the onward transmission of infection in the community expected from people who would not have known they had COVID-19, more than a tenth of cases that would have otherwise occurred were prevented. This represents a 6-12% reduction in pressure on NHS services;
- The estimated net monetary benefit of the testing pilot was £5.8 million, which means a benefit:cost ratio of around 11 for the £516,000 the pilot cost, or a return on investment of around £10.30 per £1 spent;
- There was a high degree of assurance around lateral flow device (LFD) testing, as the tests showed good performance in identifying asymptomatic infections, suggesting a different but complementary role to PCR tests which are used mainly to diagnose symptomatic infections. Between one in four and one in three people who have Coronavirus never show any symptoms, so LFD tests can help identify people with the virus who do not have symptoms and would not otherwise come forward for a test;
- Joint working across organisations worked well and was key in making the pilot a success;
- There were high levels of community engagement, thanks to targeted communications and engagement across the community.

CONCLUSIONS

The main conclusions that were drawn from the mass testing pilot were:

- The vast majority (99.6%) of those attending the mass testing centres were asymptomatic, showing the community understood the purpose of testing and presented appropriately;
- Transmission within households was the most important source of infection;
- Working in the hospitality sector and visiting the pub were also significant risks but due to the COVID-19 restrictions at the time, these were infrequent exposures;
- Smoking or vaping had a small but significant effect;
- Working in education, living with someone working in education, having caring responsibilities and visiting a supermarket, restaurant, gym or leisure centre did not appear to increase risk of infection;
- The lower testing uptake in groups of the population with higher positivity rates has clearly demonstrated an “inverse testing law”. This will be important in informing future testing strategies.

RECOMMENDATIONS

The evaluation makes a number of key recommendations for future work involving lateral flow testing and whole area testing.

These include:

- The use of mass testing for asymptomatic members of the community should be considered an important and effective part of any COVID-19 control plan;
- Use of LFD testing in the community should be targeted at areas and groups at higher risk of infection. A follow up PCR test within 24 hours is recommended to ensure that cases and contacts from a small number of false positive results are released from self-isolation;
- Testing should be targeted in more deprived areas, at men, younger people and occupations with close contact who cannot work from home, for example transport, construction and manufacturing, personal services such as hair and beauty and health and social care;
- Contact tracing should be fully integrated into the work to follow up cases for isolation and support to ensure compliance and break chains of transmission;
- It is essential that implementation is locally led, in partnership with local authorities, health services and the Third Sector;
- Good communication and engagement with community members and local businesses is needed to secure good uptake.

We would like to thank the partners who collaborated with us at all stages of the process, and the communities who engaged with the pilot to make sure it was a success. Without their dedication and hard work, a pilot of this scale would not have been possible.

To read the full report please click [here](#).

To read the executive summary of the report, please click [here](#).