

# Screening for Multi-Drug Resistant Organisms (MDROs)

# What is MDRO?

MDRO stands for Multi-Drug Resistant Organism and represents types of bacteria that have become resistant to most antibiotics.

# How can MDROs be developed?

MDROs can be developed naturally over time, through genetic, or more usually through misuse or overuse of antibiotics. They can also develop in both humans and animals, through direct contact.

# What are the common MDROs?

There are many types of MDROs, Methicillin-resistant Staphylococcus aureus (MRSA) and Vancomycin Resistant Enterococci (VRE) are both commonly found in hospital settings, however there is also a community strain of MRSA.

Methicillin-resistant Staphylococcus aureus (MRSA) is a type of Staphylococcus aureus bacterium (S. aureus) which can often be found in the nasal cavity and on the skin of some healthy people. The Methicillin-resistant strain has become resistant to most antibiotics and is often referred to as a superbug.

Enterococci is a strain of bacteria that is commonly found in intestines; however, the Vancomycin Resistant strain has become resistant to the antibiotic Vancomycin.

# Why screen for MDROs in hospital?

Antibiotic resistance is one of the major threats to global health. New resistant organisms are emerging and spreading globally, rendering antibiotics less effective to fight a growing number of infectious diseases. In view of this global threat, many health authorities have committed to actions to improve antibiotic use, establishing antibiotic resistance tracking systems. Considering this, Matilda International Hospital has introduced added screening as a precaution to prevent having these MDROs in our hospital environment.

### Who needs to do this screening?

The hospital requires patients to do <u>VRE screening</u> if they fit into one of these criteria:

- History of admission or medical management in another hospital or healthcare institution in or outside HK within the last 3 months
- Having been a resident of a long-term care facility (e.g. elderly homes or home for the disabled) within last 3 months
- History of confirmed VRE infection

In addition to the above, if the patient has been diagnosed with MRSA before, or has been admitted to an Intensive Care Unit in another hospital during the past three months, they will also need to undertake an additional <u>MRSA screening test.</u>



# 多重耐藥性細菌測試

#### 甚麼是多重耐藥性細菌?

多重耐藥性細菌是指對大部分抗生素呈耐藥性的細菌。

#### 多重耐藥性細菌是如何形成的?

多重耐藥性細菌存在於人和動物中,可以隨著時間自然形成,或透過遺傳、或不正確使用抗生素而形成;也可以經直接接觸傳染。

#### 有甚麼常見的多重耐藥性細菌?

多重抗藥性細菌種類很多,抗藥性金黃葡萄球菌(MRSA)及耐萬古霉素腸球菌(VRE)此兩種細菌在醫院 均很常見,此外亦有社區型抗藥性金黃葡萄球菌(MRSA)。

抗藥性金黃葡萄球菌(MRSA)是金黃葡萄球菌的一種,不時存在於健康人士的鼻腔和皮膚上。此耐藥性細 菌對大多數抗生素產生耐藥性,故通常被稱為超級細菌。

腸球菌是腸道中常見的一種細菌。而耐萬古黴素菌株對抗生素萬古黴素產生耐藥性**。** 

#### **為什麼要在醫院檢測多重耐藥性細菌?**

抗生素耐藥性對全球公共衛生構成重大威脅。新型抗藥性細菌於全球散播,導致抗生素對抗傳染病之療效下 降。有鑑於此,多國衛生機構已採取行動以改善抗生素的使用,並建立抗生素耐藥性追踪系統。故明德國際 醫院亦加強檢測,以防止多重耐藥性細菌在院內傳播。

#### 甚麼病人需要接受這頂檢測?

病人若符合下列任何一頂準則, 院方會要求他們接受耐萬古霉素腸球菌(VRE)檢測:

- 過往3個月內,在香港或債外任何一家醫院或醫療機構曾住院或接受治療;
- 過往3個月內,曾入住長期護理設施(例如老人院或殘疾人士宿舍);
- 有確診耐萬古霉素腸球菌(VRE)感染的病史。

除上述情況外,若病人過去三個月內已診斷出染上抗藥性金黃葡萄球菌(MRSA),或過去三個月內曾入住 另一家醫院的深切治療部,亦需進行抗藥性金黃葡萄球菌(MRSA)檢測。

#### **檢測**如何收費?

收費取決於檢測頂目及結果。所有費用已包括隔離病房的住宿、隔離程序及檢測費用。如檢測結果是陰性, 病人則毋須隔離,並會轉到所選擇的房間類別。