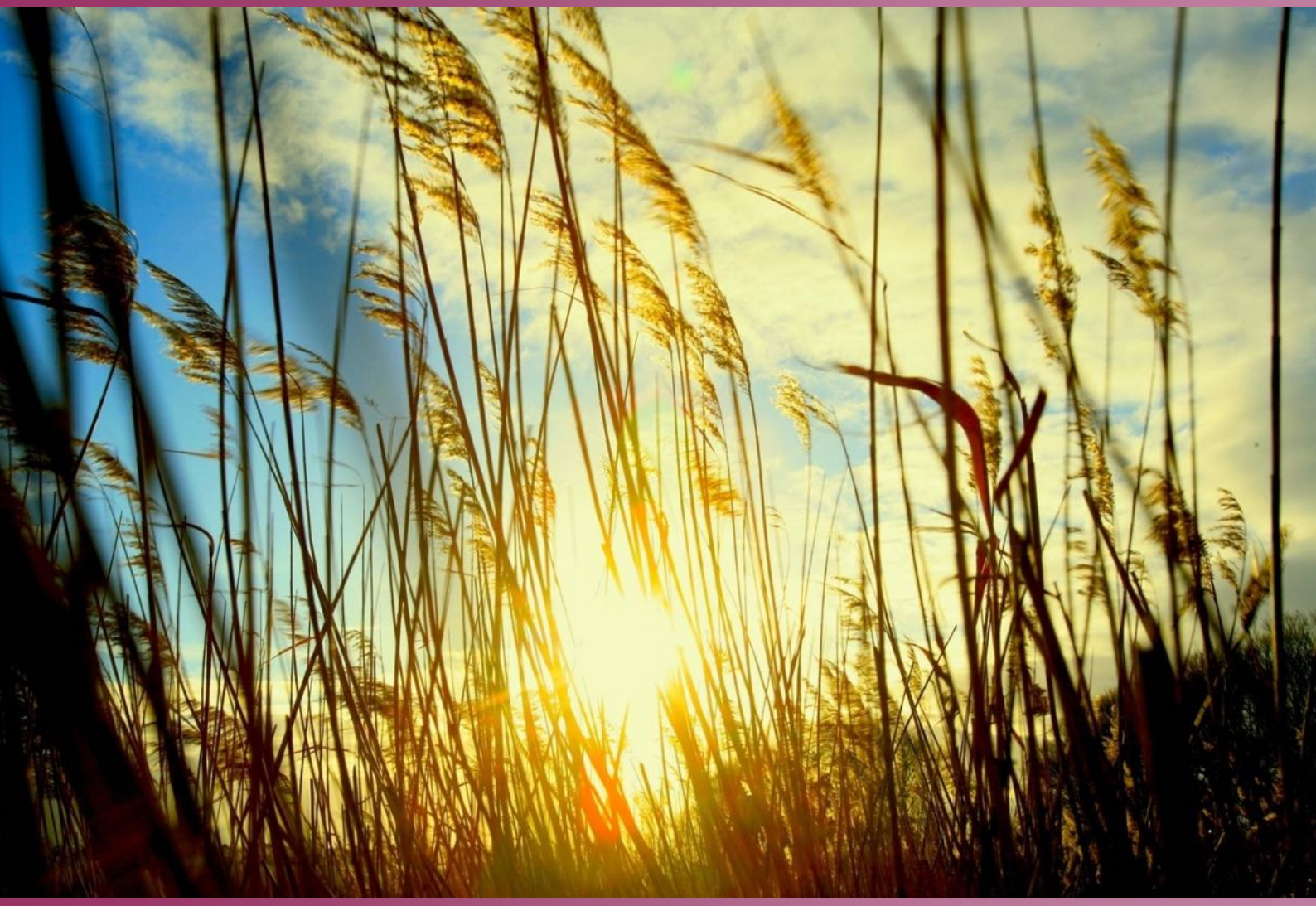
Report on London Gastrointestinal Infectious Disease Notification & Investigation



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Abstract

The major function of the notification system is to facilitate timely intervention (Rooney *et al*, 2000) to allow the earliest possible detection of potential outbreaks and epidemics (HPA, 2009); and secondly to produce local and national statistics used for surveillance purposes (McCormick, 2003). The current list of notifiable diseases comprises of those under the Public Health (Control of Disease) Act 1984, including food poisoning, and those under the Public Health Regulations 1988; but will soon increase with the introduction of the 2010 Health Protection Regulations.

The prompt investigation of these cases currently relies heavily on effective bidirectional communication between Local Authority Environmental Health Departments and Health Protection Units. However, as a Gastrointestinal Infectious Disease Outbreak could be a significant public health risk at the 2012 Olympic and Paralympic Games, it is necessary to improve the joint working standards and procedures of London Environmental Health Departments (EHDs) and Health Protection Units (HPUs) to ensure the risk is minimised.

Introduction

The Joint London Environmental Health Professional post was jointly created by the Health Protection Agency (HPA), the Association of London Environmental Health Managers (Alehm) and the Chartered Institute of Environmental Health (CIEH).

The role consists of three one year phases, with each offering a new Environmental Health or Public Health Masters student the opportunity to carry out multiagency work helping to improve the standard of Gastrointestinal Infectious Disease investigation and surveillance across London in the run up to the 2012 Olympics and Paralympic Games.

Figure 1: Map of London Boroughs

London's 33 boroughs (Figure 1) are divided geographically between the four London Health Protection Units (HPUs) (Figure 2).

As part of this project, poster presentations have been held at both the London and national Health Protection Conferences in order to raise awareness and the profile of this work.

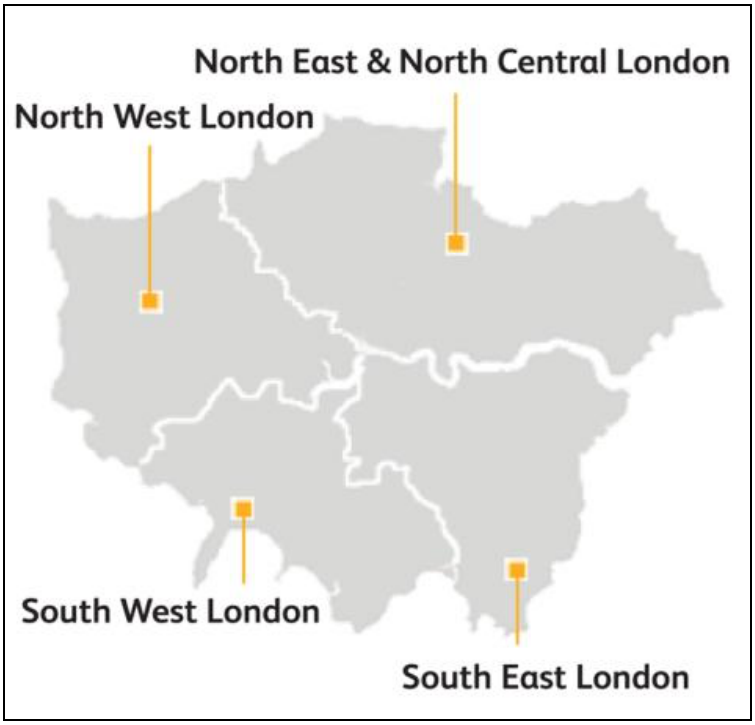

Figure 2: Map of areas covered by the individual London HPUs

Aims & Objectives

The overall aim of the project is to help establish consistency in Gastrointestinal Infectious Disease notification across all London Borough EHDs and HPUs.

The main objectives of the project include:

- exploring barriers to good communication between London HPUs and Environmental Health Departments;
- reviewing existing procedure on investigation of notifiable gastrointestinal disease;
- identifying issues surrounding the current notification system; and
- making recommendations on how to improve all areas of Gastrointestinal Infectious Disease investigation in the run up to the 2012 Olympic and Paralympic Games.

Notifications and Surveillance

The primary function of the notification system is to facilitate timely intervention (Rooney *et al*, 2000) to allow the earliest possible detection of potential outbreaks and epidemics (HPA, 2009); and secondly to produce local and national statistics used for surveillance purposes (McCormick, 2003).

Section 11 of The Public Health (Control of Disease) Act 1984 states that Registered Medical Practitioners (RMPs) who become aware, or suspect, that a patient to whom they are attending is suffering from a notifiable disease is responsible for notifying the 'proper officer' of the Local Authority. The 'proper officer' role is usually a Consultant in Communicable Disease Control (CCDC) or equivalent and is usually employed by the Health Protection Agency in the local HPU.

The current list of notifiable disease comprises of those under the Public Health (Control of Disease) Act 1984, including food poisoning, and those under the Public Health Regulations 1988, including: dysentery, Paratyphoid fever, Typhoid fever and Viral Hepatitis. However, the number of notifiable diseases is set to increase with the introduction of the Health Protection Regulations in 2010.

Currently, a Level 1 fine of £200 is payable for failure of a RMP to inform the proper officer, with the only defence against prosecution being that they believed another RMP had already notified the case.

Notifications require the following information:

a) "The name, age & sex of patient, and the address of the premises where the patient is;
b) the disease or, as the case may be, particulars of the poisoning from which the patient is, or is suspected to be, suffering and the date, or approximate date, of its onset, and
c) if the premises are a hospital, the day on which the patient was admitted, the address of the premises from which he came there and whether or not, in the opinion of the person giving the certificate, the disease or poisoning from which the patient is, or is suspected to be, suffering was contracted in hospital."

(Section 11(1) of the 1984 Act)

Notification certificates should be supplied free of charge by the local authorities, and it is currently the Primary Care Trust's (PCT) responsibility to pay the registered medical practitioner £3.36 for each certificate of notification duly sent under Section 11. However, this looks set to change under the new Health Protection (Notifications) Regulations 2010.

The RMP is required to forward a copy of the notification to the local Consultant in Communicable Disease Control (CCDC) care of the local authority's EHD within 48 hours (McCormick, 2003); however Joint Memorandums of Understanding between HPUs and EHDs in London specify various amendments to this to help speed up investigation.

The EHD is responsible for sending notification 'weekly logs', 'quarterly correction forms' and 'significant outbreak forms' to the HPA's Centre for Infections (CfI), under the Public Health (Infectious Disease) Regulations 1988.

In the national surveillance data produced by the HPA's CfI, notifications of 'food poisoning' are listed under two headings: 'formally notified' and 'otherwise ascertained'. Formal notifications are based on clinical suspicion and notified by the diagnosing doctor to the 'proper officer'; whereas 'otherwise ascertained' notifications consist of cases known to staff of local authorities which are

believed to be food poisoning by the 'proper officer' following a confirmed lab report or an outbreak investigation, but which have not been formally notified (HPA, 2009).

Notification data is helpful in establishing trends in disease; however "we know that these data are fundamentally flawed and that not only is it the tip of the iceberg for foodborne illness, it is a gross underestimate of the incidence of gastroenteritis in the community" (Day, 2001). For example, the Food Standards Agency (FSA) Infectious Intestinal Disease (IID) Study (2000) predicted that for every 136 cases of IID in England only 26 consulted their GP, of which only 1 case was notified.

Additionally, there is concern over the use of the term 'food poisoning' in notification as it suggests food contamination, whereas the term 'food borne illness' may be better used as it describes a number of infections whereby food may or may not have been the mode of transmission.

Communication & Investigation
The Communicable Disease Surveillance system (CoSurv), is a collection of computer software modules which allows laboratories, health authorities, HPUs and local authorities to record, analyse, and share infectious disease data (PHLS & CDSC, 2001). CoSurv (LabMod) is used to send laboratory confirmed information to the HPA, and CoSurv (District) is used to collate notified infections.

Efficient outbreak investigation relies upon effective joint working between EHDs and HPUs, which requires regular bidirectional communication; however Evans *et al* (1998) stated that resources available to EHDs and HPUs vary throughout the country, therefore affecting ascertainment and reporting of incidents.

Methodology

Background Scoping
The scoping of this project involved meeting with EHDs and HPUs to establish methods of working and the pros and cons of different communication methods between the organisations. The extent of the relationships was viewed further by attending HPU/EH forums (sector meetings).

EHD Questionnaire
The EHD questionnaire structure was designed to capture the various issues raised by contributors from both the London EHDs and HPUs during the background scoping phase. The questionnaire covered a broad range of topics spanning from general communication between the two organisations, to prioritisation of individual infectious disease (ID) investigation. The majority of questions were closed to allow ease of completion in the hope to increase the number of respondent boroughs, and to simplify subsequent analysis.

The questionnaire was piloted by four EHDs and their comments were taken into consideration before the questionnaire was distributed to lead ID officers of all London EHDs via the Association of London Environmental Health Managers email contact list.

Reminders were later sent out via the London Food Group Coordinators, and to individual boroughs.

HPU Interviews
Semi-structured interviews were conducted with the Gastrointestinal Infectious Disease lead Consultants in Communicable Disease Control (CCDC) of each London HPU, following a similar subject format to that of the EHD questionnaire. The use of semi structured interviews was the preferred method due to the increased detail of the information gathered.

Analysis

Analysis of the London Borough EHD responses was carried out using the statistical analysis software SPSS (Version 17.0), whereas the semi structured interviews with the HPUs were analysed using the recognised social science technique of coding the information gathered and looking for similarities and differences amongst the data.

It is important to state that it is recognised that the population sizes used in this research project are small in statistical terms, and therefore there is an increase chance of insignificant results. Therefore both methods of data collection focussed on retrieving qualitative data, over quantitative.

Results

EHD Questionnaire
The EHD questionnaire received a 100% response rate, from which the following results were deduced.

1. Organisation Arrangements in EHDs
The organisation of ID investigation within EHDs differs across London; some use a rota system for environmental health officers (EHOs) within the Food Safety & Hygiene Team, whereas others use various combinations of dedicated full and part time ID Clerks, Technical Officers, EHOs and administrative staff.

On average London EHDs spend approximately 6% of their resources on Infectious Disease investigation; however there is a range of 24.8% across London (from 0.2% to 25%). It should be noted however it is difficult to quantify the resources as they are not independent from other EH services. In turn, a quarter (24.2%) of EHDs said they did not have a specific environmental health out of hours service capable of dealing with ID investigations (Figure 3) and may therefore use other local authority services such as emergency planning in the first instance.

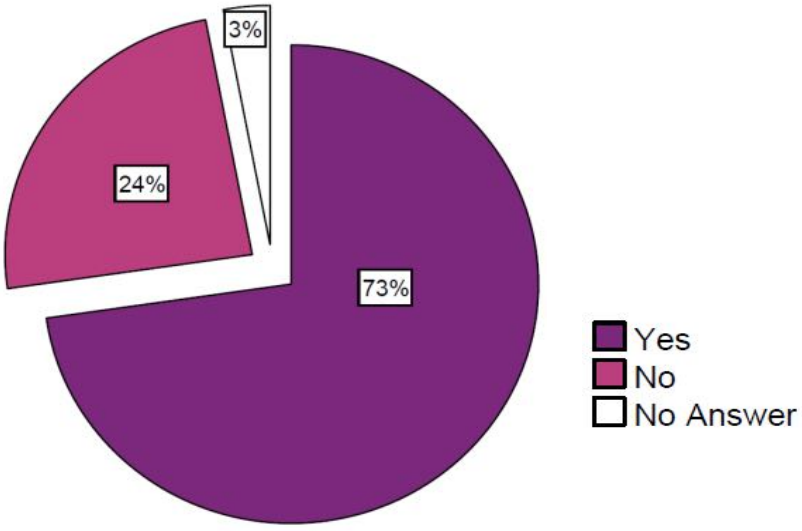

Figure 3: Does your local authority have an 'out of hours' service capable of dealing with IDs?

2. Analysis of Notification Transfer

On the issue of where notifications are initially sent and handled, EHDs did not have a common view on whether all notifications should be sent directly to the HPUs. 42% felt the existing system (of sending notifications to EHDs) is unsatisfactory and would prefer notifications to be sent directly to the HPU. However, 35% disagreed; preferring the current system and 23% had no preference.

The responses stated that the positive aspects of sending notifications directly to the HPUs would include better use of EHD resources as they do not investigate the majority of notifiable IDs, improved central coordination, practicality and consistency. Whereas the negative aspects identified concern over possible delays in outbreak identification due to a lack of detailed local knowledge in the HPUs, leading to delayed EHD investigation.

15.2% of EHDs admitted to internal duplication of ID cases. When asked about the use of electronic notification, 66.7% of EHDs thought it should be used when possible, 21.2% thought it should be used 'as appropriate', and 6.1% disagreed with its use (Figure 4).

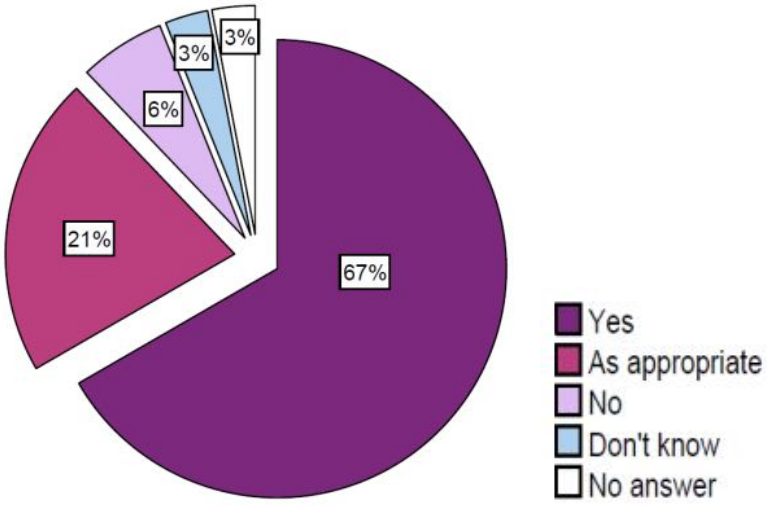

Figure 4: Do you think (where possible) notifications should be sent electronically?

3. Methods of Communication

Over half (51.6%) of EHDs currently have access to CoSurv (District) (Figure 5), with the majority (88.2%) of these actively using it. In addition, 69.7% of EHDs said that the use of a shared Laboratory/HPU/EHD database would be of value.

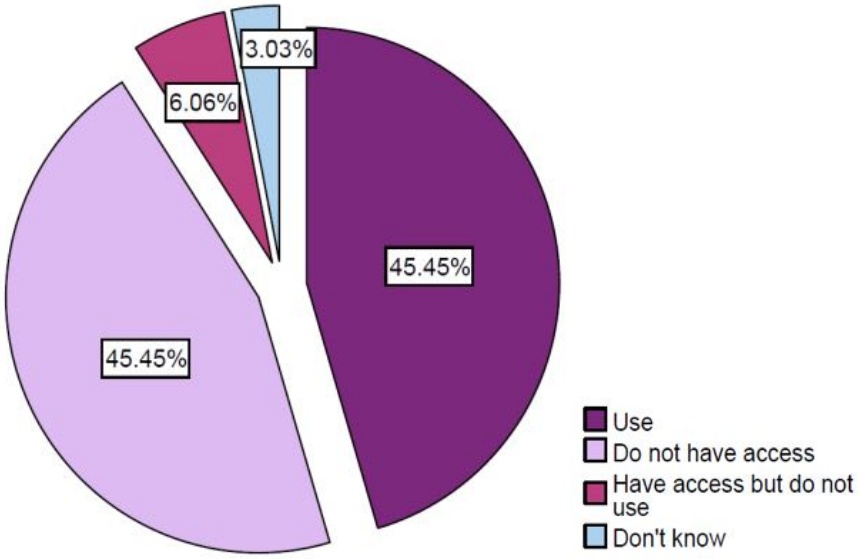

Figure 5: Do you use, or have access to CoSurv?

Nearly a quarter (24.2%) of EHDs did not class the communication with their HPU as effective (Figure 6).

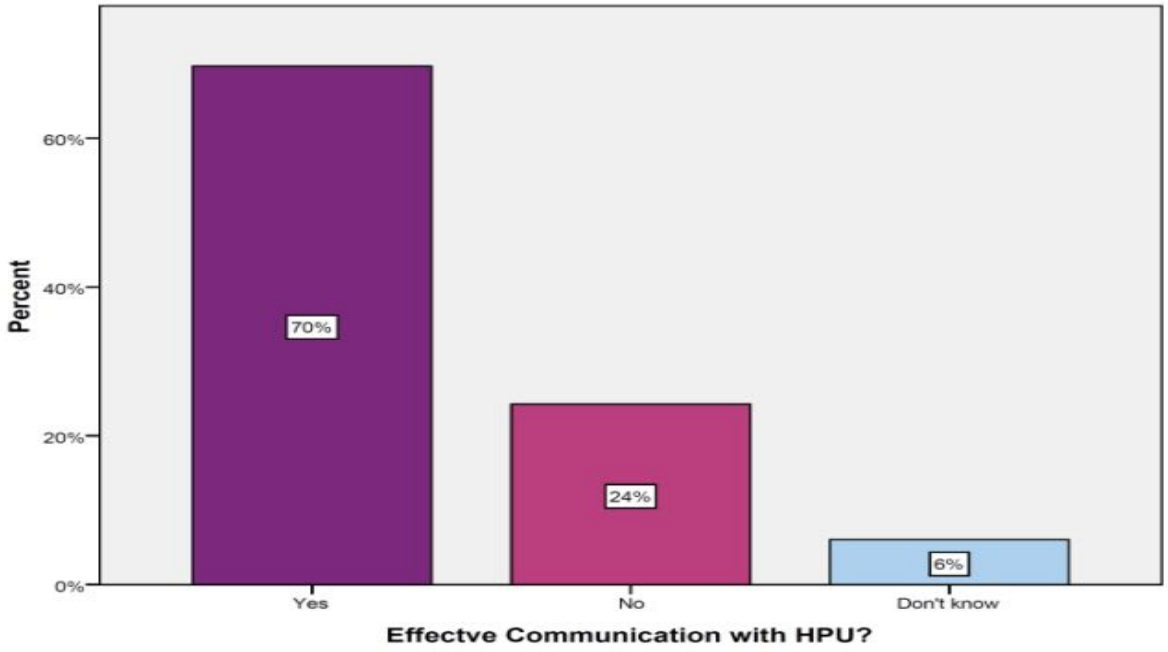

Figure 6: Is communication with your HPU effective?

The majority (54.6%) of EHDs preferred method of communication with their HPUs is email, followed by the office phone (30.3%) and fax (9.1%) (Figure 7).

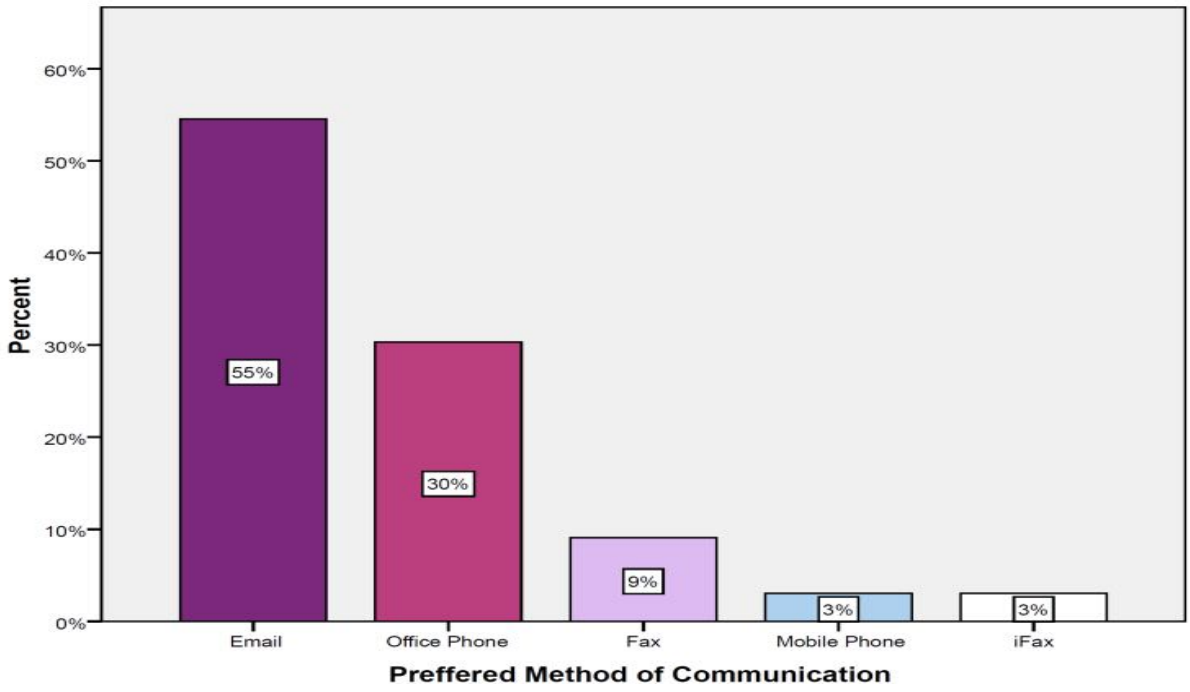

Figure 7: Preferred method of communication with HPU.

62% of EHDs rated joint HPU/EH forums (sector meetings) as 'very good' or 'good', 24% rated them as 'fair', 14% as 'poor'. None rated the forums as 'very poor' (Figure 8).

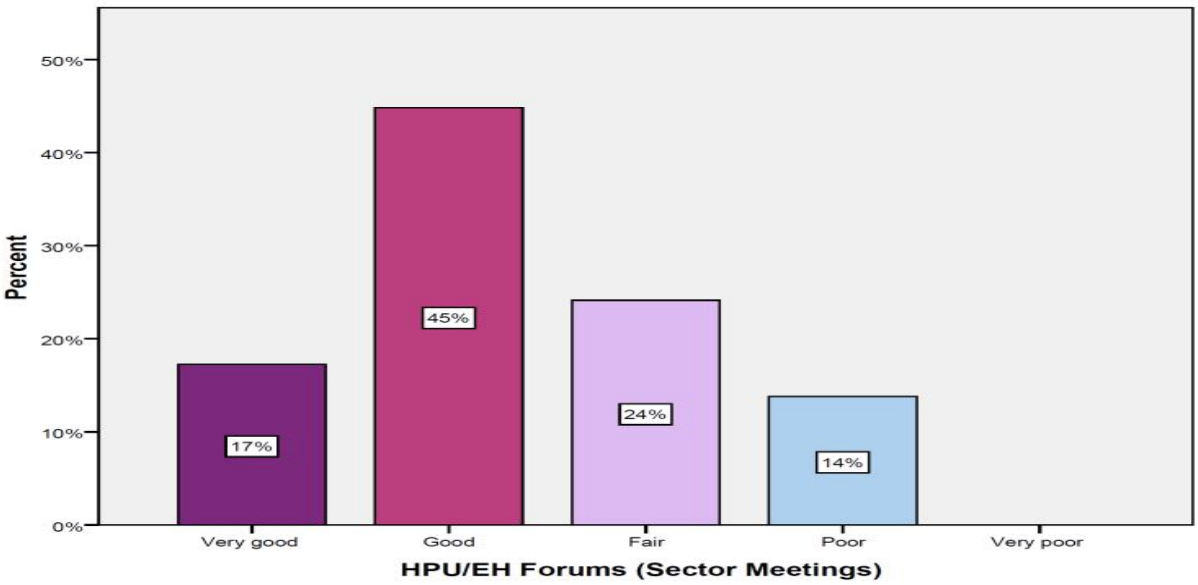

Figure 8: Ratings of HPU/EH Forums (sector meetings)

36.4% of EHDs believe that only one unit or department should have contact with cases, whereas the majority (57.6%) stated that contact with cases should be 'as appropriate'.

4. Protocols & Training

60.6% of EHDs stated that a simplified protocol format would be useful, and 97% would find an electronic toolkit document containing all relevant ID information such as: specific ID protocols, questionnaires, standard letter templates, public information sheets, and other relevant information documents and web links useful (Figure 9).

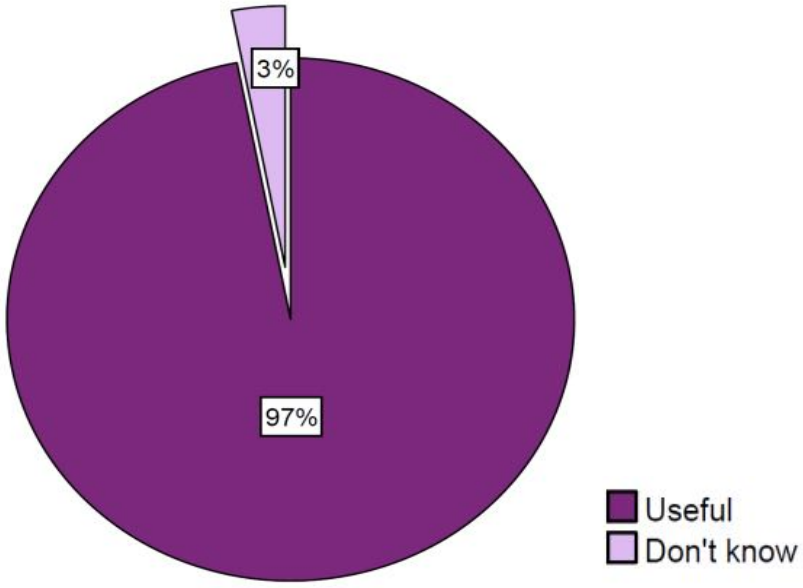

Figure 9: Would ID toolkit document be useful?

Over half (54.5%) of EHDs have not received or did not know whether they have received training regarding their ID investigation protocol. Of these, 77.8% would be interested in receiving training from their HPU.

5. Gastrointestinal ID Investigation

When carrying out investigations, 18.2% of EHDs solely use questionnaires and information documents produced by their HPU. 54.5% use a mixture of HPU and EHD produced, and 12.1% use materials jointly produced by their HPU and EHD.

EHDs ranked E.Coli 0157 (VTEC), Salmonella (Typhoid & Paratyphoid) and Listeria as the highest priority for investigation of sporadic cases, and Noro Virus, Campylobacter and diarrhoea and vomiting as their lowest (Figure 10).

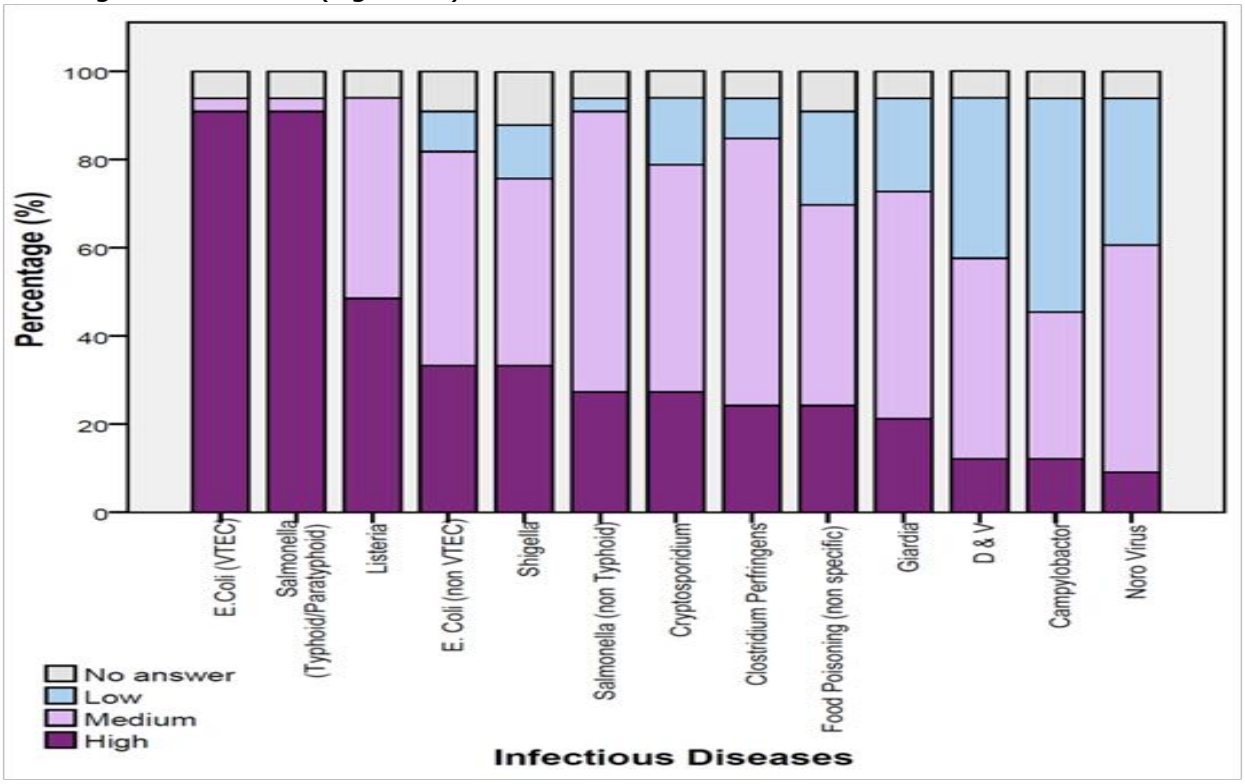

Figure 10: EHD Prioritisation of Sporadic ID Cases

In the scenario that EHDs received a notification of a case of E.Coli 0175 (VTEC) in a one year old child, London EHDs prioritised their actions in the following order. The top priority is to contact their HPU to clarify and agree appropriate action, followed by contacting the case's parent/guardian(s) to complete a questionnaire and discuss an E.Coli 0157 (VTEC) public information sheet. This was followed by forwarding the notification to the HPU, sending the public information sheet to the parent/guardian(s) of the case and only then returning the completed questionnaire to the HPU. This was followed by awaiting further instruction and continued communication with the HPU until case closed and finally entering the case onto the EHD database.

HPU Interviews

All London HPUs participated in the semi structured interviews; however it should be made clear that the views discussed are those of the current Lead Gastrointestinal Consultants in Communicable Disease, not necessarily the HPUs or London HPA.

As a whole, the Lead Gastrointestinal CCDCs all raised similar issues to those stated by the EHDs. For example, they highlighted the fact that the role of the EHDs is essential in Gastrointestinal ID investigation, although in order to improve joint working and overall ID investigation, there is a necessity to increase effective communication between the EHDs and HPUs.

The preferred methods of communication (as with the EHDs) are phone, email and fax. However, it was stated that with high priority cases, it is preferred that notifications are phoned through for speed and reliability, then followed up by an email to enable a record of notification to be kept.

HPU/environmental health forums (sector meetings) are considered to be relatively effective; however HPUs are clearly aware that increasing their frequency and altering their format will increase their success. For example, South East London (SEL) HPU has run study days (which have proved popular with both HPU and EHD staff) where aspects of Public Health and particular IDs are chosen with staff and guest speakers presenting.

It was agreed that the current notification system can and does lead to duplication, but in hindsight it was believed that this was better than running the risk of missing notifications altogether. As with the EHDs, the Gastrointestinal Infectious Disease CCDCs had varying views on the idea of notifications being sent directly to the HPU, with all seeing both the pros and cons of such arrangements. For example, removing notifications from EHDs may result in a decrease in already limited EHD ID resources and the possible deskilling of staff; however central coordination of all notifications would be likely to improve surveillance data. In turn, all Gastrointestinal ID Lead CCDCs stated that there is a need to begin the process of moving towards electronic notification.

There was a positive response to the idea of introducing an electronic toolkit document to EHDs containing all ID documents to help improve standardisation. Moreover, South East London HPU is currently in the final stages of completing such an electronic document, entitled "Food Poisoning Guidelines", which has been welcomed by the EHDs.

In addition, the Gastrointestinal ID Lead CCDCs highlighted a genuine concern regarding the number of London Boroughs without Out of Hours Services capable of dealing with ID, and the need for this to be tackled by the boroughs.

The idea of Pan London Joint ID Memorandum of Understanding was positively received by all those interviewed; however such a document would require agreement regarding current differences between the four in place today.

Discussion

The London boroughs vary demographically, economically and politically; all of which affects the extent of resources allocated to EHDs. However, the wide range in the percentage of EHD resources spent on ID investigation (24.8% variation), along with the numerous formats in which EHDs handle ID investigation, suggests that there is likely to be a large variance in the practical skills and experience of those investigating IDs. In addition, the substantial proportion of EHDs which do not have an out of hours Services capable of dealing with ID (24.2%) which may add to the variance in ID investigation across London.

With these variances it is important that EHDs meet a core minimum standard of ID investigation to ensure investigation is equally timely and effective across London, producing standardised primary data for surveillance purposes.

Notification & Communication

The Public Health (Control of Disease) Act 1984 states that notifications are to be sent to the "proper officer" of the local authority. With the proper officer now usually being a designated post at a HPUs rather than the local authority itself, some notifications of suspected cases may be being sent to EHDs and some to HPUs causing potential for complication.

The mixed responses from both EHDs and HPUs regarding sending all notifications directly to HPUs showed that the effectiveness of the current notification system itself varies across London. The need for clarification as to who the 'proper officer' is and where they are situated post formation of the HPA is clear, however unfortunately the Health Protection Regulations 2010 do not address the matter.

There has been an increase in the use of CoSurv in the last decade, with 10 London Boroughs using it in 2001 (PHLS & CDSC, 2001), compared to the 15 using it today, and a further 2 boroughs who have access but are not currently using it. The positive response to the idea of a joint HPU/Laboratory/EHD database further supports the idea to increase the use of CoSurv in London EHDs.

It has been highlighted at HPU/EH forums (sector meetings) that a few EHDs appear to be having difficulties receiving results on the samples they send to laboratories for analysis as part of clearance schedules. However, CoSurv (LabMod) is currently used by 29 of the 31 NHS Laboratories in the London Region and allows Communicable Disease Report (CDR) data to be sent by secure encrypted email to the HPA Regional office, HPUs and EHDs (if they too have CoSurv). Therefore, it may be possible to arrange for EHD sample results to be sent directly to the EHD which would reduce the amount of time spent chasing laboratory results; however this avenue would need to be explored further.

The use of CoSurv (District) in EHDs and HPUs however allows a database of NOID notifications to be kept and for notifications to be sent via secure encrypted email which firstly ensures high speed delivery, and secondly eliminates the need for further data entry. It also allows secure encrypted reports to be sent between EHDs. As there is no patient identifiable information on the 'Weekly Log' NOID forms CoSurv allows them to be printed or exported in an excel format and sent to CfI via email or fax. The use of CoSurv has proven successful in Wales where it is used by all local authorities, laboratories, Regional National Public Health Service (NPHS) offices and the Communicable Disease Surveillance Centre (CDSC).

London EHDs current concerns about the use of CoSurv consist of double data entry onto both CoSurv and the borough's case management system; and the cost of installation. However, the latest release of CoSurv (Service Pack 6C), includes a feature which allows CoSurv (District) to produce an extract file which can be imported into the management system Flare, used by several local authorities and thus removing any double data entry. However, this functionality is yet to be fully tested, and it is not known whether similar features will be produced for the other management systems in place across London. Usefully, the HPAs London CoSurv Team, situated in the London Regional Epidemiology Unit at Holborn Gate, now supply and install CoSurv, and offer training and support, all free of charge.

Electronic notification of suspected cases from RMPs to EHDs or HPUs could increase the speed in which EHDs and HPUs can start their investigations. It would not only reduce the time period between which the notification is sent and received, but also between the RMP's diagnosis and actual sending of the notification.

The majority of Environmental Health Departments reported that they had good communication between Environmental Health Officers and the HPU. In a minority of instances, further work is required to improve communication as ID investigation relies on effective bidirectional communication as a result of the current multifaceted notification system.

The HPU's expressed concern that EHO's can be hard to contact, however out of the office work is a key part of an EHO's role it can only be expected. In turn, EHDs specified that the structure of the HPUs reactive team can be frustrating resulting on occasions over consistent communication regarding notifications. Since this report has been written the HPUs in London have begun using HP Zone for recording cases and outbreaks and this should overcome previous variation of practice.

Increasing the effectiveness of communication between EHDs and HPUs will require using the most appropriate method of communication for both parties involved, of which both the EHDs and HPUs highlighted being email, and the office phone in urgent cases (followed by a confirmation email). There is however concerns regarding the security of emails when dealing with private and confidential case data, with further work around the Caldicott report required by the EHDs regarding the availability of secure email addresses. This will become even more important if remote working increases. In turn the use of faxes provoked a mixed reaction, with positive factors consisting of speed, but negatives including illegibility and security issues regarding fax machines in EHDs which use a 'hot desking' system.

Effective communication between EHDs and HPUs is essential, as in any joint working situation. Therefore agreements relating to detailed communication arrangements are a necessity in ensuring that the highly valuable relationships between EHDs and HPUs are not compromised. However, the increased use of CoSurv has the potential to limit the majority of the current communication issues and its use is encouraged.

HPU/EH forums (sector meetings) are vital in maintaining strong and effective working relationships. They offer the opportunity for both EHDs and HPUs to raise any queries or issues of concern, and share useful information and experiences. However emphasis should be placed on the fact that they are joint meetings, and therefore their success relies on equal EHD and HPU participation. For example, the introduction of alternate chairs and points on the agenda being brought forward by both parties may improve their productivity.

In turn, gaining a better understanding of each other's roles and key interests will undoubtedly improve the working relationship, and spending a day with the other organisation has proven successful in the past.

Protocols & Investigation

The results of the EHD prioritisation of ID investigation were as hoped, however each case obviously needs to be treated separately as circumstances vary. It was positive to see that the EHDs highest priority in the scenario of receiving a notification of E.Coli 0157 (VTEC) in a one year old child, was to contact their HPU to clarify and agree on appropriate action.

Currently each HPU has a Memorandum of Understanding (MoU) in place with their EHD, which outlines of the roles and responsibilities of each organisation in the investigation of specific IDs. However it appears on talking to the EHDs and HPUs that these MoUs are not necessarily always followed, for a variety of reasons. For example, it appears that occasionally investigation questionnaires are completed by both the EHD and HPU, presumably as a result of poor communication between the two, which not only portrays a poor view of the working relationship, but is also understandably frustrating for the case. Such incidents highlight the importance of regularly discussing MoUs at HPU/EH forums (sector meetings) and ensuring they are up to date and relevant.

With the HPA standardising questionnaires, public information sheets and with the introduction of new Standard Operation Procedures, and the positive response from the HPU Gastrointestinal ID Leads during the interviews, there appears to be no reason why a pan-London Joint ID MoU should not be introduced. Such a document would obviously require agreement by all those involved on detailed accounts of roles, responsibilities and time requirements of investigation for

both HPUs and EHDs. However, as the variances between the current HPU MoUs are minimal this should be achievable.

The introduction of such an agreement would hope to produce a more standardised approach to everyday ID investigation across London and in turn be of particular value during the 2012 Olympic and Paralympic Games when there will be an increased scrutiny of ID notification and investigation system. The idea of a pan- London Joint ID MoU is planned to be on the agenda at the next HPA Gastrointestinal, Emerging and Zoonotic Infections (GEZI) meeting in early 2010.

Both the EHDs and HPUs showed a positive response to the suggestion of the use of an electronic ID toolkit document within EHDs. In turn the success of SEL HPUs "Food Poisoning Guidelines" suggests that such a document should be used pan London to further improve standardisation of ID investigation.

The results of the EHD questionnaire show that EHOs are interested in training opportunities regarding the ID MoUs and investigation. Training days, such as the study days previously run by SEL HPU, would also help improve relationships between the EHDs and HPUs leading to improved joint working.

Evaluation

An outbreak of a Gastrointestinal Infectious Disease could be considered to be a significant public health risk at the 2012 Olympic and Paralympic Games; therefore improving the joint working standards and procedures of London EHDs and HPUs is essential in ensuring the potential risk is kept to a minimum.

The purpose of first phase of this three year project was to explore barriers to good communication between London EHDs and HPUs; to identify issues surrounding the notification system; to review existing gastrointestinal ID investigation procedures and make recommendations on how to improve overall Gastrointestinal Infectious Disease investigation in the run up to the 2012 Olympic and Paralympic Games.

The information gathered via both the EHD questionnaire and HPU interviews have clearly highlighted several key areas where improvements are required, and as a result the following recommendations have been made.

Recommendations

1. Improve EHD/HPU relationships and communication

HPUs and EHDs should ensure that communication frameworks and agreements are in place for both in and out of hours, and are kept up to date.

London boroughs which do not have an 'out of hours' service capable of dealing with IDs should consider how HPUs should contact EHOs when urgent out of hours investigation is required to protect public health. This will be brought to the attention of Alehm members and should be reviewed regularly to ensure systems remain in place.

In addition, EHDs need to ensure that communication between themselves and their HPU can be secure when necessary, which may involve exploring secure email options for those boroughs currently without such systems already in place. As discussed, this needs further work and it is recommended this is taken forward as a matter of importance.

Also, increasing the frequency of HPU/EH forums will allow any issues which arise during investigations to be shared and addressed more regularly, therefore improving working relationships. In turn, varying the format of the forums may also help, for example: including presentations on the different roles within the HPU and EHDs, feedback on interesting cases/outbreaks, alternating the chairman between the organisations and inviting points for the agenda from both HPUs and EHDs.

2. Increase National & Regional Standardisation

Pan London Joint ID MoU
The production of a pan-London Joint ID MoU would require a working group to be formed consisting of representatives of HPA London, the HPUs (Lead Gastrointestinal CCDCs) and EHDs. Additionally, the CIEH, Alehm and other organisations will be valuable partners.

The pan-London Joint ID Protocol should include a minimum set of core standards for individual ID investigation, and clarify roles, responsibilities and time specifications of investigation for both the EHDs and HPUs in detail. It would be advised that the working group develop a draft version of the pan-London Joint ID MoU for consultation before finalisation.

The working group should also consider how to improve the current notification system, and explore the possibility of having all notifications sent directly to the individual HPUs and then distributed to the EHDs to ensure all cases are recorded and acted upon immediately as a result of fully functioning out of hours services.

Additionally, the group should consider and inform others as to whether any changes to Gastrointestinal ID notification and investigation will be required during the 2012 Olympic and Paralympic Games.

It is recommended that this work is taken forward by the partners as soon as practicable.

Gastrointestinal ID toolkit document
A pan-London electronic ID Toolkit should be produced for use in EHDs, including simplified pan-London Joint MoU formats, nationally standardised questionnaires and public information sheets, standard letters and links to health departments and agency websites for referral. In addition to this the documents within this toolkit should allow space for London Boroughs to add their logo and contact details. It is recommended that the HPA take this work forward in conjunction with Alehm and the boroughs and is progressed alongside the pan-London MoU.

Training
The second phase of this project is planning to focus on general ID training for EHOs throughout London, focussing on the pan-London Joint ID MoU, notifications and specific Gastrointestinal ID investigation.

The training should in turn highlight and clarify any issues or grey areas in regard to individual department and unit roles and responsibilities in everyday ID notification and investigation.

3. Increase use of CoSurv in EHDs
It is recommended that awareness is raised of the ongoing work being undertaken by the HPA London CoSurv Team. Exploration of the services they offer and the overall benefits of using CoSurv will help increase the number of boroughs using it, which in turn will improve the effectiveness of the current ID notification system whilst ensuring secure notification transfer between EHDs and HPUs. It is recommended that the second phase of the project supports this work.

4. Electronic Notifications

The introduction of electronic notification between RMPs and EHD or HPUs would dramatically improve the security of notification data, whilst also expecting to dramatically increase the significance of notifiable disease surveillance data. The second phase of the project should look to support this aim with the HPUs.

5. Clarification of Notification Pathway

In order to improve the quality of notifiable infectious disease surveillance data further there needs to be clarification of 'proper officer' roles in HPUs and EHDs. This requires further discussion and could be dealt with by the working group as discussed earlier.

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References

Day, C. (2001) Gastrointestinal Disease in the Domestic Setting: What can we Deduce from Surveillance Data? Journal of Infection 43, p30-35.

Evans, H. S. *et al.,* (1998) General outbreaks of infectious intestinal disease in England and Wales: 1995 and 1996. Communicable Disease & Public Health: 1 (3), p165-171.

Health Protection Agency: NOIDs (2009) [online] Available: 13th March 2009. http://www.hpa.org.uk/webw/HPAweb&Page&HPAwebAutoListName/Page/1191942172947?p=1191942172947. Updated: 17th February 2009.

Health Protection Agency: NOIDs Reports & Tables (2009) [online] Available: 14th October 2009. http://www.hpa.org.uk/HPA/Topics/InfectiousDiseases/InfectionsAZ/1191942172956/. Updated: 2nd September 2009.

Health Protection Agency London. (2006) Communicable Disease in London 2002-05: A Review.

The Public Health (Control of Disease) Act 1984 [Online} Available 13th March 2009. http://www.opsi.gov.uk/RevisedStatutes/Acts/ukpga/1984/cukpga_19840022_en_1. Updated: 13th March 2009.

McCormick, A. (2003) The Notification of Infectious Diseases in England and Wales. Communicable Disease Report 3 (2): p19-25.

Public Health Laboratory Service (PHLS) & Communicable Disease Surveillance Centre (CDSC). (2001) Communicable Disease in London 2001- Annual report of the Communicable Disease Surveillance Centre, London.

Rooney *et al* (2000) Survey of Local Authority Approaches to Investigating Sporadic Cases of Suspected Food Poisoning. Communicable Disease & Public Health: 3 (2), p101-105.

Wheeler, J. G.*et al.,* (1999) Study of infectious intestinal disease in England: rates in the community, presenting to general practice, and reported to national surveillance. British Medical Journal: 318, p1046-1050.