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Swansea Bay University  
Health Board



## Infection Prevention and Control Report

	<b>Agenda Item</b>	2.1
<b>Freedom of Information Status</b>	Open	
<b>Performance Area</b>	Healthcare Acquired Infections Update Report	
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<b>Reporting Period</b>	09 July 2020	

### Summary of Current Position

The Health Board has been under significant pressure as a result of the current COVID-19 (SARS 2) pandemic. This is having a significant impact on the health of the Health Board's population and its staff. Services have been under significant pressure as a consequence.

### COVID-19 (SARS 2):

- From 1<sup>st</sup> March 2020 to 9<sup>th</sup> July 2020: **1,941** positive cases of COVID-19 (SARS 2) from **17,708** tests.

Location	No. COVID-19	Location	No. COVID-19
SB CTU*	<b>1303</b>	Gorseinon	<b>13</b>
Morrison	<b>385</b>	NPT CRT	<b>2</b>
Singleton	<b>112</b>	Swansea ACT	<b>1</b>
Neath Port Talbot	<b>53</b>	HMP Swansea	<b>10</b>
Cefn Coed	<b>30</b>	GP	<b>30</b>
LD	<b>2</b>		

\* mostly staff/essential workers, but started testing Care Homes w/c 15.04.20

- The number of cases in the table above identifies confirmed cases only. There have been cases of COVID-19, clinically confirmed by X-Ray, that have tested negative.
- Possible outbreaks or incidents of COVID-19 (SARS 2) associated with MH AMAU, MH Ward A, MH Ward D, MH Cardigan Ward, SH Ward 12, SH Ward 9, SH Ward 7, NPTH Ward A, NPTH Ward C, CCH Ysbryd y Coed Unit.
- There have been at least 39 care homes within the Health Board that have reported cases of COVID-19 SARS 2 (with more than 220 confirmed cases amongst patients and staff).

## Targeted Intervention Infections

### • 2020/21

There will be significant pressure on the Health Board to reverse this position in 2020/21. The Tier 1 infection reduction goals for 2020/21 have yet to be published. Until their publication, Health Board progress will be shown in comparison with the 2019/20 monthly targets.

Infection	EYO total cases	Comparison 2018/19
<i>C. difficile</i>	138	7% ↑
<i>Staph aureus</i> BSI	133	3% ↓
<i>E. coli</i> BSI	317	11% ↓
<i>Klebsiella</i> BSI	82	34% ↓
<i>Ps. aeruginosa</i> BSI	28	12% ↑

Infection	Cumulative cases Apr-Jun 2020	Cases to 30/06/20	Cases to 09/07/20	WG Monthly Expectation
<i>C. difficile</i>	47	20	2	<8 cases
<i>Staph aureus</i> BSI	28	12	1	< 6 cases
<i>E. coli</i> BSI	45	17	3	< 21 cases
<i>Klebsiella</i> BSI	21	9	1	< 8 cases
<i>Ps. aeruginosa</i> BSI	7	0	0	< 2 cases

## Achievements

- *E. coli* and *Klebsiella* bacteraemia cases in the first 3 months of this financial year have been below the Welsh Government monthly average. However, the monthly averages for April-June 2020 for *Staph. aureus* bacteraemia, *Pseudomonas aeruginosa* bacteraemia and *C. difficile*, are all above the Welsh monthly average goal. Delivery Units will need to focus efforts to reverse this trend.
- A 4 weekly *C.difficile* scrutiny panel has been established and local action plans driven by the Delivery Units, with IPC support, will provide the focus on improvement.
- A short-term 3 month contract for a proactive hydrogen peroxide vapour service has received Health Board approval. This contract commenced on 29<sup>th</sup> June in Neath Port Talbot Hospital (which had empty bay availability to facilitate a decanting process). This is a mobile, proactive service across the Health Board. The service will commence in Morriston Hospital on 13<sup>th</sup> July, before moving on to Singleton Hospital. There is a weekly planning meeting to agree decontamination plans for the following 2 weeks.
- To support the proactive HPV programme, the IPC team has trained a number of Support Services Assistants (SSA's) and Supervisors, how to effectively clean patient care equipment. The Head of Support Services has agreed a pilot of SSAs undertaking the cleaning of items generally undertaken by nursing staff.

- IPC resource – a 7 day service is now implemented.  
All new recruits into the IPCN team have commenced their posts. These new staff have commenced a period of training and developments into this broad specialty, and will begin a process of competency review in line with a nationally acknowledged competence assessment.
- IPC nurses, who will work with Primary Care and Community Services, commenced their induction programme on 6<sup>th</sup> July.
- Initial meetings with Delivery Units have commenced to discuss implementation of an integrated Infection Prevention & Control Service following a proposed Health Board Infection Prevention & Control Framework.

## **COVID**

- The IPCNT continue to provide support and advice to clinical and non-clinical staff in all issues relating to COVID-19 and other infections.
- The Swansea Bay University Health Board Infection Prevention and Control Service has supported the care home network on an advisory basis. Support and advice has been provided through regular attendance at the weekly West Glamorgan Regional PPE and infection control work stream meeting and the Environmental Health Officer network. In addition, the service has delivered direct support via question and answer sessions, completing FAQs and sharing resources including guidance and videos.
- Throughout the COVID-19 pandemic, the infection prevention and control team have provided support to primary care services including Gorseinon hospital, HMP Swansea, General Practices, GP Cluster Hubs, Community Testing Units, the Field Hospitals, the Acute Clinical Teams and Community Dentistry.
- The ICNs have undertaken regular visits to Gorseinon hospital to provide support and informal training for staff about all aspects of caring for patients with COVID-19 and maintained communication via telephone calls, particularly during outbreaks of COVID-19 on the site. HMP Swansea have also received advice via the telephone regarding individual patient management.
- The IPC nurses have visited individual General Practices who intended to continue seeing their own patients as well as visiting six of the eight identified GP Hub locations. Additional ongoing support was provided via Microsoft Teams meetings, email and telephone calls and included advice relating to patient pathways, appropriate PPE use and environmental decontamination.
- The IPC team provided support to the community testing units on both the Margam and Liberty stadium sites during the set-up of the service and throughout their operation. IPCNs have visited the sites, provided education for staff regarding PPE use and the process for sample collection, observed practice, reviewed SOPs and have had regular telephone calls and email correspondence with the service manager throughout the pandemic.
- Audits of PPE, hand hygiene and the care environment have been undertaken by the IPC team in collaboration with Nursing and Medical students from Swansea University. Whilst data from the audits is still being analysed, feedback from those involved was that this was a positive experience, which made them think more carefully about their own practice and that of their colleagues. The ICC will receive full feedback on the findings in August. Overall, the students reported that staff on the wards were very welcoming, receptive to feedback and there was clear communication between staff groups. Compliance with bare below the elbows was very good in the majority of areas across the sites. Students reported that there was not clear signage regarding which PPE was required in all departments and that the increased use of gloves appeared to be resulting in a reduction in hand hygiene being performed in line with the WHO 'My 5 moments'. Following the audits students participated in guided group reflection with all stating that they felt that this was a worthwhile experience, which they would be keen to participate in again in future.

- Colleagues from Capital Planning included the IPC team in the development of the field hospitals at an early stage and IPCNs undertook regular visits to the sites throughout their development. The IPCT provided advice in person, via telephone and email to ensure that the projects strived to achieve the required IPC standards, and where these were not achievable, appropriate actions were in place to mitigate risk. Since the commissioning of the Llandarcy site the IPCNs have attended all staff induction sessions and provided education relating to Hand Hygiene, environmental cleanliness, decontamination of equipment, appropriate use of PPE and management of patients with loose stool. Thus far, the IPC team have provided 20 training sessions to in excess of 200 staff with further sessions booked over coming weeks. The ACT received IPC face to face PPE training at the start of the pandemic with updates via Skype as national guidance has changed. Many ACT staff have also attended the induction sessions in Llandarcy field hospital.
- Community dental services have been supported by the IPC Decontamination lead with advice via Microsoft Teams, telephone and email regarding PPE, Ventilation, decontamination of equipment and the environment and waste management. PCCS and IPC have met to support plans to reinstate services.
- The education planner is on the SharePoint training link, and details the IPCT training programme available to specific staff groups and sessions accessible to all staff across SBU for the time period January- December 2020

### Challenges, Risks and Mitigation

- Challenging to sustain improvements in reduction of targeted infections.
- *C. difficile* infections continue to be on an upward trend, and significantly above the Welsh Government expected number of monthly cases. This may be related to an association with respiratory infections (possibly secondary to COVID). The Health Board IPC team has met with Public Health Wales' DIGEST team (Difficile Genomics Sequencing and Typing) to discuss reviewing the *C. difficile* isolates from SBU Health Board cases to facilitate a more detailed epidemiological review of cases to be undertaken. Results of this more detailed review will be reported at the 4-weekly C. Diff scrutiny panel in August.
- *Staph. aureus* bacteraemia continues to be an issue in the first three months of this financial year.
- It has been important during COVID-19 activity, that the Health Board does not lose focus on those other infections for which the Health Board is under Targeted Interventions.
- Reduction initiatives have been compromised by over-crowding of wards as a result of increased activity and the use of pre-emptive beds, and where there are staffing vacancies, and reliance on temporary staff, and where activity levels are such that it is not possible to decant bays to effectively clean patient areas where there have been infections. Whilst this has been less an issue at the height of COVID-19 activity, the Health Board must continue to be mindful of these risks once there is a return to normal service provision.
- The CoVID situation has provided an opportunity for decanting areas to be able to undertake a proactive deep cleaning programme. When full service resumes, the lack of decant facilities, when occupancy is at acceptable levels on acute sites, compromises effectiveness of the '4D' cleaning/decontamination programme will continue to be a challenge.
- There is an improved position in domestic hours in that there are no historical vacancies for Singleton or Morriston however recruitment continues to increase staffing to meet the agreed uplift to meet the National Minimum Standards of Cleanliness.
- The outbreak of extensively antibiotic resistant, Carbapenemase producing organisms (CPO), which began on Ward G, but involved 6 other wards, including wards in Neath Port Talbot and in Singleton, continues to have an impact. To date, there has been a **total of 24 confirmed *Klebsiella pneumoniae* with the same genetic strain (ST307)**. To 25<sup>th</sup> May 2020, there

had been no new cases identified since 18 March 2020, and there no patient cases in hospital. At the Health Board Outbreak Group meeting held on 26<sup>th</sup> May 2020, it was agreed that the outbreak was closed. A report will be prepared by the Delivery Unit and presented at a future Infection Control Committee meeting.

## Action Being Taken (what, by when, by who and expected impact)

### **Maintain infection Prevention & Control Support for COVID-19**

- **Action:** Continue to provide support and advice in relation to COVID-19 for clinical and non-clinical staff across the Health Board, and Procurement, due to supply issues as a result of COVID-19; also prepare for a potential second wave of infection... **Target completion date:** September 2020. **Lead:** Assistant Director of Nursing IPC. **Impact:** Safe practices to protect the health of patients, staff and wider public.

### **Return to business as usual for surveillance and reporting of key infections and infection related incidents**

- **Action:** Surveillance of healthcare associated infections will continue, with update reports prepared for Senior Leadership Team and Quality & Safety. **Lead:** Head of Nursing IPC, and Delivery Unit Directors. **Impact:** Provide assurance to the Board on the Health Board's, and Delivery Units', progress against infection reduction goals, and that appropriate actions are implemented to attain infection reductions.

### **Development of ward dashboards key infections**

- **Action:** Collaboration with Digital Intelligence Team and Infection Prevention & Control Team. Surveillance of healthcare associated infections will resume, with update reports prepared for Senior Leadership Team and Quality & Safety. **Target completion date:** 31 December 2020. **Lead:** ADN, IPC, Head of Nursing IPC, and Business Intelligence Information Manager. **Impact:** Provide timely information on infections at Ward, Specialty, Delivery Unit and Board level to facilitate early detection and early intervention to improve patient safety.

### **Clostridium difficile infection**

- **Action:** Further investigation into the increasing trend in C. difficile to identify possible contributory factors, including antimicrobial stewardship challenges and leading the C. difficile strategy group. **Target completion date:** August 2020. **Lead:** Matron IPC and Delivery Unit Directors. **Impact:** reduction in C. difficile cases.

### **Review of Infection Prevention & Control Service**

- **Action:** Following Health Board investment in the Corporate IPC service, undertake a service redesign to provide a Health Board-wide integrated service, which will extend to Primary & Community Care. **Target completion date:** September 2020. **Lead:** Assistant Director of Nursing IPC. **Impact:** Corporate IPC service will provide appropriate expertise, guidance and advice to all Delivery Units to support their compliance with Standard 2.4, Health and Care Standards for Wales, that "*Effective infection prevention and control needs to be everybody's business and must be part of everyday healthcare practice and based on the best available evidence so that people are protected from preventable healthcare associated infections*".

### **Domestic staff recruitment**

- **Action:** Recruitment process for additional cleaning staff progressing. **Target completion date:** September 2020. **Lead:** Support services manager. **Impact:** Increased domestic staffing to provide cleaning hours required.

### **Meeting national minimal standards of cleanliness**

- **Action:** Following the presentation to SLT on 5<sup>th</sup> February 2020, there was agreement to fund additional cleaning hours. The next steps will determine the staging of funding and recruitment of additional staff. **Target completion date:** March 2021. **Lead:** Support services



manager. **Impact:** Agreed staged approach to increasing funding for increased domestic staffing to provide cleaning hours required to meet national minimum standards.

### **Decant**

- **Action:** Solutions for decant to be identified for Morriston and Singleton. **Target completion date:** set back as a result of COVID-19 to September 2020. **Lead:** Assistant Director of Nursing IPC and Service improvement capital planning. **Impact:** Solution for decant to be identified and proposals for a solution to be presented to SLT.

### **Procurement of Hydrogen Peroxide Vapour (HPV) Contracted Service**

- **Action:** Undertake a procurement exercise to identify a safe and appropriate managed service for when ongoing transmission of an organism has occurred, despite implementation of existing control measures, and the environment and/or equipment is considered to be a persistent source of pathogens. Also, an annual programme of environmental decontamination, dependent on the ability to decant. **Target completion date:** set back as a result of COVID-19 to September 2020. **Lead:** Assistant Director of Nursing IPC, Support Services, and Procurement. **Impact:** Environmental decontamination in line with the '4D' programme: Declutter, Decant, Deep-clean and Disinfect, and the Outbreak Management Protocol, and an annual Deep Clean Programme.
- **Action:** Review the pilot of Support Service Assistants undertaking the whole deep clean of patient care areas, to include items historically cleaned by nurses, and determine efficacy and propose a long-term solution. **Target completion date:** 30 November 2020. **Lead:** Head of Support Services and Head of Nursing IPC. **Impact:** Cost- and time-effective service of deep clean and decontamination.

### **Financial Implications**

A Department of Health impact assessment report (IA No. 5014, 20/12/2010) stated that the best estimate of costs to the NHS associated with a case of *Clostridium difficile* infection is approximately **£10,000**. The estimated cost to the NHS of treating an individual cost of MRSA bacteraemia is **£7,000** (the cost of MSSA bacteraemia could be less due to the availability of a wider choice of antibiotics). In an NHS Improvement indicative tool, the estimated cost of an *E. coli* bacteraemia is between **£1,100** and **£1,400**, depending on whether the *E. coli* is antimicrobial resistant. (*Trust and CCG level impact of E.coli BSIs* accessed online at:

<https://improvement.nhs.uk/resources/preventing-gram-negative-bloodstream-infections/>).

Estimated costs related to healthcare associated infections, from 01 April 2020 – 09 July 2020 is as follows: *C. difficile* - £470, 000; *Staph. aureus* bacteraemia - £196,000; *E. coli* bacteraemia - £54,300; therefore a total cost of **£720,300**.

### **Recommendations**

Members are asked to:

- Note reported progress against HCAI priorities up to 9<sup>th</sup> July and agree actions.