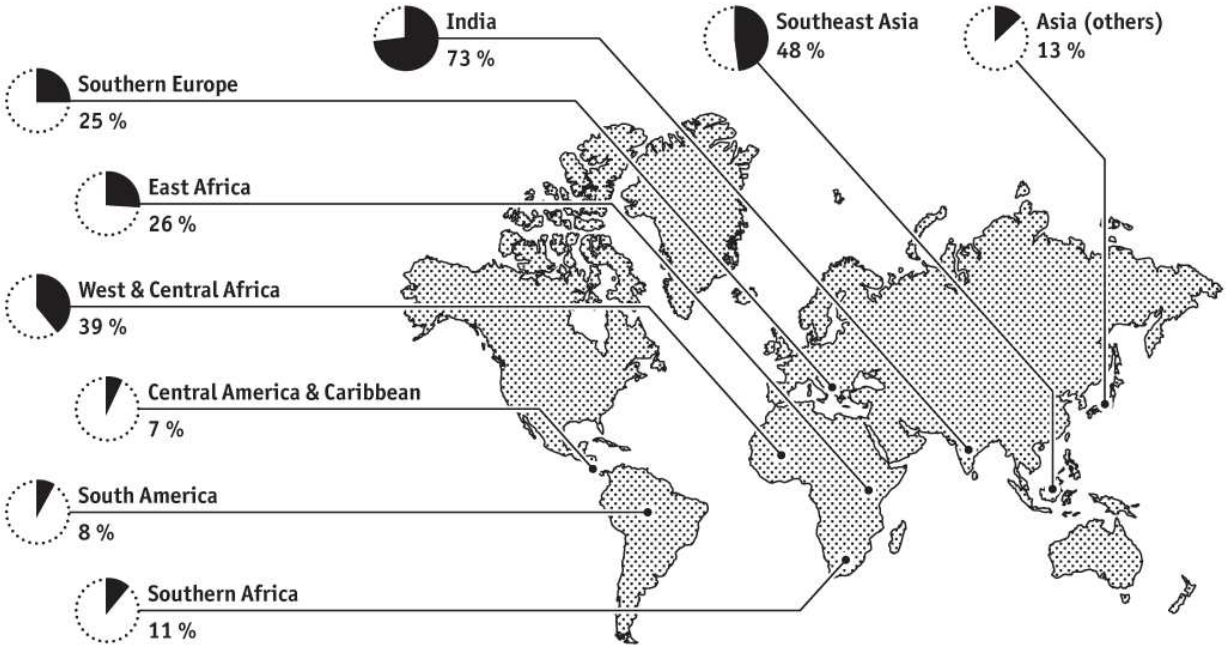
Acquisition of MDRO while travelling

Lebensretter Antibiotika
Wissen wann — wissen wie.

Travelers returning to Germany with multidrug-resistant organisms (ESBL-producing E. coli)



Lübbert, C., et al., Colonization with extended-spectrum beta-lactamase-producing and carbapenemase-producing Enterobacteriaceae in international travelers returning to Germany. Int J Med Microbiol, 2015. 305(1): p. 148-56.

Multidrug-resistant organisms (MDRO) — what is that?

An increase in the emergence and distribution of resistant pathogens has occurred in the past few years. Multidrug-resistant organisms, in short, MDRO, are bacteria that have become resistant to several antibiotics used to treat an infection. Approximately 7% of healthy Germans have been determined to carry a resistant organism.
In certain countries and and regions such as India and southeast Asia, multidrug-resistant organisms are particularly prevalent. The risk of being colonized with a multi-resistant organism is extremely high in these regions.
In other regions — e.g. the Near East, North Africa, or Southeast Europe — contact with healthcare services represents a risk of being colonized with MDRO.

Is there a need for drug therapy?

In general, drug therapy is not necessary, nor is it recommended. In most cases, the organisms disappear on their own after a period of 6 to 12 months and without the colonized person being aware of their presence. However, it is possible that the resistant organisms are spread to other people. If these people are severely ill, this may pose an acute problem (e.g. if the affected person is hospitalized). In these cases, severe and even life-threatening infections may occur. If you yourself start suffering from an infection (such as a urinary infection or pneumonia), you should inform your doctor about your travels, especially if you have been in contact with healthcare services (e.g., hospitilization) during your travels.

How do I become a carrier of MDRO while abroad?

The organisms reach the intestines via contaminated beverages and food, or via the hands — often together with pathogens responsible for causing travelers' diarrhea. The resistant organisms as such do generally not cause diarrhea. They invade the intestines without provoking any symptoms. In this case, we speak of colonization. The manifestation of travelers' diarrhea or the use of antibiotics may however increase the risk of colonization with MDRO.
For healthy people, colonization with these organisms does not constitute a problem because the resistant organism does not generally lead to a disease. If however, a person has a weakened immune system or is severely ill, such a pathogen can trigger an infection.

What you should know

• Precaution: Colonization with MDRO cannot be reliably prevented; however, the risk can be minimized. To this end, it is important to observe common hygiene measures and strict food hygiene while travelling.
• If you are diagnosed with an infection or are going to be hospitalized, it is imperative that you inform the attending physician about any previous travels and any hospital stays you might have had in the countries you went to so that the possibility of a colonization of the intestines by resistant pathogens can be taken into account. This is important not only because it helps determine the appropriate antibiotic therapy but also because it protects the health and safety of other patients in the hospital.

This patient information was created in coordination with the Robert Koch Institute (Berlin).