



Guidance relating to the control of CPE and other AMRO in the Irish Prison Service CPE Expert Group

National Guidance Document, Version 1.0

Scope of this Guidance

This guidance document has been developed by the CPE Expert Group of the HSE in consultation with the Infection Control Manager of the Irish Prison Service. The document is intended to be of use to workers who have not had extensive infection prevention and control (IPC) training and who may not be familiar with IPC terms.

The document points to key infection prevention and control principles and practices relevant to control of transmission of CPE and other AMRO. It is not a comprehensive infection prevention and control manual.

Next review of this guidance document

This guidance document will be reviewed in 2 years (January 2022).

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Abbreviations and Glossary of Terms

- **AMR =** Antimicrobial Resistance
- AMRO = Antimicrobial Resistant Organism
- **BBV** = Blood Borne Virus
- **CPD** = Continuing Professional Development
- **CPE** = Carbapenemase Producing Enterobacterales
- **GP** = General Practitioner
- **HSE** = Health Service Executive
- **IPC** = Infection Prevention and Control
- **IPS** = Irish Prison Service
- MDRO= Multi-drug Resistant Organism
- **MRSA** = Methicillin-resistant *Staphylococcus aureus*
- **PPE** = Personal protective equipment
- **TB** =Tuberculosis

Introduction - The Prison Environment

Prison environments in all countries pose particular challenges with respect to management of spread of microorganisms and infection. The challenges relate to the built environment, the nature of the service and the vulnerability of the population. The prison setting poses risks for both prisoner and prison staff.

The Physical Environment

The risk of transmission of CPE and other MDRO related to the built environment of the prison is influenced by the extent to which infection prevention and control requirements are considered in design, construction, maintenance and cleaning of facilities. However, in the design and build there is an emphasis on security for prisoners, prison staff and the wider community. The requirements for security place constraints on optimal design for infection prevention and control purposes. In addition to challenges with design and build, maintaining integrity and finish of surfaces and fixtures can be difficult particularly with prisoners with behavioural problems. Damage to the surfaces and fixtures makes cleaning and decontamination difficult. There is significant sharing of facilities such as accommodation, recreational areas, showers, toilets, schools, workshops, visiting areas and gyms in prison. This results in opportunities for transmission of organisms and poses challenges for minimising contact of prisoners with infection or colonisation with CPE or other AMRO with others.

The Operation of the Service.

The risk of infection related to the nature of the service is influenced by the overall operation of the service including staffing levels, the duration of exposure to others in confined space, the volume of demand on shared toilet and bathing facilities and the capacity to manage behaviours that represent a specific risk for spread of CPE and other antimicrobial resistant organisms. The degree of contact between prisoners in terms of proximity and duration are likely to be greater when the number or prisoners exceeds the design capacity of the facility.

Prisoners may not always cooperate with IPC measures implemented by those who manage and operate the service. In a proportion of cases prisoners may engage in behaviours that place themselves and others at risk of exposure to blood and other body fluids that increase risk of transmission of microbes. Cohorting of all prisoners in the prison identified as colonised or infected with CPE or other AMRO is often impractical for security reasons.

Risk of Infection in Prison

Acquisition of CPE or other ARMO is associated with a low risk of progression to infection in the general population outside of the acute hospital setting. However, the prison population is an at risk population. Prisoners are more likely than the general population to come from a background of social, economic and educational deprivation. The prevalence of certain conditions that may increase vulnerability, notably blood borne virus infection is high. Many prisoners have other non-communicable diseases that place them at high risk of infection including, drug and alcohol dependency, diabetes and other conditions. The risk of infection related to the nature of the prison population is related to access to health promoting services (information, nutrition and exercise) and healthcare services in prison.

Summary.

As outlined above the physical environment, the challenges of operating the service and the vulnerability of prisoners make prisons a challenging environment in which to practice IPC. As in healthcare services, senior management commitment to and support for infection prevention and control is fundamental to managing the risk.Gaining the support for and participation of prisoners in IPC to the greatest extent possible is also central to the successful implementation for this guidance.

The Wider Context

Prisons can serve to amplify CPE and other AMRO. Failure to control the spread of CPE and other AMRO in prison represents a risk not only to prisoners but also to prison officers, their families and the wider society. Control of spread of CPE and AMRO in prison therefore has public health significance beyond the prison.

The Irish Prison Service

"The mission of the Irish prison service is to provide safe and secure custody, dignity of care and rehabilitation for safer communities. It is the policy of the Irish Prison Service to strive towards combating infectious diseases in general and healthcare acquired infections within the prison environment."

There are 12 institutions in the Irish prison system consisting of 10 traditional "closed" institutions and two open centres, which operate with minimal internal and perimeter security. The majority of female prisoners are accommodated in the Dóchas Centre with the remainder accommodated in Limerick Prison. The prison buildings are of different vintage with the oldest prisons dating from the 19th Century and the newest built in the past 15 years. The overall prison design capacity is 4,244 and the level of occupancy varies from 100 to 10x% There have been a number of instances where prisoners colonised with CPE have been managed within the prison service, however, there are no data on prevalence of colonisation with CPE and other AMRO in the Irish Prison Service.

The Irish Prison Service (IPS) is committed to providing the highest practical standard of Infection Prevention and Control within the service. This guidance is intended to support this objective. The history and provision of prison services in Ireland is outlined in Appendix 1.

Scope of this document

This document is intended to provide guidance related on control of spread of CPE and other AMRO in the Irish Prison Service. It is relevant to prisoners, prison management, prison officers and to healthcare workers providing healthcare to prisoners.

The document is intended to be of use to workers who have not had extensive infection prevention and control (IPC) training and who may not be familiar with IPC terms.

The document points to key infection prevention and control principles and practices relevant to control of transmission of CPE and other AMRO. It is not a comprehensive infection prevention and control manual. Resources at the following site may be helpful if additional information is needed <u>https://www.hse.ie/hcai/</u>

Two Contexts for IPC Issues Within Prisons.

Infection prevention and control issues arise in two contexts in the prison setting. Prisons provide on-site clinical healthcare services. The standards of IPC training and practice for healthcare workers working in prisons are the same as those required of other healthcare workers. Guidance on the control of spread of CPE and other AMRO in healthcare settings such as GP clinics is already available and should be applied.

IPC issues also arise in the general context of prison services outside of the prison clinical services. This guidance is related to that general context which is not addressed in other guidance documents on control of CPE and other AMRO.

Management of health needs of prisoners

Every prisoner undergoes a committal health screen on entering prison. This is repeated for every committal and transfer. During that initial screening, information is gathered on past medical history including previous surgeries, TB history, drug use history, psychiatric history, medication, and Blood Borne Virus (BBV) status. Testing for BBV is offered. All prisoners are also offered hepatitis A and hepatitis B vaccinations. Uptake of BBV screening and vaccination is sub-optimal. Many prisoners newly committed initially refuse but then return later request screening and or vaccination.

Research has shown psychiatric co-morbidities are highly prevalent among individuals affected by substance use disorders and those with non-substance-related addictive disorders such as gambling disorder. It is **estimated** that up to 80% of prisoners have a history of drug use and or a psychiatric illness.

In addition to the burden of non-communicable disease (including diabetes, cardiovascular, respiratory, musculoskeletal, liver and renal diseases), the prison service must also manage a number of communicable diseases including tuberculosis, norovirus, *Clostridioides difficile* (C. diff) infection. The challenge of managing risk of spread of CPE and other AMRO is increasingly recognised.

Guiding principles where prisoners are colonised with CPE

Prisoners colonised or infected with CPE have the same right to access health and social care as other prisoners. Measures to manage the risk of spread of CPE and other AMRO must take account of the needs of the person to access services. In relation to healthcare, prisoners colonised with CPE or other AMRO should not experience significant delays in transfers in either direction between prison and hospitals simply because they carry CPE. People who are accommodated within the prison service are entitled to expect that the prison service will take reasonable care to protect them to the greatest extent practical from the risk of acquiring CPE and other AMRO while living in the prison. In the spirit of open communication, prisoners should know that the risk cannot be eliminated entirely. Other prisoners may be colonised with CPE and other AMRO. The need to ensure that all prisoners can access services means that people with CPE and other prisoners must share communal facilities and space. Those who are colonised with CPE and other AMRO cannot be identified as such to other prisoners by health care workers or prison staff as this would breach confidentiality. With this knowledge, prisoners may if they wish take such steps are they practically can to limit their exposure to CPE and other AMRO by attention to hygiene, in particular hand hygiene.

In almost every setting a key issue in ensuring appropriate care for people colonised or infected with CPE and other AMRO is staff training and education. This can be particularly challenging in settings where most staff are not healthcare workers and do not have a background in healthcare. Staff who do not have adequate information and training are likely both to have exaggerated fears relating to their potential exposure to CPE and AMRO and to lack the skills required to protect themselves and others to the greatest degree possible. Education and training are therefore key to appropriate implementation of this guidance.

Introduction to CPE

CPE are a type of bacteria that live in the gut and are resistant to almost all antibiotics. CPE bacteria usually do no harm if they remain in the gut: This is called **CPE colonisation**. Likewise, CPE may be found in urine samples or on swabs from leg ulcers. If there is no clinical evidence of infection, this also is colonisation or carriage. Antibiotic treatment is generally not useful in clearing CPE from the gut of people with CPE colonisation. It is important to avoid unnecessary antibiotic use in people with CPE colonisation because most antibiotics will tend to encourage multiplication of antibiotic resistant bacteria including CPE.

Spread of CPE

CPE is shed in faeces of people who carry it in their gut. Tiny traces of faeces may directly contaminate hands and surfaces near the prisoner. People who are not directly contaminated may contaminate their hands if they touch contaminated surfaces. CPE can spread to other people when these traces of faeces are transmitted from hand to mouth (for example, when eating). Prisoners and prison staff can help to break the cycle of infection where CPE spreads from one person to another by controlling this pathway of spread. This is not easy to do. Faeces is a very sticky substance and gets into all sort of places on hands, equipment and in the environment. Even when things look clean, there is often enough faecal contamination to carry CPE to another person.

It may be impossible to stop all CPE spread in all circumstances. For example, some

prisoners may have challenging behaviour due to psychological or other conditions or there may be other reasons that make it very difficult to apply good

IPC practice fully. Staff should not feel that their efforts are wasted if there are occasional new cases of spread.

Control of Spread of CPE in Prison facilities

All managers and staff involved should be familiar with the guidance for CPE and their roles and responsibilities regarding this. This includes ensuring that there are suitable governance arrangements in place for infection prevention and control within the prison service. Prison management must ensure that all non-healthcare workers in prison have had IPC training, support and supervision appropriate to their role.

It is important that there are robust systems of communicating between prisons when a person with known CPE colonisation or infection is being transferred between facilities. This also applies to transfer of prisoners to hospitals or other healthcare facilities for investigation and treatment.

Definitions of the terms CPE Case and CPE Contact

What is meant by the term CPE Case?

A **CPE case** is a patient in whom CPE has been detected from a diagnostic specimen (invasive, non-invasive infection or colonisation) or from a CPE screening specimen (rectal swab or faeces).

What is meant by the term CPE Contact?

A **CPE contact** is a person that has been designated as a CPE contact by an infection prevention and control practitioner or public health doctor on the basis that the person has had significant exposure to a person carrying CPE. This may be because they spent some hours in the same hospital room as a patient known to carry CPE. This does not mean that they are carrying CPE but it means they are at a higher risk of carrying CPE compared to most people. There is a more detailed definition of a **CPE contact** in the guideline document "Interventions for Control of Transmission of CPE in the Acute Hospital Sector", available at <u>www.hse.ie/infectioncontrol</u>

The process of designating a person as a **CPE contact** generally occurs in the acute hospital and is primarily intended to support control of transmission of CPE in the acute hospital setting. In some circumstances, for example if there is an outbreak of CPE transmission in a setting other than an acute hospital (including within a prison), CPE contacts may be identified in that facility in the course of managing the outbreak. A decision to designate a person in a prison facility as a CPE contact should only be made by an infection prevention and control practitioner, or by a public health doctor.

When a prisoner with CPE or other AMRO becomes ill with features that suggest infection

If you are worried that a prisoner with known CPE colonisation has evidence of infection (for example, the individual has a fever, is more confused (delirium) or is acutely unwell) a medical review with a doctor should be sought on an urgent basis.

Screening for CPE

Current recommendations on screening for CPE colonisation are available here: http://www.hpsc.ie/az/

microbiologyantimicrobialresistance/strategyforthecontrolofantimicrobialresistancei nirelandsari/carbapenemresistantenterobacteriaceaecre/guidanceandpublications/

Screening of prisoners in prison is generally not required. This applies even if there are prisoners with CPE in the facility. Screening may be required in the setting of a Public Health Investigation.

Although CPE screening of prisoners in prison is not required it may be appropriate to facilitate CPE screening for some individual prisoners who have been identified as a "CPE Contact". Completing the four CPE screens required to remove the designation of CPE Contact may be helpful if the prisoner is likely to require admission to an acute hospital as it may support appropriate placement in the acute hospital. Transfer of prisoners who require hospitalisation should not be delayed because of their status as CPE Contact or because CPE screening results are pending.

CPE screening of prison staff, including prison healthcare workers, is generally not appropriate and should only be considered on the basis of clear expert advice in very exceptional circumstances.

Education and Training

Infection control modules are currently being delivered as part of the Continuous Professional Development (CPD) programme, Health and Safety Management course and the Higher Certificate in Custodial Care (HCCC) programme for new recruits. To support good practice, the National Basic Educational Requirements, require that

- All staff within prison facilities must undertake hand hygiene training on induction and at least every two years thereafter. Each new prison officer recruit undertakes four hours IPC training. Training is accessed through an IPC portal that is available to staff members
- Standard Precautions training, in conjunction with Transmission-based Precautions training is undertaken on induction and at least every two years thereafter. This training should be delivered in line with the National HSE Core Knowledge and Skills Framework document (2015). Online training at HSELand includes the modules "Breaking the Chain of Infection" and "Introduction to Infection Prevention and Control". Refer to <u>www.hseland.ie</u>
- Whenever possible, training that is undertaken on-line via e-learning programmes should be supplemented with face-to-face training to allow staff voice any concerns or queries they have. Face-to-face training also allows staff to interpret the training in the context of their own work/care setting.
- All prison staff should receive introductory level education on antimicrobial resistance and antimicrobial resistant organisms to provide a background for caring for prisoners who may be colonised or infected with CPE or other AMRO

General Services to Prisoners Colonised or Infected with CPE or other AMRO

In general, the most effective approach to manage the risk of spread of CPE and other MDRO in the prison setting is to practice the best possible standard of hygiene with respect to all prisoners at all times. As many prisoners have complex healthcare needs it is likely that there are prisoners with undetected CPE and other AMRO colonisation. In addition to this, prisoners may from time to time be shedding potentially disease causing organisms including norovirus (common cause of diarrhoea). If the highest practical general standard of hygiene is practised, the care of prisoners colonised or infected with CPE or other AMRO is largely one of emphasis –what should be routine hygiene practice is implemented with particular care in the context of prisoners colonised or infected with CPE or other AMRO.

Prisoner Placement

Prisoners colonised or infected with CPE or other AMRO should not share a cell with other prisoners. The cell should have toilet facilities and the prisoner should be encouraged to use this in-cell toilet at all times, in particular, for defecation.

Cells occupied by prisoners with CPE or other AMRO should be cleaned daily.

Cells occupied by prisoners with CPE or other AMRO should be maintained in good repair (intact surfaces) to the greatest extent possible. They should be cleaned and decontaminated and if necessary repaired before assigned to another prisoner.

Prisoner Activity

Prisoners colonised or infected with CPE should be provided with information on CPE and offered training on hand hygiene. They should be encouraged to perform hand hygiene in particular after defecation or other activity likely to result in contact with faecal matter.

All prisoners, but in particular those colonised or infected with CPE should have access to hand hygiene facilities in so far as possible in the context of the security and safety of the prisoner, other prisoners and staff. There is particular need for hand hygiene facilities in toilets, where people eat and where people leave or store materials used in cleaning activities.

Plain soap and water with access to running water and disposable towels or clean towels are appropriate to support hand hygiene. Air blow hand dryers are best avoided.

Note: to perform hand hygiene properly there must be access to a flow of water that is sustained for sufficient time to perform hand hygiene.

Hand sanitiser may be an appropriate alternative to soap and water accepting that alcohol based hand rub is generally unlikely to be acceptable in the context of other risks.

Prisoners colonised or infected with CPE or other AMRO may engage in communal activities in shared space with other prisoners and prison staff provided

they are continent of faeces and do not engage in behaviour likely to disseminate faeces.

Prisoners colonised or infected with CPE or other AMRO, when in communal areas should be encouraged to avoid sharing towels or personal items with other prisoners. They should be encouraged to perform hand hygiene before leaving their cell.

Prisoners colonised or infected with CPE or other AMRO may share transport, including transport to hospital provided they are continent of faeces and do not engage in behaviour likely to disseminate faeces. They should be encouraged to perform hand hygiene before leaving their cell and before leaving the prison.

Prisoners colonised or infected with CPE or other AMRO should have no restrictions on visiting on account of the CPE or AMRO unless it is airborne.

Prisoners colonised or infected with CPE should have frequent change of clothing and easy access to change of clothing in the event that clothing is soiled or damaged.

Prison Staff

Prison staff should perform hand hygiene before commencing work and at the end of each shift. Hand hygiene should be performed after exiting secured areas and in particular before breaks and meals and after using the toilet.

Prison staff should have ready access to appropriate hand hygiene facilities close to the point where they enter and exit secure areas, close to where they have meals and in toilet facilities.

Air blow hand dryers are best avoided.

Note: to perform hand hygiene properly there must be access to a flow of water that is sustained for sufficient time to perform hand hygiene.

Hand sanitiser may be an appropriate alternative accepting that alcohol based hand rub is generally unlikely to be acceptable in the context of other risks.

Use of personal protective equipment gloves and disposable aprons is appropriate when contact with blood, body fluids or faeces is likely or inevitable. **Glove and apron use is always in addition to hand hygiene and never a substitute for hand hygiene.** Prisoner officers should have access to face and eye protection for situations when splashing of blood or body fluids is likely.

Prison staff should change into to a clean uninform when presenting for work and where possible uniforms should not be worn home at the end of a shift. Prison staff should have access to a change of uniform and can order a replacement uniform in the event that a uniform becomes soiled or damaged during their shift. Coveralls may be appropriate in certain circumstances when providing services to prisoners where the risk of contamination is very high because or specific behaviours or other reasons.

Contamination of Prison Staff and Prisoners

From time to time incidents may occur in which prison staff or prisoners are grossly contaminated with blood, body fluid or faeces of a person known colonised with CPE or other AMRO.

Contaminated staff should leave the secure area as quickly as safe to do so and go to a shower facility.

If eyes or mucous membranes were splashed, rinse with clean water

Soiled garments should be removed and placed into a yellow clinical waste bag for disposal.

The person should shower with soap and water to remove any blood body fluids or faeces on their skin.

The incident should be reported according to local policy and the guidance related to blood and body fluid exposure should be followed.

There is no specific treatment to reduce the risk of acquisition of CPE or other AMRO in this setting.

Screening for CPE or other AMRO is not recommended in this setting although in some settings the doctor caring for the person exposed may wish to discuss testing with a microbiologist or public health consultant.

Exposure of Prisoners to CPE or other AMRO

It will occur from time to time that a prisoner who has been sharing a cell with one or more other prisoners will be identified as CPE positive. This may happen for example when a prisoner is newly detected as CPE colonised on admission to an acute hospital or when there is delay in communication regarding the CPE status of a prisoner.

Any prisoner sharing the cell with the prisoner colonised with CPE when the information becomes available should be moved to another cell as soon as possible. The exposed prisoner (prisoners) should not share that cell with another prisoner pending conclusion of a risk assessment.

A risk assessment should be performed to determine how many other prisoners have shared space with the CPE colonised prisoner and for what period of time. The risk assessment should take account of any incidents or behavioural issues likely to be relevant to risk of transmission of CPE or other AMRO. In general, the risk is greatest with prolonged sharing of space, if the prisoner in question had diarrhoea or behavioural problems.

Sharing of space with a continent prisoner with no behavioural disturbance for less than 12 hours should generally not be regarded as significant exposure. After relevant information is collected, the prison doctor or IPC Manager should seek the advice of a Consultant Microbiologist or Public Health Consultant on any requirement for screening.

Communication

Prison healthcare workers should be provided with all relevant information related to the IPC status of anybody who is transferred from a healthcare facility to a prison. Likewise, a hospital or clinic should be provided with any relevant information regarding CPE or other AMRO status of any prisoner attending a hospital or clinic.

Communication with the prison regarding CPE or other AMRO status of a prisoner should be managed by the prison service on a need to know basis.

Every effort should be made to ensure clear communication with the prisoner regarding infection or colonisation with CPE or other antimicrobial resistant organisms and to protect their privacy to the greatest degree possible. It is accepted that in some cases other prisoners may become aware of specific infection prevention and control measures applied to a particular prisoner either inadvertently or because the person in question chooses to tell them.

All prisons should have a record of which prisoners are colonised or infected with CPE or other AMRO and this should be accessible at all time on a need to know basis.

Appendix 1 - The Irish Prison Service

Political responsibility for the Prison System in Ireland is vested in the Minister for Justice and Equality. The Irish Prison Service operates as an executive agency within the Department of Justice and Equality. It is headed by a Director General supported by 5 Directors.



Criminal justice System Chart

Prison Institutions

There are 12 institutions in the Irish Prison System consisting of 10 traditional "closed" institutions and two open centres, which operate with minimal internal and perimeter security. The majority of female prisoners are accommodated in the purpose built "Dóchas Centre" with the remainder accommodated in Limerick Prison. The Irish Prison Service deals with male offenders and female offenders who are 18 years of age or over.

These Twelve Institutions include:

1. Wheatfield Place of Detention:

Wheatfield prison is a closed, medium security place of detention for adult males of 18 years and older.

Prisoner Population: The daily average number in custody in 2016 was 460. **Operational Capacity:** 540 at year end

2. Cloverhill Prison:

Cloverhill is a closed, medium security prison for adult males, which primarily caters for remand prisoners committed from the Leinster area.

Prisoner Population: The daily average number in custody in 2016 was 382.

Operational Capacity: 431 at year end

3. Portlaoise Prison

Portlaoise prison is a closed high security prison for adult males. It is the committal prison for those sent to custody from the Special Criminal Court and prisoners accommodated here include those linked with subversive crime.

Prisoner Population: The daily average number in custody in 2016 was 198 **Operational Capacity:** 291 at year end

4. Midlands Prison

The Midlands Prison is a closed, medium security prison for adult males. It is the committal prison for counties Carlow, Kildare, Kilkenny, Laois, Offaly and Westmeath. **Prisoner Population:** The daily average number in custody in 2016 was 814. **Operational Capacity:** 870 at year end.

5. Mountjoy Prison

Mountjoy Prison is a closed, medium security prison for adult males. It is the main committal prison for Dublin city and county.

Prisoner Population: The daily average number in custody in 2016 was 515 **Operational Capacity:** 554 at year end.

6. Dochas Centre

Dochas Centre is a closed, medium security prison for females aged 18 years and over. It is the committal prison for females committed on remand or sentenced from all Courts outside the Munster area.

Prisoner Population: The daily average number in custody in 2016 was 109. **Operational Capacity:** 105 at year end.

7. Training Unit

Training Unit is to be re-opened with the ground floor identified to house prisoners over 55 who require some level of care. The second floor will house able-bodied prisoners over 55.

Prisoner Population: The daily average number in custody in 2016 was 90 **Operational Capacity:** 96 at year end.

8. Arbour Hill

Arbour Hill is a closed, medium security prison for adult males. The prisoner profile is largely made up of long term sentenced prisoners.

Prisoner Population: The daily average number in custody in 2016 was 134 **Operational Capacity:** 142 at year end.

9. Castlerea Prison

Castlerea Prison is a closed, medium security prison for adult males. It is the committal prison for remand and sentenced prisoners in Connaught and also takes committals from counties Cavan, Donegal and Longford.

Prison Population: the daily average number in custody in 2016 was 293. **Operational Capacity:** 340 at year end.

10.Cork Prison

Cork Prison is a closed, medium security prison for males aged 18 years and over. It is the committal prison for counties Cork, Kerry and Waterford.

Prisoner Population: The daily average number in custody in 2016 was 253. **Operational Capacity:** 273 at year end.

11. Limerick Prison

Limerick Prison is a closed, medium security prison for adult males and females. It is the committal prison for males for counties Clare, Limerick and Tipperary and for females for all six Munster counties.

Prisoner Population: The daily average number in custody in 2016 was 253. **Operational Capacity:** 220 (males) and 28 (females)

12. Loughan House

Loughan House is an open, low security prison for males aged 18 years and over who are regarded as requiring lower levels of security.

Prisoner Population: The daily average number in custody in 2016 was 116 **Operational Capacity:** 140 at year end.

13. Shelton Abbey

Shelton Abbey Shelton Abbey is an open, low security prison for males aged 19 years and over who are regarded as requiring lower levels of security.

Prisoner Population: The daily average number in custody in 2016 was 101. **Operational Capacity:** 115 at year end.

Appendix 2: Example of Prisoner Population on a given day in 2019

ITUTION	Number in Custody	No. On Temp Release*	On Trial/ Remand	Prisoners in System**	Bed Capacity	% of Bed Capacity	Bed Capacity per Inspector of Prisons***	%of Inspector of Prisoners Bed Capacity		
MOUNTJOY CAMPUS										
Mountjoy (m)****	666	97	21	820	755	88%				
Mountjoy (f)	125	42	38	174	105	119%	105	119%		
Cloverhill****	355	3	305	367	431	82%	414	86%		
Wheatfield****	502	31	30	535	550	91%	550	91%		
PORTLAOISE CA	PORTLAOISE CAMPUS									
Midlands	838	27	76	880	845	99%	870	96%		
Portlaoise	235	6	7	242	291	81%	291	81%		
A Block	21	0	0	21	40					
C Block	174	6	0	181	181					
E Block	40	0	7	40	70					
Cork	277	43	47	330	296	94%				
Limerick (m)	225	30	83	261	210	107%	185	122%		
Limerick (f)	31	24	8	56	28	111%	24	129%		
Castlerea	322	16	57	345	340	95%	300	107%		
Arbour Hill	138	0	1	147	138	100%	131	105%		
Loughan House	113	5	0	132	140	81%	140	81%		
Shelton Abbey										
Totals	3,939	329	673	4,413	4,244	93%				