

PRESS RELEASE

Cross-border transfer increases patients' risk of resistant bacteria

Stockholm, 13 September 2011

Patient transfer between hospitals and in particular between countries, is a risk factor for the spread of bacteria that are resistant to last-line antibiotics. More specifically, for highly resistant bacteria, like carbapenemase-producing Enterobacteriaceae (CPE), the risk is heightened when patients are transferred from, or have received previous medical care in areas with high rates of bacterial resistance. These are conclusions from a risk assessment produced by ECDC that evaluated the risk to the citizens of Europe, of the spread of CPE through patient transfer between healthcare facilities, with special emphasis on cross-border transfer.

ECDC Director, Dr. Marc Sprenger, said:

"Our risk assessment highlights that without proper infection control, such as active screening of patients who are transferred across borders and taking additional precautions for the care of patients found to be infected with highly resistant bacteria, such as carbapenemase-producing Enterobacteriaceae, doctors will increasingly face the dilemma of not having any treatment options left".

The Enterobacteriaceae is a large family of bacteria which includes *Klebsiella pneumoniae*, a frequent cause of pneumonia and urinary tract infections in hospitals where they often are resistant to multiple antibiotics. As a result of production of carbapenemase enzymes, these already highly resistant bacteria are no longer susceptible to a class of last line antibiotics, the carbapenems. This means that the only treatment options left to doctors may be other antibiotics that are often toxic and which are not always effective.

In this risk assessment, ECDC emphasises the need for implementation of infection control measures to be able to effectively halt the spread of CPE within hospitals and countries. The evidence from the medical literature consistently supports the effectiveness of a) early implementation of active surveillance through rectal screening for detection of patient carriage with CPE, b) additional precautions for the care of CPE-positive patients, including the wearing of disposable gloves and gown and c) cohort nursing by a separate, dedicated team. Additional suggestions from ECDC are for countries to perform active surveillance on any patient transferred across borders upon admission to a hospital or other healthcare facility, to develop national guidance for how to stop the spread of CPEs within their country and to actively report cases of CPE by making confirmed cases notifiable to public health authorities.

Dr Sprenger continued: *"Antibiotic resistance in bacteria remains a serious threat to patient safety, reducing options for treatment and increasing the length of hospital stay, as well as increasing patient morbidity and mortality. That is why in this risk assessment, ECDC suggests active reporting of confirmed cases of colonised and infected cases. In addition, through promoting the European Antibiotic Awareness Day, ECDC supports prudent use of antibiotics as an effective strategy for reducing the development of resistance."*

Background to "ECDC risk assessment on the spread of carbapenemase-producing Enterobacteriaceae (CPE) through patient transfer between healthcare facilities with special emphasis on cross-border transfer"

In May 2010, due to concern about the increasing number of outbreaks and the spread of CPE in healthcare facilities across Europe, EU Member States submitted a proposal to ECDC to perform a risk assessment. The

purpose of the risk assessment was to evaluate the risk to the citizens of Europe of the spread of CPE through patient mobility and to assess the effectiveness of infection control methods to stop the spread of CPE within healthcare institutions. The risk assessment is based on two systematic reviews. The first review looked at the risk factors for patient colonisation or infection with CPE and the second examined the effectiveness of using screening and/or targeted infection control measures to decrease the incidence of colonisation or infection in acute healthcare settings. In addition, a group of ten experts on infectious diseases, infection control, public health and microbiology attended a meeting in Stockholm, Sweden on 24 November 2010 to give feedback on the systematic reviews, and to provide their expert opinion and recommendations.

About European Antibiotic Awareness Day

European Antibiotic Awareness Day is a European health initiative which aims to provide a platform and support for national campaigns about prudent antibiotic use. Across Europe each year the European Antibiotic Awareness Day is marked by national campaigns on prudent antibiotic use during the week of 18 November. For more information, visit the [European Antibiotic Awareness Day](#) site.

Links

["ECDC risk assessment on the spread of carbapenemase-producing Enterobacteriaceae \(CPE\) through patient transfer between healthcare facilities with special emphasis on cross-border transfer"](#)

Further information on surveillance of antibiotic resistance can be accessed from the [EARS-Net website](#)

ECDC/EMA Joint Technical Report: [The bacterial challenge: time to react](#)

Further information

More information on antibiotic resistance is available on the [ECDC site](#)

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The European Centre for Disease Prevention and Control (ECDC) is an EU agency tasked with identifying assessing and communicating threats to human health posed by infectious diseases. It supports the work of public health authorities in the EU and EEA/EFTA Member States.