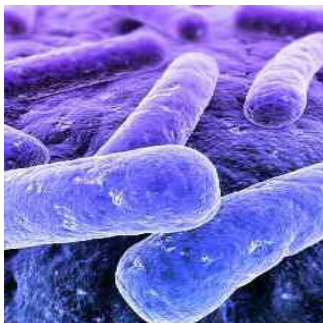

ICU Volume 11 - Issue 4 - Winter 2011/2012 - News

Antibiotic Resistance Continues to Rise



The European Centre for Disease Prevention and Control (ECDC) is releasing new European-wide surveillance data showing that the percentage of carbapenem-resistant *Klebsiella pneumoniae* is increasing within the European Union. Several Member States are now reporting that between 15 and almost 50 percent of *K. pneumoniae* from bloodstream infections are resistant to carbapenems. Carbapenems are the major last-line class of antibiotics to treat infections with multidrug-resistant Gram-negative bacteria such as *Klebsiella pneumoniae*, a frequent cause of pneumonia and urinary tract infections in hospitals.

On the occasion of the launch of a European Commission strategy to combat antibiotic resistance, ECDC Director, Marc Sprenger, said: "The need for concerted action to curb growing resistance to antibiotics is now critical with the establishment of resistance to the last line of antibiotics being reported to ECDC from several European countries for the first time. Failure to act will mean that treatment options for patients with bloodstream infections, pneumonia, and urinary tract infections in hospitals will be severely limited. That is why ECDC is working very closely with the European Commission to support the implementation of its multi-disciplinary approach to combat antibiotic resistance".

For a large part, antibiotic resistance is being driven by misuse of antibiotics in humans and animals. According to the latest data released by ESAC (European Surveillance of Antimicrobial Consumption), the vast majority of human consumption of antibiotics occurs in the community. Resistance to last-line antibiotics like the carbapenems, however, cannot be explained only by the use of antibiotics outside hospitals. Studies show that 50 percent of all antibiotic use in hospitals can be inappropriate. Prudent use of antibiotics is paramount to prevent and control resistant bacteria. Additionally, compliance with good hand hygiene by healthcare workers is the most effective way to prevent the spread of infections in hospitals. Finally, there is a particular lack of new antibiotics with new targets of mechanisms of action, in particular against carbapenem-resistant Gramnegative bacteria.

Following an increasing number of outbreaks and the spread of carbapenemase-producing enterobacteriaceae (CPE) in healthcare facilities across Europe, ECDC recently published a risk assessment to evaluate the risk to the citizens of Europe of CPE spread through patient mobility. According to ECDC, the transfer of patients across borders poses a clear risk for the transmission of carbapenem-resistant bacteria, especially when patients are transferred from areas with high rates of such bacteria to healthcare facilities in another country or have received medical care abroad in areas with high rates of carbapenem-resistant bacteria. Another ECDC risk assessment on the spread of New Delhi metallo- β -lactamase (NDM) stresses that NDM and other highly antibiotic resistant bacteria represent a particular risk for Europe because EU Member States lack systematic surveillance systems and policies to detect carriage or infection deriving from these bacteria.

Published on : Sun, 5 Feb 2012