

Market Analysis- Clinical Microbiology 2020

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The worldwide microbiology market is esteemed at \$6,727.29 million in 2014 and is relied upon to develop at a CAGR of 13.03% in the vicinity of 2014 and 2019. Expanding sickness weight of irresistible maladies and expanded subsidizing for social insurance consumption are the essential development drivers for this market amid the conjecture time frame. The pharmaceuticals application fragment represented the biggest share of the microbiology advertise in 2014; while the nourishment application portion is normal develop at the most astounding CAGR in the vicinity of 2014 and 2019 in the worldwide microbiology showcase. The global clinical microbiology market is projected to reach USD 5.77 Billion by 2021 from USD 3.35 Billion in 2016, growing at a CAGR of 11.5% from 2016 to 2021. Market growth can be attributed to factors such as the technological advancements; rising incidence of infectious diseases and growing outbreak of epidemics; growing healthcare expenditure across the world; and increasing funding, research grants, and public-private investments in the field of life science researches.

Emerging regions such as Asia-Pacific (including Japan, China, and India) are expected to become the new revenue-generating pockets in the market in the next five years. The Asia-Pacific market is projected to grow at the highest CAGR during the forecast period owing to the growing number of hospitals and clinical diagnostic laboratories in India and China; expanding research capabilities for the development of innovative and affordable clinical microbiology testing procedures across India, China, and Japan; and rising incidences of infectious diseases.

Market Research:

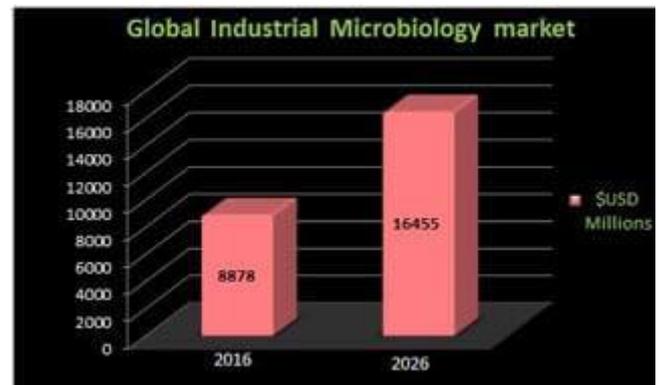
Market research is vital to the development of the industrial market, and continues to be in demand. In 2018, we anticipate delivery of new editions of our report on Microbiology Testing in the Global spurt.

Global Market Survey:

Applied Microbiology size was valued at over USD 24.3 billion in 2017 and will exceed USD 675.2 billion with 7.9% CAGR from 2017 to 2024. At Global Market Insights, It is a unique blend of primary and secondary research, with validation and iterations, in order to minimize deviation and present the most accurate

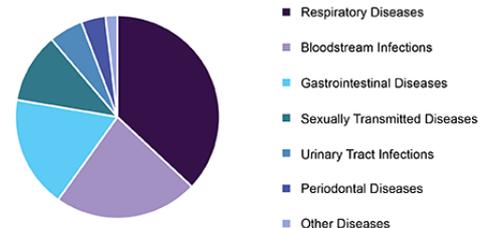
analysis of the industry.

Graphical representation of Microbiology Market Analysis.



Rising demand of new technologies will drive the biotechnology industry size. we've seen tremendous growth and change in the industrial diagnostics industry, particularly in the food safety sector expertise in all aspects of the market, plus extensive experience in business management, strategy development and international business, microbiology test volumes, market values and methods used by food producers around the world, based on detailed interviews with more than 450 food production facilities in America, Europe and Asia, including Japan. Total test volumes have increased 128%, and testing for specific foodborne pathogens like Salmonella and E. coli grew at an even faster rate.

Global clinical microbiology market share, by application, 2016 (%)



The global DNA sequencing market is projected to reach USD 85.5 Million by 2025 from USD 310.1 Million

in 2017 growing at a CAGR of 8.5% during the forecast period.

The global market for Food Microbiology reached nearly \$7.1 billion in 2017. This market is expected to grow to nearly \$9.6 billion in 2017 and \$15.7 billion by 2025, with a compound annual growth rate (CAGR) of 8.1% from 2017 to 2025.

Global Nanotechnology Market was valued at \$216.2 billion in 2017 and \$448.3 billion in 2017. The total market is projected to grow at a compound annual growth rate (CAGR) of 19.3% from 2017 through 2025 and reach \$828 billion by 2025.

Product:

Based on technology, the industry is segmented into tissue engineering and regeneration, fermentation, PCR, nanotechnology, chromatography, DNA sequencing and cell based assay. In 2017, the tissue engineering and regeneration segment accounted for highest revenue and was valued at over USD 11.3 billion. However, the nanotechnology, fermentation and cell based assay segments will experience lucrative growth owing to rising R&D initiatives by various biotechnological and pharmaceutical companies.

The global clinical microbiology market is valued at \$6,727.29 million in 2014 and is expected to grow at a CAGR of 13.03% between 2014 and 2019. Increasing disease burden of infectious diseases and increased funding for healthcare expenditure are the important growth drivers for this market during the forecast period. The pharmaceuticals application segment accounted for the largest share of the microbiology market in 2014, while the food application segment is expected grow at the highest CAGR between 2014 and 2019 in the global microbiology market.

Market Overview:

Several microorganisms are used in industrial microbiology, including laboratory-selected mutants, naturally occurring organisms, and genetically modified organisms (GMOs). Microbiology research and development is finding increasing application in oil and gas organizations, the food and beverage industry, and environmental testing organizations.

In addition, the traditional R&D in the biopharmaceutical industry is witnessing an upsurge, due to drug development research, which is helping in the augmentation of the industrial microbiology market.

Increased demand for nutraceuticals and other fermented products further drives the importance of industrial application of microbiology on a large scale. Such factors are helpful to drive the industrial market.

However, in the market, there are several conflicts

observed regarding the usage of genetically modified organisms in food sources, which are expected to restrict the growth of the industrial microbiology market.

Industry Insights

The global clinical microbiology market size was valued at USD 9.1 billion in 2016 and is expected to develop at a CAGR of 6.7% over the forecast period. Constantly rising incidence of infectious diseases is driving market growth.

Infectious diseases are primarily diagnosed using clinical tests. According to the Centers for Disease Control and Prevention (CDC), around 9,421 new cases of tuberculosis, 51,455 new cases of salmonella, 33,461 new cases of Lyme disease, and 433 new cases of meningococcal disease were registered in U.S. in 2014.

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Similarly, according to the American Cancer Society, around 1,688,780 new cases of cancer were diagnosed in U.S. in 2017. Thus, high prevalence of diseases where clinical tests are used as one of the major diagnostic tools is expected to augment market growth in future. Sudden outbreaks of Ebola, Zika, and other contagious pathogens are also contributing to rising prevalence of infectious diseases.

As per an article published in the Journal of Clinical Microbiology, there is a shortage of trained and skilled professionals in medical and microbiological laboratories for processing and interpreting samples and specimens. Moreover, there has been a steep decline in the number of medical laboratory training programs and students graduating from such programs in U.S.

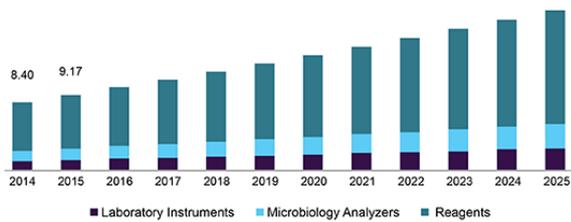
Lack of trained graduates and training programs is an issue particularly in developing countries, where demand for skilled professionals is rapidly increasing. However, entry of automated systems in the market is going to replace manually-operated conventional platforms in future, thereby reducing the impact of lack of skilled professionals.

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U.S. clinical microbiology market size, by product, 2014 - 2025 (USD Billion)



Product Insights

Reagents accounted for the largest revenue share in the global clinical microbiology market. The segment includes products such as solutions, primers, master mixes, and kits used in various diagnostic assays. Reagents currently captures the largest revenue share, with more than 60% attributed to repeat purchase driven by need for new set of reagents for new tests.

The segment is expected to remain dominant throughout the forecast period. Factors such as higher cost of specialized kits and constant repeat purchase are expected to drive the segment over the forecast period. The market is witnessing rising investments in research and development (R&D). Almost all analytical and therapeutic research projects demand reagents and chemicals, thereby driving penetration of reagents.

To learn more about this report, Laboratory instruments comprise incubators, gram strainers, bacterial colony counters, autoclave sterilizers, petri dish fillers, and culture systems. Automated culture systems dominated the global laboratory instruments segment with more than 30% share in 2016.

The microbiology analyzers segment comprises instruments used in molecular diagnostics, mass spectrometry, and microscopes. Microscopes held the largest share owing to wider applicability and rising demand. The molecular diagnostic instruments segment, on the other hand, is expected to exhibit the fastest growth rate over the forecast period. This growth can be attributed to increasing significance of molecular diagnosis in early detection of cancer and infectious diseases.

Application Insights

Increasing levels of air pollution with growing industrialization is resulting in rapid escalation in prevalence of respiratory diseases. Also, among all infections, respiratory diseases spread rapidly owing to easy transfer of contagious pathogens. Thus, the segment is expected to show significant growth over the forecast period. Furthermore, prevalence of infectious diseases is high in developed as well as developing countries.