Public Health management of the Covid -19 pandemic

1. Introduction

Management of communicable diseases is a part of the Health Protection function which is one of the Public Health statutory functions. Public Health functions in the Local Authority have been defined in the Health and Care Bill 2012. The key statutory functions are:

Strategic Leadership for Health

- Lead on population approach to health based on understanding population needs and developing relevant evidence-based programmes.
- Lead on the development of the Health and Well-being strategy for Bromley and support implementation of health and wellbeing priorities.

Provision of Services

- Provide health surveillance service, population needs assessments and advice on clinical effectiveness, audit and evaluation.
- Advise and support the NHS.
- Health Protection function: prevention and control of communicable and infectious diseases; screening; immunisation.
- Public Health training

Commissioning of Services

Responsible for the commissioning of:

- Adult Public Health Services
 - NHS Health Checks

Children and Young People Public Health Services

• Bromley 0-19: Public Health Service

Risk and Resilience Programmes for Young People and Adults

- Sexual health services
- Substance misuse services

2. Management of the Covid-19 pandemic

The basis for the Public Health management of the Covid-19 pandemic has been the Bromley Outbreak Management Plan.

Public Heath completed and published the first plan in June 2020, pulling together all key partners in the borough. The plan has been updated several times and it is overseen by the Health Protection Board. There are a number of workstreams overseeing different aspects of our pandemic response and each of these workstreams has developed and changed as the pandemic has progressed.

Public Health team led in setting up new services to manage the pandemic such as contact tracing, community testing, testing in schools, surge testing and setting up systems to prevent and manage outbreaks. They have also worked closely with SEL CCG on the vaccination programme.

During the pandemic several members of staff in the Public Health team moved from Business as Usual to working on the response to the pandemic almost entirely, leaving those not working on the pandemic to keep all the other work going.

Key areas of work:

- Surveillance
- Outbreak management
- Covid-19 clinical response service
- Local contact tracing service
- Community testing service
- Vaccination
- Prevention /Communication and engagement
- Vaccination

2.1. Surveillance

The Public Health Intelligence Team used PHE data to track the number of positive cases in Bromley and our positivity rate throughout the pandemic. This also enabled monitoring of cases in vulnerable groups such as those in care homes, the GRT population and those in temporary homeless accommodation which our nurses then followed up. The intelligence team were also instrumental in setting up and populating a database for our local Contact Tracing team, so that they were able to contact residents that were passed onto them by National Test and Trace for contact tracing or might have required support due to self-isolation.

The public health intelligence team set up surveillance systems for care settings, education settings and all other settings. To keep these systems up to date, a new email address was set up for colleagues to send all correspondence relating to surveillance to which all members of the Public Health Intelligence Team have access to. This allowed the team to triangulate the local and national intelligence provided to us.

The intelligence team triangulated many sources of data and intelligence and information about the pandemic and it's spread in Bromley along with data on testing, vaccinations and deaths. All of this has been monitored on a daily basis.

The intelligence team also produced reports and intelligence where required to support surge testing, the vaccine sprint, the public health team, councillors, contact tracing, other departments in LBB and the CCG and dealt with the many technical difficulties that arose.

2.2. Outbreak management

One of the key Health Protection Functions has been outbreak management. Public Health team has managed or supported a very large number of outbreaks in different settings (Tables 1&2). This included incident management meetings and subsequent review meetings with a large number of care homes and schools as listed in the table below. All meetings were chaired by either Director of Public Health or the lead Consultant in Public Health and supported by the Infection Control Nurse. Depending on the setting, these meetings were attended by colleagues from Adult Social Services (for care home outbreaks) or Education team (for school outbreaks) who provided further management support and advice. This type of joint multi-disciplinary meetings and support was shown to be very effective and highly valued by care homes and schools.

Setting	Number of outbreaks 2020-21
Care Setting	120
School Setting	214*
Workplace Setting	36
Other Settings	16
TOTAL	386

Table 1. Outbreaks 2020-21

Table 2.	Outbreaks	2021-22
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Setting	Number of outbreaks 2021-22 (as at 31/03/2022)
Care Setting	254
School Setting	289
Workplace Setting	9
Other Settings	37
TOTAL	589

Outbreak = 2 or more cases of Covid-19, for education settings this has changed to 5 or more cases since September 2021.

*data from September 2020 to 31st March 2021

2.3. Covid-19 clinical response service

The service, delivered by Public Health Nurses, provided infection prevention and control (IPC) advice, support and responses to enquiries received from a wide range of health and care professionals in different settings, including businesses as well as from the general public.

The nurses were involved in a range of activities supporting different populations with some targeted work to vulnerable and disadvantaged groups who may be more at risk of transmission of COVID-19, including homeless hostels and Gypsy/traveller population. A summary of main activities is shown in the table below (this includes some but not all the activities of the IPC specialist nurse), a lot of these activities are continuing at the present time.

Activity	Availability/Frequency	Documentation		
Telephone and Email Enquiries and Support				
Telephone Helpline to COVID-19 group telephone.	Available 8am-8pm 7 days a week at the peak of the pandemic. Currently available 9am - 5pm Monday to Friday	All telephone calls into COVID-19 Helpline are followed up with a summary email to ensure an audit trail		
Proactive contacts	Monthly regular telephone calls to Providers who are not in an Outbreak situation - provided by the Support Nurses at peak of the pandemic. Now provided by PH nurses according to need.	Call logs to be maintained on excel and Sharepoint List.		
Follow up actions from proactive calls	Additional calls and provision of training as required.	Logged on excel and Sharepoint		
Emails received in the COVID-19 questions inbox	Mailbox monitored 8am-8pm 7 days a week including bank holidays at the peak of the pandemic. Currently available 9am - 5pm Monday to Friday	Excel transitioning to Sharepoint. Interim Sharepoint system commenced 4 th Jan.2021.		
Training in Different Settings				
Training Train the trainer in IPC, PPE donning and doffing, testing	A targeted schedule of training programmes rotating across Providers has been implemented since March 2020.	 Excel until Jan 2020 Shared Excel and Sharepoint Jan 2020 		

Table 3. Summary of Public Health Nursing team activities

		1		
	Ad hoc refresher training in an			
	Outbreak situation			
Q & A Webinars	As a response to increased	Webinars completed for:		
	number of queries or new	 Pre-school, childcare 		
	guidance published	providers		
		Schools		
		Care settings		
Health protection	Programme of training delivered	 In collaboration with 		
principles and	to newly identified Health	adult social care		
practice	Protection Champions in Care	 Supporting care settings 		
	Settings - 2021	to develop and maintain		
		their own expertise		
		through a Health		
		Champions Network		
Outbreak Management and Surveillance				
Review Meetings	Infection Prevention Specialist	Minutes		
	led with Providers who are in an	Sharepoint		
	outbreak situation when required	Surveillance system		
Incident	From LCRC in more serious	Minutes		
Management	outbreak situations when	 Sharepoint 		
Meetings	required	Surveillance system		
Surveillance	Led by Health Intelligence	Health intelligence		
meetings	attended by IPC specialist (with	surveillance		
	PH nurse in attendance)	spreadsheet		

Clinical Response analysis

The number of queries received by the Covid response team was at least 4993 from April 2020 – March 2022, however this is an underestimation as some of the Health Protection Team were receiving additional queries into their individual email boxes.

The charts Figure 1 - 4 provide an analysis of the clinical team activity recorded on our Sharepoint list database.

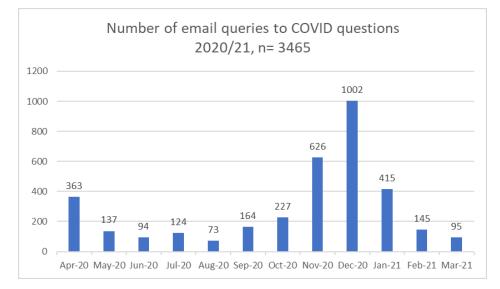
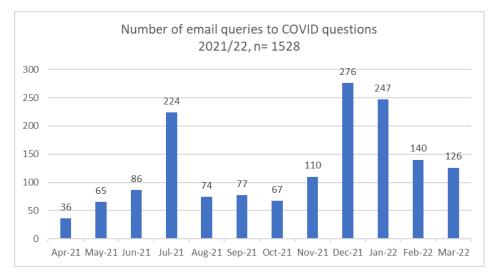
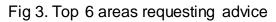
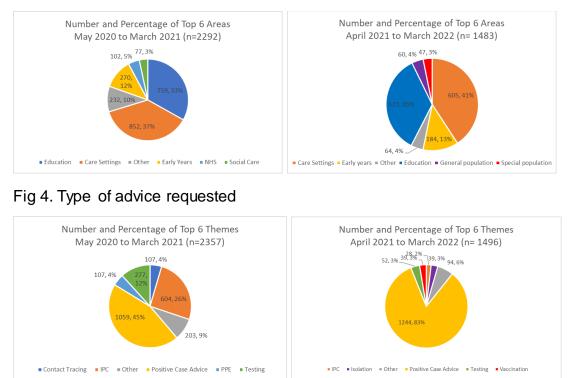


Fig 1. Number of queries in the period April 2020 – March 2021 (n = 3465)

Fig 2. Number of queries in the period Apr 2021- March 2022 (n = 1528)







The nature of the queries changed over the course of the pandemic. As providers gained understanding, the type of queries coming to the helpline or via email now tend to be complex in nature and require research and specialist advice.

2.4. Local Contact Tracing Programme

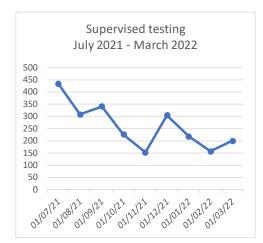
- This programme started in October 2020, the programme lead was Sarah Foster, with Chloe Todd part of the management team for the programme
- Public Health (Chloe Todd) took over the programme lead role in June 2021
- The programme ended on 23rd February 2022
- This programme shared staff across the testing, and contact tracing programmes on a rota basis
- The programme operated 9.00am to 5.00pm Monday to Friday, 10.00am to 2.00pm Saturday and Sunday

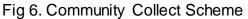
2.5. Community and Targeted Testing Service

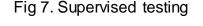
Community Asymptomatic Testing using Lateral Flow Devices (LFD) has been a key component of the Covid-19 Test and Trace programme designed to break the chain of transmission of the virus in the community. The programme was initiated and led by Naheed Chaudhry in January 2021 and Public health (Mimi Morris-Cotterill) took over from 1 July 2021 when the direction of the programme moved from a mass testing approach to one that targets hard-to-reach communities such as Roma Gypsy Travellers and disproportionally impacted groups (DIGs) such as those who are BAME and Homeless, and in areas that are densely populated and in deprived areas. The Targeted Community Testing (TCT) Programme was funded directly by the DHSC based on activity against a set of pre-determined rates.

Given the change in direction and funding, delivery of the programme became smaller in scale with one testing site at the Civic Centre that offered walk-in supervised testing (reduced to one testing bay) as well as LFD kits also available for collection with a further community collection point sited in the Civic Centre Vaccination Centre. The Programme approach to delivery was via Services such as the homeless charitable groups, local drugs and alcohol service that were already engaged with these hard-to-reach communities. The programme team also promoted testing and distributed kits in communities where there was low vaccine uptake and participated in events such as vaccine sprint that aimed at improving vaccine uptake. The programme was delivered by 1 wte Co-ordinator and a team of 6 (not wte) staff members working on a rota basis. The Team worked closely with the Contact Tracing team with the aim to operationalise a more integrated approach to test and trace locally.

The TCT programme (from July 2021 to March 2022) has carried out 2,337 supervised testing and distributed 169,718 kits, of which 59,790 kits are for the hard-to-reach communities. This programme was closed on 31 March 2022 in accordance with DHSC guidance.









2.6. Covid-19 Vaccination

Public Health team has been engaged in the delivery of the vaccination programme in various areas:

Support to the NHS

- Communication and engagement events with residents, schools, care homes, social media campaigns, webinars
- Vaccine sprint campaign
- Support to vaccination of vulnerable and hard-to reach communities work with homeless, Gypsy and Travellers

Vaccine hesitancy and inequalities workstream

- In collaboration with other local authority colleagues and the SEL CCG, Public Health were active members of a working group created to support the vaccination rollout by addressing vaccine hesitancy and vaccine inequality. This group was chaired by Vinit Shukle with members including Public Health. Initially the group was targeting the BAME population who had low levels of uptake. However the group subsequently broadened its remit to encompass other population groups with low uptake (e.g. Young people).
- Gathering intelligence on vaccine hesitance and/or vaccine inequality and arrange conference and group support to address this.
- Identifying areas of low uptake through health data
- Local Authority helping to find and secure access to venues for pop up vaccination centres e.g., Penge Library, Mottingham and Cotmandene Resource Centres, site for Vaxi Taxi in Penge
- Local Authority sharing contacts who supported events e.g. Penge Business Improvement District with Vaxi Taxi
- Securing vaccination teams such as Vaxi Taxi, Penge PCN, Bromley GP Alliance.
- Holding Information pods run by GP Registrars in The Glades, and at Lidl (Burnt Ash)
- Health colleagues, Public Health and Local Authority Comms Briefing Councillors regarding door knocking project. Valuable local intelligence from Councillors supporting the initiative gained. There has been a great deal of comms support from both the CCG and LA teams.
- Pop Ups were funded by SELCCG (except Vaxi Taxi and possibly Anerley Town Hall – funded through inequalities money), but venues were secured through working together. Slides below show detail on pop ups.
- PH Nurses visited Star Lane Gypsy and Traveller site to promote vaccination and deliver home testing kit.
- Workshops run to educate and reassure vaccine hesitant BAME care setting staff. These workshops were run by health professionals from

similar BAME backgrounds in recognition of cultural factors. This was subsequently extended to vaccine hesitant staff from non-BAME backgrounds and for other organisations (e.g., BHC.)

- Workshops with students 16-18 to address misconceptions around Covid vaccination and promote uptake.
- Vaccination sprint was also supported by the group, further detail see section 2.7.

2.7. Prevention /communications and engagement

Prevention

Public Health worked closely with the Communication Team and other LBB and external colleagues to ensure that the latest messages on prevention were available to Bromley residents in public places and on the LBB website.

In addition, Public Health targeted specific population groups classed as either more susceptible to catching Covid, or in situations where it would be easily transmitted. These areas required more intensive prevention intervention, some examples of which are shown below:

Homeless health and vaccination

Public Health successfully secured funding from the SEL CCG out of Hospital Model Initiative and supported Bromley GP Alliance in the Winter Homeless Shelter Healthcare Support Project which addresses the health needs of homeless population in Bromley. Over the winter of 2020, a total of 29 homeless clients and 15 homeless shelter volunteers interacted with the service over 17 weeks in the winter months last year. Of these, 17 clients received a covid-19 vaccination with 14 of them fully vaccinated. 15 of the volunteers also received a covid-19 vaccination and 2 received the flu vaccination.

Bromley GP Alliance continue to collaborate with Bromley Homeless, Oxleas, Change Grow Live and Bromley Healthcare to provide the weekly clinic this winter. Since 2 December 2021, 20 homeless clients have attended the Clinic, totalling 36 attendances; 7 Covid19 Vaccinations and 6 Flu vaccinations were administered; 6 prescriptions were arranged and 13 clients are now registered with a GP Practice. During this time, Bromley Homeless has hosted and provided hot meals to a total of 63 homeless and rough sleepers at the weekly evening. The Clinic will continue to 24 March 2022.

Health Protection Champions in Care Settings

Public Health and Social Care collaborated to secure funding to set up and develop a network of Health Protection Champions in care settings. Care settings were contacted by the team including Public Health nurses who introduced the concept to care setting staff and obtained commitment from the setting. There then followed a series of workshops to establish those nominated care setting staff as a network. A programme of education was provided to ensure they had the necessary expertise including health protection principles and practice together with infection prevention and control. LBB staff have a working group to oversee this network development chaired by Mimi Morris Cotterill from Public Health.

Vaccine Sprint

To accelerate the Covid-19 vaccination programme and to support the lifting of restrictions on 19 July, Public Health worked with the CCG and led a door-to-door engagement with local residents in 3 ward areas identified by the NHS as areas with low vaccine uptake (Mottingham, Penge & Cator, Plaistow and Sundridge). Delivery was via a third-party organisation, GPS, commencing on 30 June 2021 to 4 July 2021, with follow up visits over the weekend. A further engagement covering Cray Valley East and West and Bromley Common on 13, 14 and 15 July. Pre-visit communications were distributed to the residents in these ward areas, prior visit briefing sessions were given to the team of advisors who conducted the visits with LBB ID and authorisation. The intervention included promotion of the vaccination programme and encouraged booking, where required, making the booking for the resident at the door. This was then extended to cover a vaccination awareness promotion at local railway stations – St. Mary's Cray, Penge West, Orpington, Bromley South, New Beckenham and Beckenham Junction.

Public Health Weekly Bulletin

To enhance information and the understanding of COVID-19, a weekly Public Health COVID-19 Community Update was disseminated to community leaders to disseminate to their local communities. The information was communicated using 'Plain English' principles to help inform and support residents to stay safe and well during the pandemic. A wide range of topics were addressed in the updates, these included self-isolating, PCR and LFD testing, community support, managing COVID-19 and vaccine hesitancy. The updates were initially sent weekly, and then monthly, between February and July 2021.

Health Promoting Messages

COVID-19 has prompted many people to reflect and think more seriously about their health and the ways in which they can change their behaviour. In support of the Better Health campaign launched by Public Health England, Bromley Public Health used this unique moment in time to help kick start our health – to eat better and get active – and developed a range of health promoting messages available to patients and the public.

3. Exit strategy from the pandemic

The pandemic is now moving towards being endemic in the population, and in order to provide the support that is needed for this situation two new members of staff have been recruited to support the Health Protection function within the Public Health team. This small team will aim to take over most of the Health Protection work around Covid as well as supporting local response to other outbreaks of infectious disease in the borough. The new staff have been recruited for a 12-month period initially.

4. Lessons learnt / legacy

The pandemic has caused significant morbidity and mortality in the population, but it has also led to numerous improvements in the way we all work. The Association of Directors of Public Health led a peer-review process across London with the aim to identify key lessons learnt and legacy that should be preserved for the future.

The key areas that we have identified in Bromley are:

4.1. Partnership working

This has been one of the key areas that has worked very well since the beginning of the pandemic, both within the Council and across different agencies and stakeholders.

Within LBB, we have seen many examples of improved joint working and that has been particularly evident in relation to outbreak management and support to vulnerable groups and settings. The joint working to support care settings has been recognised as excellent work and awarded the National MJ Award and reached the finalist list for consideration for One Bromley Celebration Integration Together Award, this work has also reached the shortlist for the Bromley Stars Awards.

4.2. Flexibility of workforce

Our workforce has shown a great flexibility and ability to take on different roles in a short period of time.

Within Public Health, clinical staff were able to very quickly pick up health protection roles with short training and updating.

Across the Council, staff were able to fulfil various roles in Covid management again with short training. Many colleagues used their transferable skills to support Covid management – e.g. taking leading roles in Contact tracing and Community and surge testing programmes.

4.3. Communication and local networks

Our communication team has been instrumental in supporting the engagement with local communities and developing and delivering numerous Public Health messages. It has become clear very quickly how good communication is central to Public Health work.

4.4. Good sub-regional working

The six SE London Public Health teams have worked closely together during the pandemic, with regular weekly Directors of Public Health meetings which are also attended by the SEL CCG Chief nurse, vaccination and testing leads and the PHE lead Consultant in Communicable Diseases. This has enabled joint working and sharing of work (e.g. production of a weekly SEL Dashboard). This group were supported by the collaboration of SEL public health intelligence teams who quickly established a network to meet and discuss data and intelligence across the SE London area on a weekly basis.

4.5. Key lessons/developments for the future

As a part of the peer review process, Public Health teams were asked to identify three key lessons or developments that we felt should be retained as a priority for the future. Below are the three priorities identified by Bromley:

- 1. Re-energise whole Council approach, including partners i.e. whole system approach to address any health protection issues
- 2. Ensure flexibility of the workforce through training, development, recruitment
- 3. Maintain communications and local networks established for rapid information sharing and community engagement.