

# The Global Market for Nanocoatings in the Medical Industry

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## **Abstracts**

In medical and healthcare facilities it is necessary to equip materials and surfaces with a high level of hygiene using antimicrobial agents to protect them against bacteria and other micro organisms to prevent infections caused by bacteria and contribute significantly to reduce health costs. Challenges in medical device coatings include:

biocompatibility;

coating adhesion;

uniform coverage over challenging shapes;

strength;

durability.

Benefits of nanoscale coatings in this sector include long lasting antimicrobial effect, constant release of the active substance, effectiveness against bacteria and other microorganisms, no chemical impurities, easy processing, no changes to the characteristics of the equipped material, and no later discolouration of the equipped material. Nanocoatings are already finding application in life sciences & healthcare in enabling anti-bacterial surfaces for medical catheters, added to paints and lacquers used to coat operating tables, door knobs and door handles in hospitals and as ultra-hard porous coatings for surgical and orthopedic implants like screws, plates or joint implants.

The medical market will be a high growth area for nanoscale coatings over the next



5-10 years, and this is reflected in the high number of companies exploiting technology in this area, especially in the anti-microbial domain. The main market driver in this area is the prevention of the spread of deadly infections in medical facilities. Drug-resistant bacteria, the so-called 'superbugs,' are a growing problem in hospitals worldwide and poor hygiene among staff is often blamed for the spread of such infections.

Report contents include:

Advantages of nanocoatings in the medical and healthcare industry.

Types of nanocoatings.

Anti-viral and anti-microbial nanocoatings industry analysis.

Types of nanomaterials utilized in medical nanocoatings.

Profiles of 107 companies.



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