



DISPOSABLE MEDICAL SUPPLIES MARKETS *(SAMPLE COPY, NOT FOR RESALE)*

Trends, Industry Participants, Product Overviews and Market Drivers

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1. Introduction

This report focuses on the U.S. and world disposable medical supplies markets. Product categories examined include surgical gowns, surgical drapes, isolation gowns, surgical and examination gloves, institutional incontinence disposables, operating room (OR) custom kits and trays, non-OR custom packs, shoe covers, masks, disposable coveralls and lab-coats, headwear, protective eyewear, sterile wipes, swabs and mops. For each market segment, this study presents the latest information on size, growth rates, sales projections and factors influencing growth in the U.S. and internationally.

The U.S. demand for disposable medical supplies is projected to grow █% annually to \$█ in █. The growth will be driven by a rising volume of patient activity and epidemiological patterns. Drug delivery, catheterization and related products will remain the largest and fastest-growing group of disposable medical supplies. Gains will reflect an increasing number of chronic-care patients who require surgery or continuous therapy. This trend—coupled with the introduction of higher value-added, safety-enhanced products—will boost growth opportunities for several types of drug delivery, catheterization and related supplies, including prefilled inhalers, prefilled syringes, cardiac and urinary catheters, infusion and dialysis tubing sets, transdermal patches and oxygen delivery systems.

Staplers, bioengineered tissue adhesives and sealants, collagen foam, alginate dressings and growth-factor healing agents are bound to see the fastest growth among disposable wound management supplies. Most hospitals are upgrading surgical infection prevention safeguards, and this will have a favorable sales gain in non-woven surgical gowns and drapes. Disposable face masks, surgical gloves, disinfectants and waste-disposal products possess a strong market. Medical research investigation will likely impact favorably on the market for disposable labware. Silicone hydrogel with aspheric and toric configurations are bound to promote broader sales of daily and other short-wear disposable contact lenses.

In the U.S. and other developed countries, the home healthcare market has been providing the fastest growth for disposable medical supplies. Demand in the home healthcare sector is boosted by the easy availability of respiratory devices and glucose-monitoring meters as well as the increasing popularity of contact lenses. Hospitals provide the largest market, accounting for nearly █% of the expected █ market. Demand in dental products shows a sustained growth.

1.1 Objectives

The main objectives of this study are to describe the structure of the disposable medical supply business, provide information on the current size and projected growth of the global market, identify market opportunities and focus on global industry developments. The report also examines the medical uses of disposable medical supplies, market drivers and trends in the industry.

1.2 Scope

This analysis concentrates on the disposable medical supplies market segment in important worldwide markets such as the U.S., Japan and Europe. It focuses primarily on the hospital market segment, and describes the devices and supplies marketed by major companies in this segment. This review discusses the market size, growth rates and market components for a wide variety of disposable supplies and consumables used in this area. The report does not cover what is generally characterized as durable devices, instruments, reagents or imaging equipment.

The study touches on specialty medical testing as part of the overall analytical focus on companies marketing health-related equipment. However, it is beyond the scope of this report to quantify the size of this broader market. The reader should consult other TriMark Publications reports at <http://www.trimarkpublications.com> for details on individual market segments related to specialized medical testing.

1.3 Methodology

The author of this report holds a PhD in biochemistry from the University of Minnesota and has many decades of experience in science writing and as a medical industry analyst. He has been a senior director of several large regional and national healthcare laboratories. The editor holds a PhD and is a retired college professor with vast experience in biochemistry, biotechnology, pharmacology and environmental biology.

Company-specific information is obtained mainly from industry trade publications, academic journals, news and research articles, press releases and corporate websites, as well as annual reports for publicly-held firms. Additionally, sources of information include the non-governmental organizations (NGOs) such as the World Health Organization (WHO) and governmental entities like the U.S. Department of Health and Human Services (HHS) and U.S. federal agencies such as National Institutes of Health (NIH), Food and Drug Administration (FDA) and the Centers of Disease Control and Prevention (CDC). Where possible and practicable, the most recent data available have been used.

Some of the statistical information was taken from Biotechnology Associates' databases and from TriMark's private data stores. The information in this study was obtained from sources that we believe to be reliable, but we do not guarantee the accuracy, adequacy or completeness of any information or omission or for the results obtained by the use of such information. Key information from the business literature was used as a basis to conduct dialogue with and obtain expert opinion from market professionals regarding commercial potential and market sizes. Senior managers from major company players were interviewed for part of the information in this report.

Primary Sources

TriMark collects information from hundreds of Database Tables and many comprehensive multi-client research projects, as well as Sector Snapshots that we publish annually. We extract relevant data and analytics from TriMark's research as part of this data collection.

Secondary Sources

TriMark uses research publications, journals, magazines, newspapers, newsletters, industry reports, investment research reports, trade and industry association reports, government-affiliated trade releases and other published information as part of its secondary research materials. The information is then analyzed and translated by the Industry Research Group into a TriMark study. The Editorial Group reviews the complete package with product and market forecasts, critical industry trends, threats and opportunities, competitive strategies and market share determinations.

TriMark Publications Report, Research and Data Acquisition Structure

The general sequence of research and analysis activity prior to the publication of every report in TriMark Publications includes the following items:

- Completing an extensive secondary research effort on an important market sector, including gathering all relevant information from corporate reporting, publicly-available data and proprietary databases.
- Formulating a study outline with the assigned writer, including important items, as follows:
 - Market and product segment grouping, and evaluating their relative significance.
 - Key competitors' evaluations, including their relative positions in the business and other relevant facts to prioritize diligence levels and assist in designing a primary research strategy.
 - End-user research to evaluate analytical significance in market estimation.
 - Supply chain research and analysis to identify any factors affecting the market.
 - New technology platforms and cutting-edge applications.

- Identifying the key technology and market trends that drive or affect these markets.
- Assessing the regional significance for each product and market segment for proper emphasis of further regional/national primary and secondary research.
- Completing a confirmatory primary research assessment of the report's findings with the assistance of expert panel partners from the industry being analyzed.

1.4 Executive Summary

Among disposable wound-management supplies, the fastest growth is likely to be seen in prefilled staplers; bioengineered tissue adhesives and sealants; collagen, foam and alginate dressings; and growth factor healing agents. By contrast, limited pricing flexibility and similarities among major brands likely will moderate gains in the market for most types of bandages. Advances in staples and sealants are anticipated to slow growth in overall demand for surgical sutures.

Class IV surgical drapes and gowns probably will see the best sales gains among non-woven medical disposables as surgical infection prevention safeguards are upgraded by hospitals and ambulatory surgery centers. Disposable face masks also likely will fare well in the marketplace, as will examination and surgical gloves; personal, surface and instrument disinfectants; and infectious waste-disposal products. The increasing complexity of medical research investigation may have a favorable impact on the market for disposable labware. New high value-added silicone hydrogel as well as aspheric and toric configurations are expected to promote broader sales of daily and other short-wear disposable contact lenses.

The global non-wovens industry is currently valued at more than \$ [REDACTED] at the roll-goods level, and many times that in terms of end-user markets. Non-wovens markets have enjoyed consistent growth, despite raw materials price shocks, and have continued to outperform related industries such as textiles and paper. Growth in the U.S. industry is expected to be driven by incontinence products, filters and protective apparel. Total demand for non-woven products in the U.S. reached nearly \$ [REDACTED] in [REDACTED]. The U.S. is the largest medical non-wovens market in the world and is projected to exceed \$ [REDACTED] by [REDACTED]. Among product segments, surgical non-woven products market is the largest and the fastest-growing segment, and is projected to cross \$ [REDACTED] by [REDACTED], at a compound annual growth rate (CAGR) of about [REDACTED]%. The global medical textile market has an estimated value in excess of \$ [REDACTED] with a production volume of around [REDACTED] tons, which represents almost [REDACTED]% of the total technical textile market.

Sales of non-woven surgical gowns in [REDACTED] in the U.S. accounted for [REDACTED] units for a value of \$ [REDACTED], and the global sale was [REDACTED] units with a value of \$ [REDACTED]. U.S. sales in [REDACTED] are projected to reach \$ [REDACTED] with a [REDACTED]% growth rate. The worldwide sales from [REDACTED] to [REDACTED] are projected to \$ [REDACTED] with an [REDACTED]% growth rate. The total European surgical gloves, drapes and gowns market was estimated to be worth \$ [REDACTED] in [REDACTED]. In [REDACTED], sales of disposable surgical drapes in the U.S. amounted to [REDACTED] units and \$ [REDACTED]. The projected sales in [REDACTED] are \$ [REDACTED] with [REDACTED]% growth from [REDACTED]. Worldwide sales of surgical drapes in [REDACTED] reached [REDACTED] units and \$ [REDACTED]; an average of [REDACTED] units per procedure and penetration of [REDACTED]% were reported in [REDACTED].

The U.S. sales of isolation gowns in [REDACTED] reached \$ [REDACTED] with about [REDACTED] units, and in [REDACTED] the sales are projected to reach \$ [REDACTED] with [REDACTED] units. The global sale in [REDACTED] is expected to reach \$ [REDACTED] with [REDACTED] units. In [REDACTED], glove sales in the U.S. consisted of [REDACTED] units and \$ [REDACTED]. Internationally, glove sales amounted to [REDACTED] units and \$ [REDACTED] in [REDACTED]. Glove sales are projected to be about [REDACTED] units with a value of about \$ [REDACTED] in [REDACTED].

In [REDACTED], sales of custom kits and trays in the U.S. for the OR portion amounted to [REDACTED] units with a value of \$ [REDACTED]; OR sales are projected to reach [REDACTED] units and \$ [REDACTED] in [REDACTED]. Worldwide, sales of OR custom kits and trays reached [REDACTED] units with a value of \$ [REDACTED] in [REDACTED] and are projected to move on to [REDACTED] units with a value of about \$ [REDACTED] in [REDACTED].

In [REDACTED], sales of shoe covers in the U.S. amounted to [REDACTED] units for a value of \$ [REDACTED]; worldwide, shoe cover sales came to [REDACTED] units and \$ [REDACTED]. It is projected that the U.S. sales of shoe covers will be about [REDACTED] units with a value of \$ [REDACTED] in [REDACTED]; worldwide sales are projected at [REDACTED] units and \$ [REDACTED] in [REDACTED]. Worldwide, in [REDACTED], sales of masks amounted to [REDACTED] units and \$ [REDACTED]. Mask sales are projected to rise to [REDACTED] units and \$ [REDACTED] in [REDACTED].

The global contact lens industry varies drastically by region and country, yet the good news for all is that industry growth continues. The ophthalmic sector as a whole is up [REDACTED]% from [REDACTED] to [REDACTED]. The contact lens industry remains healthy with industry analysts predicting [REDACTED]% to [REDACTED]% growth both for the U.S. and worldwide over the next few years.

Fueled by stent revenues and rising at an average annual growth rate (AAGR) of [REDACTED]%, the U.S. catheter market sales was estimated to be \$ [REDACTED] in [REDACTED], whereas the world catheter market was estimated at \$ [REDACTED] in [REDACTED] and is forecast to reach \$ [REDACTED] by [REDACTED]. The worldwide market for syringes is projected to reach \$ [REDACTED] by [REDACTED], driven by an aging population and the subsequent rise in healthcare demand. Other factors influencing growth include increasing popularity of prefilled syringes, rising incidence of diabetes, and growing awareness of AIDS and other infectious diseases. The U.S., Europe and Asia-Pacific dominate the global syringes market, with more than [REDACTED]% share for [REDACTED]. Asia-Pacific represents the fastest-growing regional market for syringes, with sales anticipated to reach \$ [REDACTED] by [REDACTED].

2. Disposable Medical Supplies Market

2.1 Overview

Over more than 20 years in the U.S., disposables have engulfed the OR almost completely. Nearly ■% of reusable surgical drapes and gowns have been converted to disposables. Through disposability, greater protection has been afforded to the patients and the healthcare workers in burn care and other sensitive areas. Nearly ■% of the money spent on medical disposables is for medical disposable apparels.

One factor contributing to the growing usage of medical disposables is increased public awareness of cross-contamination. With the rise of AIDS, hepatitis and other transmittable diseases, hospitals increasingly have demanded clean, sanitary and disposable products to protect healthcare professionals and patients. The most significant advantages of disposables in the medical market are their safety and convenience. Most medical non-wovens are disposable, and can therefore prevent cross-infection of bacteria and protect healthcare professionals and patients.

Hospitals strongly emphasize infection control. Universal precautions—standard practice for the past several years—require using effective procedures and products to protect healthcare providers and patients from infectious diseases. With hepatitis and multiple-resistant pneumonia among the biggest concerns in the industry today, hospitals are looking for high-performance infection-control products with excellent, consistent quality.

One important consideration in protecting healthcare professionals and patients from cross-contamination is cost, and healthcare providers are searching for cost-effective solutions. While wovens are still used in the medical field, non-wovens offer a cheaper alternative in certain applications. With new and improved non-woven technologies being developed and the rising production cost of woven products, non-wovens are expected to infiltrate a larger share of historically woven applications.

2.2 Technological Advancements in Disposable Medical Supplies

Technological advancements, such as the meltblown and spunbond processes for manufacturing non-wovens, have been instrumental in increasing the penetration of non-woven materials in the medical supplies market. The extension of non-wovens to lab coats, shoe covers, coveralls and other types of hospital apparel also has increased market share. The introduction of sterile custom kits and trays has helped healthcare providers facilitate surgical procedures while improving cost efficiency—and has produced a billion-dollar market in the U.S. alone. Custom packs developed for use outside the OR have proven successful in treating lacerations in the emergency room while administering intravenous (I.V.) feeding and tending to other post-surgical needs.

Increasing necessity for comprehensive protection against transmission of disease in the OR has given rise to the practice of double gloving. In ■, double gloving occurred in ■% of surgeries taking place in the U.S., usually involving four members of the OR staff. The double-gloving trend stimulated a second burst in glove sales following an initial spurt in the ■ when the use of gloves to prevent disease transmission became more widespread. The spread of gloving to the blood lab and various exams also has contributed to growth in this market. As glove usage proliferated, new materials and powder-free versions have been developed to provide options for the ■% of people who suffer allergic reactions to latex.

New technological developments point to further progress in the fight against disease transmission. Announcement of a new fabric capable of blocking the spread of bacteria presents hope for the future, but the effectiveness of that fabric in confronting a variety of disease entities remains to be proven. Progress also is being made in the disposal of disposable surgical gowns and drapes. White Knight Healthcare, Inc. has produced a dissolvable drape, which could set a trend in eliminating the expense and necessity of landfill disposal of medical waste. The process involves placing the drape in water heated at ■° F. until dissolved completely. Objections to the product have centered on the cost, which ranges from ■% to ■% above the standard type of drape. Financial problems surrounding Isolysor Co., Inc. may hamper continuing development of its own product, but, given the potential of the dissolving process, it appears certain that others will take an interest in this area.