Carbapenem-resistant Gram-negative Bacilli (CRGNB)  
Fact Sheet for Healthcare Professionals

What are Gram-negative bacilli?  
Gram-negative bacilli commonly encountered in healthcare settings include species such as  
*Pseudomonas aeruginosa*, *Acinetobacter* species, *Stenotrophomonas maltophilia*, and species  
belonging to the *Enterobacteriaceae* family, such as *Escherichia coli*, *Klebsiella pneumoniae*, and  
*Enterobacter cloacae*.

What are Carbapenem-resistant Gram-negative bacilli?  
Recent reports from around the world indicate an increasing occurrence of antimicrobial resistance  
in Gram-negative bacteria. Of particular concern is the development of resistance to a group of  
antibiotics called carbapenems. The carbapenem group of antimicrobials has been a safe and  
generally effective treatment for severe Gram-negative bacterial infections when resistance to other  
classes of antimicrobials is present. When resistance to carbapenems occurs, there are often few  
alternative treatments available.

Carbapenem resistant gram negative bacteria have been identified in several countries including the  
United States and the United Kingdom. There are some early reports that suggest a link between  
the receipt of medical care in certain overseas countries, most notably India and Pakistan, and  
carriage of these resistant bacteria.

How is it Transmitted?  
The most common form of transmission is by contact; both direct and indirect.

Screening of Patients  
Patients admitted to acute care facilities who have recently been an inpatient in any foreign country  
(including the USA) during the past 3-6 months should have the following swabs sent: sputum (if  
able), wounds (if present), perirectal, and urine (if catheterized or signs & symptoms of UTI). This is in  
addition to other routine appropriate admission screens (e.g. MRSA, VRE). There is no indication to  
either screen or use additional precautions in residents/clients in other non-acute health care  
settings including pre-hospital care.

Precautions  
Place patients with known or suspected (pending results) carbapenem infection or colonization on  
Contact Precautions. A single room is preferred. If respiratory infection is also suspected, use  
Droplet and Contact Precautions.

Cleaning  
All horizontal and frequently touched surfaces should be cleaned twice daily in rooms of individuals  
confirmed to carry this organism.

Discontinuing Precautions  
Consult Infection Control. If a patient is confirmed as being colonized or infected with CRGNB,  
Contact Precautions should continue for the duration of the hospitalization during which the CRGNB  
was isolated. Patients readmitted within 12 months of that hospitalization should be considered  
colonized with CRGNB and placed on Contact Precautions.

What Are the Risks to Health Care Providers?  
There is no indication that these organisms are any easier to acquire or more likely to cause  
infection that any other antibiotic resistant organism. This is especially true for healthy individuals.  
The use of diligent hand hygiene and protective barriers as outlined in Contact Precautions will  
minimize the risk of transmission.