

# 2017 Sustainability Performance Update



## To our stakeholders

In just a few short years, we have transformed BD like no other time in our 120-year history. We have accelerated our momentum in our core solutions, we have integrated CareFusion to enhance the value we offer to our customers, and we reengineered our functional teams to leverage our scale and operate more efficiently and effectively. This groundwork has prepared the company for the integration of C. R. Bard Inc. (BARD), the next major milestone in our strategic transformation. Through all of this growth and change, one thing remains constant at BD—our unwavering commitment to doing what is right. We are guided by our core set of values that help ensure we don't put company results above company principles. This is one area that we will never change.

Throughout our transformation, our approach has been grounded in a deep focus and understanding of the role BD has in the healthcare ecosystem: we help the people who help the patients. That includes the caregivers, the laboratory professionals, the researchers and others in healthcare settings around the world who have direct responsibility for making patients better. They are our heroes. We support these heroes of healthcare by providing solutions, services, education and expertise so that they can provide the best care possible and develop the next generation of diagnostics and therapies. We help the healers. And we don't take that responsibility lightly.

I am pleased share with you the progress we are making toward our 2020 Sustainability Goals. These goals provide the framework for how we manage, and make an impact on, the most relevant social and environmental issues for our company. We remain focused on supporting priority health needs that are aligned with the U.N. Sustainable Development Goals (SDGs), and contribute to the SDGs through our collaboration with the public and nonprofit sectors across the four key areas that comprise our 2020 goals—innovation, access, efficiency and empowerment.

Innovation—The power of the "new" BD is seen in our new solutions. We no longer focus on just new products, but instead we determine how we can bring a suite of products and services to solve customer challenges. Everything starts with the customer. We are redefining medication management technologies to support hospitals and health systems to help make their process safer, smarter and simpler. For clinical laboratories looking for better ways to diagnose, we offer a comprehensive set of tools to support disease diagnosis and treatment. We are on the front lines of helping medical researchers develop a new generation of diagnostics and therapies through our expertise in bioscience and genomics. And we continue to invest in innovation, including new technologies under development to provide more advanced "wearable" drug delivery devices and diabetes disease management applications. As we integrate the BARD portfolio, we are broadening our solutions for infection prevention and control as well as medication management. In addition, the BARD portfolio will enable us to provide solutions for patients with peripheral artery disease and surgical issues, such as hernia repair.

**Access**—Developing the next generation of solutions for clinicians and researchers is just the beginning of our industry leadership. As we grow into one of the top five largest medical technology companies in the world, we are also leading in areas that are critical to the future of our industry and to society at large. This is evident in our approach to emerging worldwide health concerns, such as antimicrobial resistance (AMR), which current trends project could cause up to 10 million deaths annually by 2050, surpassing deaths currently caused by cancer. To combat AMR, we have mobilized our internal teams across the company's businesses, regions and functions to integrate our unique combination of expertise and solutions across infection prevention, diagnostics and surveillance. And we continue to work collaboratively with leading agencies and NGOs to strengthen health systems and improve access for vulnerable populations.

**Efficiency**—The health of our planet impacts the health of humans. We are steadfast in our commitment to take action and form partnerships to tackle environmental challenges, such as climate change and natural resource scarcity. We are taking measures to increase climate resilience and investing in renewable energy, and I'm proud to report that 98 percent of electric power used by our operations in the U.S. is obtained from renewable sources.

**Empowerment**—We profoundly respect that what we do is for the good of people, and that it starts with our associates. They reflect the communities in which we live and work, the customers and patients we serve, and our broad range of thought and experience. Furthering Inclusion & Diversity is a strategic imperative and helps us to drive innovation, better understand patient and customer needs and make BD the best possible place for all people to work. We also take seriously the role we play as leaders in the communities where we live and work. By giving our time, our talent and our resources through philanthropic and charitable efforts, we seek to improve global health standards and access to healthcare for all communities.

Fiscal 2017 was another transformative year for BD, and I am truly looking forward to what lies ahead. As much as BD has been able to affect positive change in healthcare for the past 120 years, we continue to strengthen our ability and leadership in our industry. With this leadership comes even greater responsibility. Our integration with BARD will bring a renewed look at our key sustainability issues and goals, and we will communicate more about how sustainability at BD will evolve in future reports. I am pleased to share our progress thus far and look forward to working with you—our stakeholders—as we advance the world of health.

Sincerely,

Vincent A. Forlenza
Chairman and Chief Executive Officer

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# About this performance update

This report provides an update of our global environmental, social and governance (ESG) performance against our 2020 goals during our fiscal year 2017 (October 1, 2016 to September 30, 2017) for Becton, Dickinson and Company (also known as "BD") and our subsidiaries, unless otherwise stated.

We report annually on our sustainability performance. Our last report, which highlighted progress made in Fiscal Year 2016, was published in May 2017.

In December 2017 BD acquired BARD, a leading multinational developer, manufacturer and marketer of innovative, life-enhancing medical technologies in the fields of vascular, urology, oncology and surgical specialty products. As this acquisition occurred in Fiscal Year 2018, this report does not reflect any data or information from BARD or their subsidiaries unless otherwise noted.

This report contains standard disclosures from the GRI Sustainability Reporting Guidelines. While this report is not intended to meet the requirements of the GRI Sustainability Reporting Guidelines, reference numbers for Standard Disclosures have been included where full or partial information has been provided.

Data in this report has not been externally assured.

Reporting and performance data includes information on our owned and operated facilities. We have processes in place to ensure that reporting on key sustainability performance indicators is as accurate and robust as possible, and we continually work to improve them.

On October 3, 2016, we completed the divestiture of the Respiratory Solutions business; therefore efficiency data has been restated accordingly. Further details of this divestiture can be found in our 2017 10-k filing.

In addition to providing an update to our performance against the 2020 sustainability goals and context around each goal, this report also includes details about key ESG factors relevant to our business.

We seek feedback from stakeholders each year, which informs our selection of content for sustainability reporting. Contact information can be found at the end of this report.

Our previous sustainability reports are available at **bd.com/ sustainability**.

GRI disclosure: 102-10, 102-48, 102-50, 102-51, 102-52, 102-53, 102-54, 102-56

## **About BD**

BD is one of the largest global medical technology companies in the world and is advancing the world of health by improving medical discovery, diagnostics and the delivery of care. We support the heroes on the frontlines of healthcare by developing innovative technology, services and solutions that help advance both clinical therapy for patients and clinical process for healthcare providers. Our 65,000¹ employees have a passion and commitment to help improve patient outcomes, improve the safety and efficiency of clinicians' care delivery process, enable laboratory scientists to better diagnose disease and advance researchers' capabilities to develop the next generation of diagnostics and therapeutics. BD has a presence in virtually every country and partners with organizations around the world to address some of the most challenging global health issues. By working in close collaboration with customers, we can help enhance outcomes, lower costs, increase efficiencies, improve safety and expand access to health care. In December 2017, BD welcomed BARD and its products into the BD family.

BD is engaged in the development, manufacture and sale of a broad range of medical supplies, devices, laboratory equipment

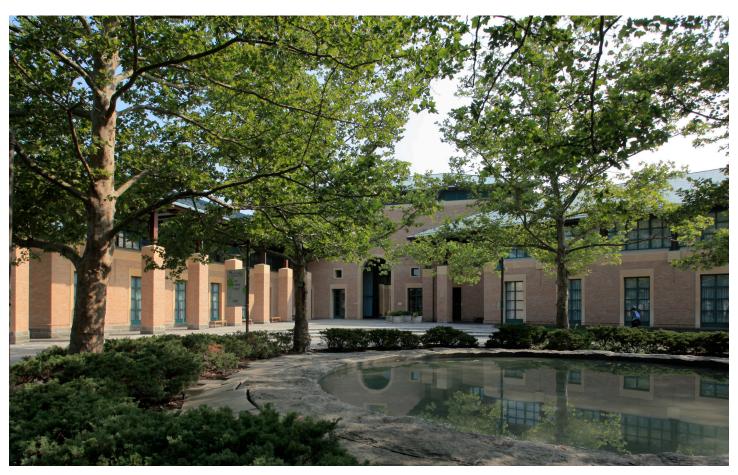
and diagnostic products used by healthcare institutions, life science researchers, clinical laboratories, the pharmaceutical industry and the general public. We provide customer solutions that are focused on improving medication management and patient safety, supporting infection prevention practices, equipping surgical and interventional procedures, improving drug delivery, aiding anesthesiology care, enhancing the diagnosis of infectious diseases and cancers, advancing cellular research and applications and supporting the management of diabetes.

For more information on BD (including our products and brands), please visit **bd.com**.

BD is headquartered in Franklin Lakes, NJ, and serves over 190 countries.

Further details about BD (including location of operations and direct economic impact generated and distributed) can be found in our 2017 10-k filing.

GRI disclosure: 102-1, 102-2, 102-3, 102-4, 102-5, 102-6, 102-7, 201-1



BD Corporate headquarters, Franklin Lakes, NJ.

1 This number includes BARD associates. BARD was acquired in December, 2017. In FY2017 the total number of associates was 47,750.

# Company structure

BD is structured to serve customers with unique solutions. The data below represents the company structure for FY2017.

102-6, 102-7



(billions of dollars)

\$6.5

\$2.6

Greater Asia

51.7

Other (Canada, Latin America, and EMA, which includes the Commonwealth of Independent States, Middle East and Africa)

\$1.3

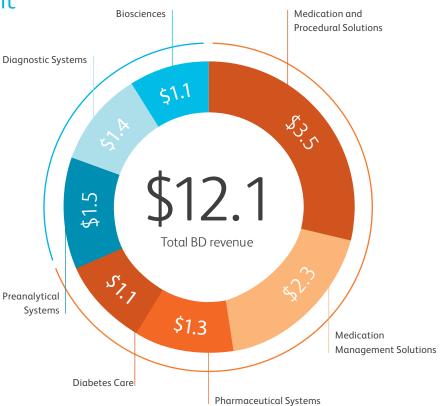


(billions of dollars)





Values in this exhibit reflect rounded numbers.



## How we do business

## Ethics and compliance

BD is committed to a strong ethics and compliance culture. We do not tolerate actions or behaviors that are inconsistent with the BD Values or violate the BD Code of Conduct or applicable laws and regulations. All BD associates are responsible for reinforcing our ethics and compliance culture and sustaining our reputation as a company dedicated to quality and integrity.

The BD Values define the core elements of our culture and guide how we hold ourselves accountable to our shareholders and stakeholders.

- We do what is right.
- We anticipate and address the challenges of patients and customers globally.
- We innovate and improve continuously.
- We respect, collaborate, challenge and care about each other.
- We take personal responsibility.

These values are cascaded through all levels of the organization.

Further information about our commitment to ethics and compliance can be found in our FY2016 report.

GRI disclosure: 102-16

# Code of conduct and training

The Code of Conduct defines and clarifies our expectations for legal and ethical behavior on the part of every associate—an obligation that is a condition of continued employment. It provides information and guidance about situations that BD associates may encounter in their day-to-day business dealings. It is available in English and 20 other languages.

Further information about our Code of Conduct and antibribery and anticorruption programs can be found in our FY2016 report.

Our Code of Conduct is available at **bd.com/investors/ corporate\_governance/** 

GRI disclosure: 102-16

## Reporting ethics concerns

BD associates are required to report any actual or suspected violation of the BD Code of Conduct, BD policies or BD ethical standards. Associates can report matters in a number of ways, including through the BD Ethics HelpLine, which is operated by an independent third party vendor. The HelpLine can be reached through a series of toll-free telephone numbers available 24/7 or a web-based reporting tool. All BD associates have access to the HelpLine and can submit reports in numerous native languages. BD also encourages associates to raise issues with their manager, another leader in their organization, or with the HR, Legal, or

Ethics and Compliance functions. Regardless of the outcome, associates are never penalized for bringing such matters to the Company's attention in good faith.

In FY2017, the Ethics Office received nearly 500 contacts from associates worldwide seeking guidance or reporting concerns. BD takes all contacts seriously, investigates concerns and takes action as appropriate. Depending on the findings, corrective action may be taken, including discipline up to and including termination of employment.

GRI disclosure: 102-17

# Interactions with healthcare professionals and government officials

BD engages with numerous healthcare professionals and government officials in order to deliver its medical technology solutions. In these engagements, BD complies with all applicable laws, regulations and industry codes, including the Foreign Corrupt Practices Act (FCPA) and other anticorruption laws. To help ensure compliance, BD has established various internal policies and processes and has adopted various

industry codes, including the Advanced Medical Technology Association (*AdvaMed*) Code of Ethics in the U.S. and MedTech Europe Code of Ethics. BD associates receive information and training about these codes in a number of ways, including periodic communications and online and in-person trainings at conferences and meetings.

## Human rights

At BD, we are committed to operating in a way that respects the human rights of all associates, as well as the people in our supply chains and the communities in which we operate. Our human rights policy recognizes that while governments have the primary responsibility to protect human rights, our activities have the potential to impact the human rights of individuals affected by our business. In all of our operations:

- We provide a safe and healthy workplace for our associates.
- We do not use child labor.
- We do not use forced, prison, indentured, bonded or involuntary labor.
- We prohibit discrimination in our hiring and employment practices.
- We prohibit physical abuse and harassment of associates, as well as the threat of either.
- We support the freedom of association and the rights of workers and employers to bargain collectively.

We believe that all people should be treated with dignity and respect and we are committed to conducting our business in a manner consistent with this principle. We comply with applicable employment and human rights laws and regulations wherever we have operations; we expect our suppliers to do the same.

To that end, BD maintains several policies that reflect our **Core Values**, which BD associates are expected to follow in all aspects of business, including dealings with suppliers, customers and other stakeholders. These include:

- BD Code of Conduct, which includes a section outlining our policy on human rights
- BD Expectations for Suppliers, our code of conduct designed for our thousands of suppliers

BD strives to continuously improve its programs to ensure compliance with applicable laws and high ethical standards to meet the expectations of our customers, shareholders, associates, communities and other stakeholders.

## Corporate governance

Details of our governance principles, Board composition and executive compensation can be found in our FY2016 Sustainability Report, the Corporate Governance website and in our **proxy statements**.

GRI disclosure: 102-18, 102-22, 102-23, 102-24, 102-25, 102-35

# Participation in the political process

BD engages in public policy advocacy through ongoing, constructive and transparent interactions with government officials, policymakers and stakeholder groups. Our participation in the political process, including lobbying and the BD PAC program, is governed with Board and Management Committee

oversight. All advocacy activities are directed toward furthering the Company's purpose of *advancing the world of health*, without regard to the personal political affiliations or views of any individual BD associates at any level across the organization.

# Public policy advocacy

We employ public policy professionals who work closely with our country and business leaders to make constructive contributions to policy discussions relevant to the Company and to the communities in which we operate. We leverage our diverse expertise, global reach and collaborations with healthcare professionals, patients and others to advance sound public policy.

In areas in which BD has deep experience, the Company develops public policy positions that guide our advocacy efforts

worldwide. We currently have a range of **Global Public Policy Positions**, available online.

We also engage in policy dialogue to advance regulatory and reimbursement frameworks that ensure the safety and efficacy of medical technologies while also enabling timely patient access to them. We promote sensible tax policies that enhance competitiveness and innovation. We also support policies and programs that advance biomedical research and seek to expand access to care for all people.

### U.S. lobbying expenditures

# \$110,756 Issue-based coalitions<sup>3</sup> \$456,920 BD associates \$256,454 Trade associations<sup>4</sup> \$1,546,787

# \$114,369 Issue-based coalitions<sup>3</sup> \$293,784 BD associates \$1,264,753 \$637,586



### Political contributions

The Company prohibits the use of corporate funds and assets to support U.S. federal or state candidates, political parties, ballot measures or referendum campaigns. Exceptions to this policy require approval by the CEO, General Counsel and a designated member of the Board of Directors Corporate Nominating and Governance Committee. To date, no exceptions have been sought or approved.

Certain conditions must also be met for any political contributions outside of the U.S.

### Political action committee: BD PAC

As permitted under U.S. law, the Company operates a political action committee. The BD PAC is a mechanism to enable eligible U.S. associates to voluntarily support candidates for elected office who share our perspectives and approaches to public policy issues. BD has not authorized the establishment of any political action committees operating on the state or local level. Contributions to the BD PAC are entirely voluntary and are governed by the BD PAC by-laws. BD provides administrative support to the PAC, as permitted under federal law.

Annual reporting of itemized PAC contributions, and any other corporate contributions that may be made, is available at: bd.com/investors/corporate\_governance/policy-positions.aspx.

Further details about the participation of BD in the political process, including oversight, accountability and transparency of this process, including reporting of violations, can be found in the document "Our Participation in the Political Process" at bd.com/investors/corporate\_governance.

- 2 Data represents calendar years
- 3 Issue-based coalitions: Diagnostic Test Working Group, Medical Device Competitiveness Coalition, Physicians Fee Schedule Pathology Payment Coalition, United for Medical Research

\$722,657

consultants

4 Trade associations: AdvaMed, Healthcare Institute of New Jersey, California Life Sciences Association, North Carolina Biosciences Organization

2016<sup>2</sup>



Solar panel installation in Suzhou, China.

# Sustainability strategy

Our sustainability strategy, governance and stakeholder engagement approach remain consistent with what was reported in our FY2016 report, available at **bd.com/sustainability**.

### Significant sustainability issues

When BD acquired CareFusion in 2015, we worked to refresh our understanding of the significant sustainability issues (also known as material sustainability issues) facing the Company. This exercise identified 16 key ESG issues (material financial issues are outlined in our 10-k document). Our 2020 Sustainability Goals were developed to guide our strategy in addressing many of the significant sustainability issues that were identified. While our 2020 goals do not map directly to each significant issue, our

approach to pursuing the goals considers all these factors. Our sustainability reporting includes our management approach to the topics most important to our stakeholders within each of the broad areas addressed by our 2020 goals, such as data security and talent attraction and retention. As we integrate BARD, we will once again evaluate our significant sustainability issues for future reporting.

Our significant sustainability issues are:



### Innovation

Data privacy and security

Informatics and innovation



### Access

Collaborations and partnerships

Value-based outcomes

Patient-centric care

Healthcare access and affordability



### **Efficiency**



### **Empowerment**

Planetary health

Sustainable supply chain

Product design and

lifecycle management

Energy and greenhouse gas (GHG) management

Waste

Water

0

Inclusion and diversity

Associate health and safety

Attraction and retention of talent

Transparent and ethical business practices

GRI disclosure: 102-47

### 2020 Sustainability Goals

Our sustainability strategy addresses the wide range of challenges in our industry while helping to make a difference on relevant issues that affect society and the planet. We also actively evaluate how we can mobilize and contribute to the achievement of the U.N. SDGs, through our product and service offerings, as well as collaborative efforts across various sectors—most prominently around SDG3, for good health and well-being.

We launched our 2020 Sustainability Goals in July 2015, reflecting a broader and more integrated agenda than previous years. In line with our significant sustainability issues, our

goals and programs are arranged around four strategic areas: innovation, access, efficiency and empowerment.

In our FY2016 Sustainability Report, we outlined alignment of our current strategy, core activities and 2020 Goal framework against the 17 SDGs and associated 169 targets. Our analysis reviewed the type of impact BD has on the SDG target, the location of impacts within the value chain, our degree of control and relevant ESG factors.

Case studies of how BD is supporting the SDGs are available at **bd.com/sustainability**.



Innovate key healthcare processes such as medication management and lab automation.

Develop innovations and informatics to enable disease management across the care continuum.

Enable the transition from research into clinical practice.

Provide solutions that improve healthcare worker and patient safety.



Develop low-cost innovations to address leading causes of mortality and morbidity.

Collaborate on health system strengthening with leading agencies and nongovernmental organizations (NGOs).

Further expand BD manufacturing, product array and employment in emerging countries.



Reduce GHG emissions and increase climate resilience throughout operations and value chain.

Minimize our environmental footprint and conserve natural resources.

Establish supplier responsibility evaluation methodology.

Eliminate priority materials of concern in specified product categories.

Improve life cycle impacts of current and future products.



Increase the diversity of our workforce, particularly in leadership roles.

Achieve best-in-class associate safety performance.

Partner with nonprofits to address unmet needs locally and globally.

Drive the social impact and associate engagement through volunteer programs.



# Innovation

# Healthcare safety, outcomes and cost

### Introduction

BD is focused on supporting healthcare systems by balancing four key priorities: increasing access, improving outcomes, mitigating healthcare system cost pressures and protecting patients and healthcare workers. We no longer focus just on new products, but instead we determine how we can bring a suite of products and services to solve customer challenges. Everything starts with the customer.

A sustainable innovation system needs investment, discipline and leadership to succeed. Our capabilities span ideation through market development. Along this continuum, we are increasing our impact through selective partnerships.

We think a broad definition of the term "innovation" is the best way to advance healthcare. Whether it is technology, processes, systems, partnerships or any dimension of business, we pioneer new, relevant ways to address healthcare's most pressing problems. Our technologies and execution capabilities allow BD to make a profound impact on the quality of care.

### **R&D** investments

We conduct our research and development (R&D) activities at our operating units and at BD Technologies in Research Triangle Park, North Carolina. The majority of our R&D activities are conducted in North America. Outside North America, we primarily conduct R&D activities in China, France, India, Ireland and Singapore. We also collaborate with certain universities, medical centers and other entities on R&D programs and retain individual consultants and partners to support our efforts in specialized fields.

Our innovations enable research insights inside and outside the body's cells, transform the infectious disease lab of the future and manage medication across a wide care continuum. In FY2017, BD launched numerous significant new products and solutions that are helping our customers deliver enhanced outcomes with greater safety and efficiency.

R&D expense (USD, millions)

FY11	FY12	FY13	FY14	FY15	FY16	FY17
470	472	494	550	632	828	774

### Innovation awards



**Analytics** 

For the third year in a row, BD was included the annual study by Clarivate Analytics to identify the world's Top 100 Global Innovators. The Clarivate Analytics 2017 Top 100 Global Innovators report

highlights the most successful organizations in the world that are active in innovation through research and development, protection of their intellectual property and the achievement of commercial success.

### Antimicrobial resistance

AMR is a threat of historic proportions to the health and wellbeing of the world's population. Current trends project that AMR could cause up to 10 million deaths annually by 2050. This would surpass annual deaths currently caused by cancer. and potentially setting back economic development across the globe as previously safe interventions become too dangerous to conduct.

Up until very recently, external focus on combating AMR has almost exclusively been on the need to strengthen the pipeline for new antibiotics. While still a primary focus, these perspectives are broadening with regard to the role of diagnostics.

Our relevance to combating AMR is broad and deep. No other company is positioned across so many intervention areas: infection prevention and control, diagnostics, medication preparation/dispensing/delivery, informatics and surveillance.



\$20 billion annually in the United States



# 🕅 Impactʻ

700,000 preventable deaths worldwide annually



# Projections

10 million deaths and more than \$1 trillion per year by 2050

Some bacteria are resistant to antibiotics



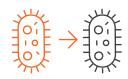
Antibiotics kill both good and bad bacteria



Drug-resistant bacteria survive and multiply



Drug-resistant bacteria become dominant and spread



Resistant bacteria pass between people



- 5 Centers for Disease Control and Prevention (CDC) Antibiotic resistance threats in the United States 2013. https://www.cdc.gov/drugresistance/threat-report-2013/index.html
- O'Neill J. Tackling drug-resistant infections globally: final report and recommendations. Rev Antimicrob Resist. May 19. 2016. https://amr-review.org/sites/default/files/160525\_Final%20paper\_
- O'Neill J. Antimicrobial resistance: tackling a crisis for the health and wealth of nations. Rev Antimicrob Resist. December 11, 2014. https://amr-review.org/sites/default/files/AMR%20Review%20 Paper%20-%20Tackling%20a%20crisis%20for%20the%20health%20and%20wealth%20of%20nations\_1.pdf

BD possesses a broad array of product solutions relevant to combating AMR and improving patient safety in multiple procedure categories:

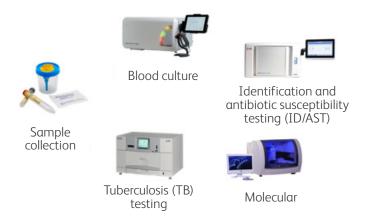
### Infection prevention

Prevention is a first line of defense against all infections, including antimicrobial-resistant organisms. Systematic infection prevention and control procedures reduce the incidence of hospital-acquired infections (HAIs) and reduce the need for antibiotics to treat infections. Our comprehensive product and service offerings help clinicians improve patient outcomes through the standardization of care and adherence to infection prevention best practices.



### Diagnostic testing

Precise identification of the presence and cause of infection is essential to determine appropriate drug therapy, enabling clinicians to implement effective antimicrobial interventions. Our diagnostic platforms reduce the risk of transmission of HAIs, promote fully informed prescribing decisions and enhance clinical outcomes by rapidly identifying major drugresistant threats.



### Medication management

Proper attention to medication management, formulary control and surveillance enables effective antimicrobial stewardship. Our offerings around medication preparation allow for the safe preparation, storage and distribution of medications; our medication administration products accurately deliver medications while helping protect patients from errors.







Dispensing



Infusion

### Surveillance and analytics

Surveillance systems monitor infection types and resistance trends, drive appropriate and judicious use of antimicrobials and support other critical components of effective antimicrobial stewardship and infection control. Our surveillance solutions help expand and foster an integrated antimicrobial stewardship program for pharmacists, physicians, microbiologists and infection preventionists.

To combat AMR, we have mobilized our internal teams across the Company's businesses, regions and functions to integrate our unique combination of expertise and solutions. We will continue to invest in the development of new product innovations designed to advance the capabilities of our customers in combating AMR.

### BD Phoenix™ CPO detect test

According to the U.S. Centers for Disease Control and Prevention (CDC), carbapenemase-producing organisms (CPO), specifically carbapenem-resistant Enterobacteriaceae (CRE), represent a prominent AMR threat to public health because these dangerous microbes may be resistant to nearly all available antibiotics. These organisms are also on the World Health Organization (WHO) priority pathogen list as critical threats to public health. Reported rates of mortality associated with certain CPO infections vary widely from 22 to 72 percent. When CPOs

are detected, rapid implementation of infection prevention measures can be implemented to prevent further transmission.

In FY2017 we launched\* the first automated phenotypic test to detect and classify CPOs. Available as part of the BD Phoenix™ automated microbiology system in Europe, the new BD Phoenix™ CPO detect test will help hospitals identify and contain infections caused by CPO, while potentially combating an increase in AMR.

For further information about AMR and our activities in this area, please visit **amr.bd.com**.



<sup>\*</sup>Currently available for sale outside the U.S. Product not available for sale in the U.S.

<sup>8</sup> Centers for Disease Control and Prevention (CDC). Antibiotic Resistance Threats in the United States, 2013. Atlanta: CDC; 2013.

<sup>9</sup> World Health Organization. Global Priority List of Antibiotic-Resistant Bacteria to Guide Research, Discovery, and Development of New Antibiotics. February 2017. http://www.who.int/medicines/publications/WHO-PPL-Short\_Summary\_25Feb-ET\_NM\_WHO.pdf?ua=1. Accessed May 14, 2018.

<sup>10</sup> Tumbarella M, et al. J Antimicrob Chemother. 2015;70: 2133-2143. doi: 10.1093/jac/dkv086

Innovate key healthcare processes such as medication management and lab automation

### 2017 performance highlights

# Medication management

# There is a **45%** chance for error in the medication administration process.

We are redefining medication management technologies to support hospitals and health systems to make their process safer, smarter and simpler.

Through the BD HealthSight™ platform for enterprise medication management, launched in 2017, we have introduced a new concept in the integration of technology, analytics and expert services that closes gaps and creates seamless visibility across BD medication management solutions, such as BD Pyxis™ dispensing and BD Alaris™ infusion solutions. The BD HealthSight™ platform optimizes the medication management process and helps improve efficiency, reduce waste and improve patient outcomes.

Also in 2017, BD introduced the Institute for Medication Management Excellence, developed to help advance the safe and efficient management of medication across the continuum of care. The new institute is uniquely designed to offer a collaborative environment for customers and industry thought leaders to engage in insightful research and best practices to directly impact patient safety. The goal of the Institute is to identify and support advancements in medication management to help improve the safety and cost of healthcare by

encouraging transformational ways of thinking, new methods, processes, guidelines and best practices to create a foundation for measurable improvements. It will initially be focused on three initiatives:

### • Opioid control and management

BD is collaborating with national healthcare organizations and health systems to address clinical and operational medication management and drug diversion issues in acute care settings to define and promote solutions that healthcare organizations can implement to address the rising opioid epidemic.

### • End-to-end IV safety

In collaboration with national experts and IV safety organizations, BD is working to improve comprehensive IV infusion safety through the entire process from initial compounding to administration at the patient's bedside.

### • Medication availability

BD is working with medication management experts to ensure that the right medication is available when and where needed to improve patient outcomes and cost efficiencies across the continuum of care.

Further details about the Institute can be found at bd.com/en-us/clinical-excellence/bd-institute-for-medication-management-excellence.



## Lab automation and efficiency

Increasing efficiency of the laboratory helps to reduce healthcare system costs by improving productivity and helping to deliver faster and more accurate diagnostic results. The improved accuracy and reliability of the result may lead to improved laboratory performance for patients. Through BD Kiestra $^{\text{TM}}$  lab automation solutions, we continue to automate clinical laboratories for maximum efficiency.

### BD Kiestra™ Digital Imaging Application—Urine Culture App

Every day, medical laboratory professionals spend a significant amount of time reviewing urine samples. Because up to 70 percent of these samples yield no growth or no significant growth, professionals devote more time to non value-added tasks rather than to complex patient samples that require expert analysis. In 2017, we announced new technology that can automatically report and release negative urine cultures.\* The BD Kiestra™ Urine Culture App, together with BD BBL™ plated media, uses digital imaging and software algorithms to determine the amount of growth on a urine culture plate from clean caught and catheterized samples. Using the BD Kiestra™ ReadA™ compact's intelligent incubation and imaging device with high-throughput robotics to perform time series imaging, plates with no significant growth can be automatically\* released for disposal and the results reported to the customer's

compatible laboratory information system. Plates with significant growth automatically go into a queue for analysis. The BD Kiestra™ Urine Culture App was validated in close collaboration with the University of Ljubljana (*Slovenia*) and the University of Heidelberg (*Germany*). For more information about BD Kiestra™ lab automation solutions, visit: bd.com/en-us/offerings/capabilities/lab-automation/.

For clinical laboratories looking for better ways to perform diagnostic tests to support clinicians with diagnosis and treatment, we offer a comprehensive set of tools. In 2017, we introduced a wide variety of new ID/AST diagnostics that can identify infectious diseases and provide antimicrobial susceptibility data to enable physicians to prescribe appropriate treatments.

### BD Phoenix™ M50 System

BD introduced the new BD Phoenix™ M50 automated microbiology system to deliver modularity, reliability, affordability and high-quality susceptibility results needed by clinical microbiology laboratories worldwide. The new BD Phoenix™ M50 ID/AST system helps deliver the same rapid, accurate and costeffective testing as the legacy BD Phoenix™ 100 system, within a smaller footprint. The system is highly reliable and requires no preventative maintenance, thanks to innovative materials and engineering techniques employed during its development.

In addition to being robust, the system offers multiple languages, facilitating even broader adoption in laboratories around the world.



<sup>\*</sup> Automatic release of results is not available for sale in the U.S.

### Develop innovations and informatics to enable disease management across the care continuum

Technology is advancing capabilities for how clinicians and patients manage disease across the care continuum. We work closely with healthcare systems to improve safety, costs and outcomes. We continue to invest in new technologies under development to provide more advanced "wearable" drug delivery devices and diabetes disease management applications. As we pursue new digital technologies, we are committed to providing secure products to our customers.

### 2017 performance highlights



## Secure by design

Products developed with security in mind with industry best practice



### Secure in use

Products secured and maintained across their lifetimes, multiple technologies and multiple sites, including end-of-life decisions



### Secure through partnership

A culture of transparency and collaboration with customers and industry stakeholders that offer better management security

# **Product security**

Our approach to product security is a three-prong strategy that considers security measures during design, when the product is in use and through partnership with healthcare providers, government and the cybersecurity industry.

Our framework provides

- Transparency: providing proactive communication around cybersecurity as it relates to our products
- Control: the ability to meet different security needs in different environments

We continue to pursue various activities that will improve security throughout the product lifecycle, including:

- Adopting secure coding standards
- Performing vulnerability scanning, product security requirement risk assessments and robustness as well as penetration testing
- Generating customer communications including product security white papers in partnership with government organizations

In May 2017, WannaCry ransomware impacted healthcare systems around the world. BD was able to rapidly notify customers and validate protection measures due to a well-planned process and a tight cross-functional partnership.

The Product Security Incident Response Team organized and coordinated cross-functional task forces to ensure BD had a response and remediation that was promptly communicated to customers and other external organizations. BD was one of only three companies in the critical infrastructure industry recognized in the initial advisory from the U.S. Department of Homeland Security ICS-CERT as having a proactive, public notification for customers with recommendations in response to this ransomware event.

For more information about our product security efforts, visit **bd.com/ProductSecurity**. Future collaborators for product-related privacy or security initiatives are encouraged to contact BD at **productsecurity@bd.com**.

### Enable the transition from research into clinical practice

We are on the front lines of helping medical researchers develop a new generation of diagnostics and therapies through our expertise in bioscience and genomics. As immunotherapy research continues to expand, the ability to isolate and characterize individual cells becomes exponentially more important, and BD is a recognized leader in cell sorting applications. This is an area where we will continue to lead.

### 2017 performance highlights

### BD Rhapsody™ Platform

The new BD Rhapsody™ platform is a complete system of reagents, instruments and software for targeted gene expression in single-cell analysis with the ability to detect rare molecules that researchers use to study whether the presence of these biological markers are indicative of disease.

These new products build on our 40-year history of providing solutions for single cells using flow cytometry. With the

BD Rhapsody<sup>™</sup> system, researchers are able to easily discover both the gene expression and protein markers that more completely identify their cell population of interest. More information on the BD Rhapsody<sup>™</sup> system and the new BD<sup>™</sup> single-cell multiplexing assays is available at bd.com/Rhapsody.

### BD FACSLyric™ Flow Cytometer System

In FY2017, we received 510(k) clearance from the U.S. Food and Drug Administration (FDA) for the BD FACSLyric<sup>™</sup> flow cytometer system, an easy-to-use in vitro diagnostic (IVD) system, for use with BD Multitest<sup>™</sup> assays for immunological assessment of individuals and patients having or suspected of having immune deficiency. The BD FACSLyric<sup>™</sup> system strengthens our portfolio

of clinical flow cytometry solutions available in the U.S. The system was CE marked to the EU IVD Directive the previous year. The new flow cytometer system combines a benchtop-sized instrument with software, reagents and services to provide clinicians and scientists with accurate, reliable and repeatable results. For more information, visit bdbiosciences.com.

### BD™ Precise WTA Reagents

BD™ precise whole transcriptome analysis (WTA) reagents provide an easier method to identify and quantify genetic information in individual cells for genomics-based research. The process of WTA is typically used by researchers in the discovery phase to determine if an under- or overexpression of certain genes is indicative of a specific set of physical characteristics or phenotype. Being able to quantify RNA molecules that comprise

genes is a critical early-stage process to determine what makes healthy cells different from diseased cells, for example, or to gain a greater understanding of the underlying causes of cell differentiation. Highly accurate quantification of RNA allows researchers to investigate biological questions from diseases like cancer to stem cell development.

2020 goal

### Provide solutions that improve healthcare worker and patient safety.

Hospitals and clinics pose an inherently risky environment because of the high percentage of patients with communicable diseases. With the increase in AMR, the need for infection prevention and control in the healthcare environment is paramount, in addition to protecting healthcare workers from needlestick injuries and exposure to hazardous drugs.

About 90% of hospital inpatients receive a peripheral IV, and those IVs have a 35% to 50% failure rate

We are tackling IV-related complications associated with vascular access management through our Vascular Access Management program, a uniquely integrated approach that combines clinical practice assessments, a comprehensive portfolio of products, expert clinical training and education to help hospitals reduce unnecessary complications. When they all work together, we can drive better outcomes. It's a new way to increase quality of care for the most invasive procedures.

For more information about BD Vascular Access Management, please visit **go.bd.com/vascular-access-management.html**.

### 2017 performance highlights

### Progress toward injection safety in South Africa

The spread of infection and disease is opportunistic in nature, and those who routinely come into contact with these hazards must protect themselves by employing sound practices and tools designed to reduce such risks. In March 2017, BD hosted 120 representatives of private hospital groups, public sector health departments, pathology services, health science faculties at universities, research bodies and professional groups who participated in the Fourth Healthcare Worker Safety Summit, held in Johannesburg, South Africa. The attending healthcare professionals gained insight on such topics as Options for Improving Injection Safety, WHO Guidelines and Advancing the Culture of Safety.

South African healthcare workers fall into a high-risk category from needlestick injury and infection from blood-borne pathogens. Currently, there is no standardized approach to protecting healthcare workers in the country from needlestick injuries. Yet, the extent of needlestick injuries in South Africa is such that better strategies to improve the safety of healthcare workers have become necessary.

In the United States, BD played a key role in helping advance legislation to secure the safety of all who are involved with sharp instruments. We continue to advocate for similar national guidelines in many parts of the world, supporting use of safety engineered devices in conjunction with education, training, surveillance and capacity building.



BD offers a number of sharps products, including hypodermic needles and syringes, infusion sets, anesthesia and pharmaceutical drug delivery systems and diabetes care products. BD has produced many of these products for most of its history and is a pioneer and leader in developing products that protect healthcare workers from needlestick injuries and exposure to blood-borne pathogens. The Global Public Policy Position on Preventing Sharps Injuries and Other Blood Exposures can be found at <a href="mailto:bd.com/investors/corporate\_governance/policy-positions.aspx">bd.com/investors/corporate\_governance/policy-positions.aspx</a>.



# Access

# Healthcare in resource-limited populations

### Introduction

BD believes in the vision of a world free of disease and needless suffering. We think healthcare is so fundamental it can create more productive, educated and equitable societies.

BD Global Health works to expand access and drive capacity building through partnerships with leading organizations and governments. We engage in advocacy with funders and international health agencies to advance innovations around the world to address the world's leading public health needs, which are highly aligned with the U.N. SDGs.

The business model for emerging markets encourages our country leaders to understand the health system priorities in their country and engage with key opinion leaders responsible for health policies and practices. This enables BD to engage at earlier stages in the healthcare decision-making process and adapt our strategic plans for product array, manufacturing and talent accordingly.

### Antimicrobial resistance

AMR is a natural phenomenon and the threat of resistance to antibiotics by pathogens causing infectious diseases in humans has been recognized for decades. However, true global mobilization to address this threat is just starting, catalyzed by the U.K.-based *Review on Antimicrobial Resistance* reports and

the 2016 U.N. General Assembly high-level meeting on AMR. Beyond our technical and product relevance (outlined in the Innovation section of this report), our considerable experience and skills in global mobilization, cross-sector collaboration, education and training are highly relevant.



### Our approach

**Engage:** We are developing relationships with external AMR leaders to partner on initiatives and gain insight on how to most effectively manifest the Company's capabilities to combat AMR.

**Advocate:** We are aligning public policy activities to increase government and regulatory agency focus on factors that inhibit or enable progress on AMR, and will actively pursue policy change initiatives accordingly. Some of our advocacy initiatives include:

- Advocating for increased U.S. CDC funding through the Association for Professionals in Infection Control and Epidemiology (APIC) and Friends of CDC
- Engaging with the U.S. FDA to advocate for reduced time-tomarket for AST innovations
- Partnering with the Global Sepsis Alliance to elevate sepsis as an AMR issue at the EU Commission
- Supporting development of a HAI and AMR surveillance network with the Canadian Network for Antimicrobial Resistance

**Mobilize:** We have developed and launched a global openarchitecture, noncommercial AMR advocacy and coalition-building campaign to raise awareness and mobilize key constituency groups under a unified framework and approach.

**Research and educate:** We are establishing AMR research, education and training initiatives in collaboration with leading institutions that demonstrate the impact, value and economic outcomes of diagnostic and infection prevention interventions.

Our Global Health function is collaborating with the London School of Hygiene & Tropical Medicine (LSHTM) to develop an education program on the Role of Diagnostics in the AMR Response. An external advisory panel has been established with representatives from organizations such as the India Council of Medical Research, Stellenbosch University, Foundation for Innovative New Diagnostics (FIND), and Africa CDC and includes a representative from WHO who participates as an observer. This training will be made available to health workers and policymakers globally through a massive open on-line course (MOOC) platform.





We have taken on the challenge of raising global awareness and mobilization to combat AMR more broadly, through the development and launch of the I Am A Resistance Fighter $^{\text{TM}}$  communications campaign.

Launched in 2017 in Washington, DC during Antibiotic Awareness Week, the Antimicrobial Resistance Fighter campaign is comprised of two main components. The first describes the roles of various clinicians on how they are combating AMR through their dedication and professional responsibilities. The second tells "real stories;" personal testimony of leaders, clinicians, organizations and patients of how they are fighting (or how they survived) AMR. The Antimicrobial Resistance Fighter campaign was launched simultaneously in several global locations.

Halting and reversing the massive challenges associated with AMR will require the combined resources and efforts of both public and private sectors. There is no single solution, and the challenges cannot be solved without multiple players working collectively on a common AMR agenda. For more on BD efforts to address AMR, visit amr.bd.com.

### Develop low-cost innovations to address leading causes of mortality and morbidity

### 2017 performance highlights

### Point of care testing for fever patients—partnership with FIND

Our joint initiative with FIND seeks to create a paradigm shift in how fevers are managed in low- and middle-income countries (LMICs), which is key to curbing the spread of AMR. Fever due to viral, parasitic or bacterial infection is one of the most common symptoms of patients seeking care in low-resource settings. Research has shown that these patients are often prescribed antibiotics, which are not appropriate for nonsevere viral infections. This is largely because clinicians do not have simple, affordable tests that can rapidly identify whether the cause of the fever is bacterial. In turn, this overuse of antibiotics drives the rise of drug resistance.

As part of the joint initiative, BD intends to provide an accessible bacterial versus viral test on its existing BD Veritor™ point of care system. BD will work to develop an assay that will detect immunological biomarkers from blood via a very simple and easy testing workflow. The combination of several host biomarkers has proven to increase the sensitivity and specificity in the diagnosis of bacterial infections. In parallel, BD will also work on the adaptation of the platform to allow the use of fingerstick whole blood, an important criterion to enable use in low-resource settings.

2020 goal

### Collaborate on health system strengthening with leading agencies and NGOs.

BD Global Health leads broad areas of partnerships with leading health agencies, government and NGOs to strengthen health systems and improve clinical practice around the world.

### 2017 performance highlights

### BD Global Health—FIND partnership on TB



Each year, about 1.8 million people die from TB, which is a curable disease. Although there are no simple solutions to the challenges TB brings to developing nations, BD Global Health deploys a strategic combination of

resources and technologies aimed at making a positive and sustainable impact.

To make high-quality TB diagnosis accessible, especially to HIV-positive patients, BD, FIND, Stop TB Partnership and the United Nations Development Program (UNDP) expanded their collaboration to increase access to critical technology across 85 countries for improved TB diagnosis and drug susceptibility testing (DST). This agreement offers access pricing to high-need, low-resource settings.

BD and FIND are also supporting the national TB reference labs in Kenya and Ethiopia to reach accreditation and scale up universal DST. Kenya and Ethiopia are among the 30 countries with the highest rates of TB, TB/HIV coinfection and multidrugresistant (MDR) TB.

Leveraging a successful public-private partnership (PPP) model to expand capacity for second-line (SL) DST in two high-burden countries—**Kenya** and **Ethiopia**—through gap assessment, training and mentorships

### Ethiopia

**Only 45**% of total notified TB cases were tested for rifampicin resistance (*RR*; *FL DST*)

4%

of the lab-confirmed MDR/RR TB cases were tested for SL resistance

### Kenya

**only 27**% of total notified TB cases were tested for RR (FL DST)

63%

of the lab-confirmed MDR/RR TB cases were tested for SL resistance

Source: World TB Report

<sup>11</sup> Dittrich S, Tadesse BT, Moussy F, Chua A, Zorzet A, Tängdén T, et al. Target product profile for a diagnostic assay to differentiate between bacterial and non-bacterial infections and reduce antimicrobial overuse in resource-limited settings: an expert consensus. PLoS ONE. 11(8):e0161721. doi:10.1371/journal.pone.0161721.

### BD USAID partnership on TB

In 2017, BD entered into an agreement with the United States Agency for International Development (USAID) to address



drug-resistant TB patients in select high-burden countries. The agreement includes increasing access to existing and new diagnostic technologies and launching an awareness campaign to promote adherence to high-quality testing. This partnership, called STRIDES (Strengthening TB Resistance Testing and Diagnostic Systems to End MDR-TB) builds on our previous partnership with USAID, which began in 2014, to strengthen labs in order to improve national capacity for TB testing in Indonesia.

### **STRIDES**:

Strengthening TB Resistance Testing and Diagnostic Systems to End MDR-TB Partnership in Ohigh-priority TB countries through gap assessment, training and mentorships: Indonesia, Kazakhstan, Philippines, Burma, India, China, Pakistan, Ukraine, Nigeria, South Africa

On average in these 10 countries, 50% of lab-confirmed RR/MDR TB samples are not tested for SL resistance. Source: USAID

### BD PEPFAR and CDC public-private partnerships

BD Global Health has established a series of partnerships with PEPFAR (*The U.S. President's Emergency Plan for AIDS Relief*) and the U.S. CDC that include strengthening laboratory

system and upgrading clinical practices in phlebotomy, infusion and injection.

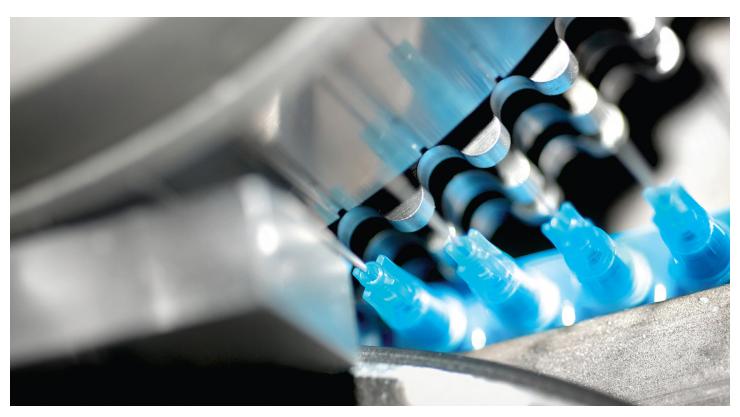
**Labs for Life:** Our flagship partnership that spans a decade focuses on building strong laboratories with quality systems compliant to ISO 15189. Quality lab systems are relevant

in the HIV care continuum but also relevant to the Global Health Security Agenda, a growing partnership established by leading governments to help build countries' capacity to help create a world safe and secure from infectious disease threats and elevate global health security as a national and global priority.

Countries included in this partnership are Kenya, Ethiopia, Uganda, Mozambique and India.

**Best Practices in Phlebotomy:** The preanalytical phase is often decisive of the quality and correctness in lab analyses. To address this, BD rolled out phlebotomy training in 10 states in India for 150 clinicians as well as a train-the-trainer program for 90 master trainers.

BD continued its collaboration to improve practices for infection prevention and control by providing training on safe injection, infusion and phlebotomy practices in Cambodia. In 2017 BD completed its baseline assessment with over 100 observations and rolled out a train-the-trainer program where 35 master trainers were provided with in-depth education by BD.



### Further expand BD manufacturing, product array and employment in emerging countries

### 2017 performance highlights

Emerging markets continue to be a key growth driver for BD. Our momentum in China and the broader emerging markets is reflected in our strong fiscal 2017 performance in both segments.

We will continue to pursue growth opportunities in emerging markets, which include the following geographic regions: Eastern Europe, the Middle East, Africa, Latin America and certain countries within Asia Pacific. We are primarily focused on certain countries whose healthcare systems are expanding, in particular, China and India.

Emerging market revenues were \$1.95 billion, \$1.9 billion and \$1.8 billion in 2017, 2016 and 2015, respectively. Emerging market revenue growth in 2017 was driven by sales in Greater Asia, including China, and Latin America.



### Product highlight: reinventing BD Venflon™ I Cannula in India



BD identified a significant opportunity in India after researching consumers' unmet needs: a lack of "first-stick success," i.e., difficulty in catheter insertion on the first attempt, causing distress to patients.

Our R&D, manufacturing and business teams in the country worked closely to develop a solution that led to the creation

of the BD Venflon™ I IV cannula with BD Instaflash™ needle technology. Among other modifications, the cannula loading system lube process technology was improved at the BD plant in Bawal, India during this project. This work resulted in a significant decrease in catheter penetration force, which substantially enhanced customer perception of the product, resulting in users reporting enhanced catheter performance.



# Efficiency

# Environmentally sound products and resilient operations

### Introduction

BD aims to set the pace for improving healthcare everywhere we do business. We accept the accountabilities inherent in leadership, especially in reducing the impact on the environment across our value chain. We also believe partnerships inspire ideas and breakthroughs. This ability to partner more closely with suppliers, customers and peers helps us address some of the world's most pressing environmental issues more broadly than we could on our own.

## Status of performance against 2020 goals

In FY2017 BD continued to make progress towards our 2020 efficiency goals.

### **Emissions**



### 2020 goal

Reduce Scope 1 & 2 GHG emissions by 50%

Current status FY17
Reduced by 69%

### 2020 goal

Reduce volatile organic compound (VOC) and hazardous air pollution (HAP) emissions by 65%

Current status FY17
Reduced by 28%

### 2020 goal

Reduce ozone-depleting substance emissions by 95%

Current status FY17
Reduced by 55%

### **Energy**



### **2020** goal

Increase use of renewable energy to 50% of total energy

Current status FY17 45% of total energy

### 2020 goal

Reduce energy consumption by 40%

Current status FY17
Reduced by 20%

### Waste



### 2020 goal

Reduce total waste by 50%

Current status FY17 Reduced by 30%

### 2020 goal

Increase recycling rate to over 70%

Current status FY17
Increased to 66%

### 2020 goal

Reduce hazardous waste by more than 60%

Current status FY17
Reduced by 56%

### Landfill diversion



### 2020 goal

Increase diversion rate to over 85%

Current status FY17
Increased to 79%

# Water consumption



### 2020 goal

Reduce water consumption by 40%

Current status FY17 Reduced by 35% Our environmental performance has a direct and indirect impact on human health. Climate change and population growth are placing great demands on natural resources and presenting new challenges to our business and operations.

To ensure continuous improvement of environmental performance at a facility level, BD continues to implement ISO 14001-certified environmental management systems at our manufacturing sites around the world. In FY2017, 7 new sites were certified, bringing our total to 30 certified sites—most of which are manufacturing locations.

The acquisition of BARD in December 2017 (Q1 of our fiscal year 2018) will need to be accounted for in our sustainability data, goals and reporting going forward. We are currently working to collect and integrate BARD's environmental data with our current Company data and anticipate updating our sustainability strategy and re-examining specific sustainability initiatives over the next year as we better understand the impact of the combined companies.

2020 goal

Reduce GHG emissions and increase climate resilience throughout operations and value chain.

### FY2017 performance highlights

### **GHG** emissions

While we continue to exceed our 2020 target, Scope 1 emissions increased slightly this year due to increased production at many of our facilities. The rise in normalized Scope 1 emissions can also be attributed to the decrease in Cost of Production (COPS) in FY2017.

Measurement and UOM	FY08 baseline	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
GHG emissions—Scope 1 and 2										
Scope 1 absolute (metric tonnes CO <sub>2</sub> -e)	86,194	87,220	88,198	81,963	80,276	76,128	73,254	73,025	73,750	87,638
Scope 1 normalized (metric tonnes CO <sub>2</sub> -e per \$M COPS)	18	18	17	15	15	13	12	13	11	14
Scope 2 absolute (metric tonnes CO <sub>2</sub> -e)	460,855	430,191	357,853	337,134	281,094	240,050	217,220	185,255	165,628	133,386
Scope 2 normalized (metric tonnes CO <sub>2</sub> -e per \$M COPS)	97	91	70	63	51	43	36	33	26	22
Total absolute (metric tonnes CO₂-e)	547,048	517,411	446,051	419,098	361,370	316,178	290,474	258,281	239,378	221,024
Total normalized (metric tonnes CO <sub>2</sub> -e per \$M COPS)	115	109	87	79	65	56	48	46	37	36

2020 Goal: reduce Scope 1 and 2 GHG emissions by 50% (normalized by COPS). Current status: reduced by 69%

Data represents Scope 1 (direct) and Scope 2 (indirect from electricity) energy sources. Data has been restated for previous years to align with data previously reported to CDP and to include data not previously reported.

**UPDATE**. This report was first published in July 2018. Subsequent to publication, RECS were reallocated, which required Scope 2 emissions to be recalculated. As the resulting reduction was significant this data was restated and this report republished in August 2018. This ensured consistency across other public disclosures platforms such as CDP.

Measurement and UOM	FY16	FY17
GHG emissions—Scope 3 (absolute, metric tonnes Co <sub>2</sub> -e)		
Purchased goods and services	966,282	1,069,505
Capital goods	42,728	37,691
Fuel- and-energy-related activities (not included in Scope 1 or 2)	39,222	33,976
Upstream transportation and distribution	72,640	125,904
Waste generated in operations	9,641	9,996
Business travel	86,583	108,937
Employee commuting	102,232	73,195
Upstream leased assets	27,094	47,011
Downstream transportation and distribution	Not relevant <sup>12</sup>	Not relevant <sup>12</sup>
Processing of sold products	Not relevant <sup>12</sup>	Not relevant <sup>12</sup>
Use of sold products	263,924	298,638
End-of-life treatment of sold products	87,558	97,082
Downstream leased assets	Not relevant <sup>12</sup>	Not relevant <sup>12</sup>
Franchises	Not relevant <sup>12</sup>	Not relevant <sup>12</sup>
Investments	Not relevant <sup>12</sup>	Not relevant <sup>12</sup>

**2020 Goal**: establish Scope 3 GHG emission baselines for categories applicable to BD. Current status: we provided limited reporting of Scope 3 emissions in previous years and in FY2017 we worked with external partners to establish baseline Scope 3 emissions across all categories. This information will be used to inform future strategy.

2020 Goal: initiate climate resilience planning for BD facilities. Current status: as the devastating hurricanes across the U.S. in 2017 demonstrated, resilience planning for extreme weather events is essential to ensure operations are restored as quickly as possible.

Work is underway to deepen our understanding of potential risks to our supply chain and operations, to ensure potential impacts are mitigated or reduced.

Data has been restated for previous years to align with data previously reported to CDP and to include data not previously reported.

<sup>12</sup> Relevance based on 1% threshold relative to total Scope 3 emissions inventory. Determined this category to be not relevant to the Company's business activities and did not estimate the associated GHG emissions.

### Minimize our environmental footprint and conserve natural resources

### FY2017 performance highlights

BD continued investing in sustainability projects at our sites through our Sustainability Capital Fund, to reduce impacts across our operations. We invested \$7.5 million in these standalone or incremental sustainability projects across the company in FY2017 that related to topics such as energy efficiency, water and waste.

In FY2017 a new cogeneration facility came online at our Fraga, Spain facility and we made upgrades to our fuel cell energy storage in San Jose, California. We also put two major solar installation projects in motion, to be completed in FY2018.

### **Energy**

Energy consumption increased slightly this year due to increased production at a number of our facilities. The rise in normalized energy consumption can also be attributed to the decrease in COPS in FY2017.

In addition to ongoing activities to reduce energy consumption, activities related to the integration of BARD may also provide additional opportunities to decrease consumption.

However, we are continuing a strategy to increase our use of renewable energy. Currently, 66% of our electric power comes from renewable sources, including on-site generation and purchase of electricity from renewable sources. We purchased Renewable Energy Credits (RECs) to offset 54% of our electricity consumption.

Measurement and UOM	FY08 baseline	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17						
Total energy consumption																
Scope 1 absolute (GJ)	1,610,916	1,635,016	1,648,438	1,534,350	1,494,580	1,363,814	1,378,609	1,375,187	1,390,406	1,676,696						
Scope 1 normalized (GJ per \$M COPS)	339	345	322	288	270	242	227	246	214	273						
Scope 2 absolute (GJ)	3,445,523	3,406,785	3,494,911	3,546,672	3,519,153	3,567,825	3,636,093	3,588,752	3,636,086	3,540,100						
Scope 2 normalized (GJ per \$M COPS)	725	719	684	666	637	632	598	642	560	576						
Total absolute (GJ)	5,056,439	5,041,801	5,143,348	5,081,022	5,013,733	4,931,639	5,014,702	4,963,939	5,026,492	5,216,796						
	1,064	1.064	1,006	954	907	874	825	888	774	848						
Total normalized (GJ per \$M COPS)	1,004	.,					2020 Goal: reduce energy consumption by 40% (normalized by COPS). Current status: reduced by 20%									
. ,	tion by 40%		<i>by COPS</i> ). Cu	rrent status:	reduced by 2	0%										
2020 Goal: reduce energy consumpt	tion by 40%		752,176	935,030	reduced by 2		1,625,438	1,876,135	2,129,442	2,345,583						
2020 Goal: reduce energy consumpt Renewable energy (RECs, green po	tion by 40%  wer)  124,362	(normalized l				1,507,088		1,876,135 4,963,939	2,129,442 5,026,492							
2020 Goal: reduce energy consumpt  Renewable energy (RECs, green po  Volume of renewable energy (GJ)  Total volume of energy (GJ)—	tion by 40%  wer)  124,362	(normalized l	752,176	935,030	1,238,761	1,507,088										
2020 Goal: reduce energy consumpt  Renewable energy (RECs, green po  Volume of renewable energy (GJ)  Total volume of energy (GJ)—  all sources	wer) 124,362 5,056,439 2%	294,888 5,041,801 6%	752,176 5,143,348 15%	935,030 5,081,022 18%	1,238,761 5,013,733 25%	1,507,088 4,931,639 31%	5,014,702	4,963,939	5,026,492	5,216,796						
2020 Goal: reduce energy consumpt  Renewable energy (RECs, green po  Volume of renewable energy (GJ)  Total volume of energy (GJ)— all sources  % renewable—total energy	wer) 124,362 5,056,439 2%	294,888 5,041,801 6%	752,176 5,143,348 15%	935,030 5,081,022 18%	1,238,761 5,013,733 25%	1,507,088 4,931,639 31%	5,014,702	4,963,939	5,026,492	5,216,796						

Water

We continue to decrease water consumption through various projects in addition to ongoing water conservation efforts.

Measurement and UOM	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
	baseline									
Water consumption										
Absolute (cubic meters)	5,166,218	4,633,822	4,146,827	4,177,392	4,277,970	4,377,008	4,658,691	4,841,662	4,805,927	4,326,601
Normalized (cubic meters per \$M COPS)	1,087	978	811	784	774	776	766	867	740	703
2020 Goal: reduce water consur	nption by 40%	(normalized	by COPS). Cι	ırrent status:	reduced by 3	35%				
Waste water discharge										
Absolute (cubic meters)	3,895,334	3,557,305	2,943,553	2,972,861	3,092,529	3,241,568	3,581,564	3,491,499	3,493,249	3,245,679
Normalized (cubic meters per \$M COPS)	820	750	576	558	560	575	589	625	538	528
% discharge	75%	77%	71%	71%	72%	74%	77%	72%	73%	75%

### Case study: Bawal water reduction

Water shortages pose a serious threat to human health globally. With increasing calls for reduced groundwater extraction, the BD—Bawal (*India*) plant developed a project to reduce its total water consumption. The manufacturing facility implemented a campaign called "Blitz on Water Conservation" in July 2017. Several simple steps were implemented to ensure that the plant met its sustainability objective of reducing water consumption.

Taps and wash basins were modified, leakages in storage tanks were remediated, and industrial reverse osmosis plant water was recycled. This concerted effort by associates around the site to consistently reduce led to a 25% reduction in water usage in the program's first year.

### Waste

Despite the increase in production at a number of our facilities in FY2017, we continued to decrease the amount of nonhazardous and hazardous waste generated. However, the proportion of waste that could be recycled fell slightly this year for a variety of reasons. For example, certain materials were no longer accepted

by our recycling vendors; additionally a number of facilities introduced new production processes. In both instances this necessitated disposal via landfill. We will continue to pursue opportunities to recycle waste streams and reduce the overall generation of waste.

Measurement and UOM	FY08 baseline	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
Total nonhazardous waste generated										
Absolute (metric tonnes)	50,882	47,610	48,929	49,105	47,764	46,800	45,078	44,176	49,805	46,418
Normalized (metric tonnes per \$M COPS)	10.71	10.04	9.57	9.22	8.64	8.30	7.42	7.91	7.67	7.55
2020 Goal: reduce total waste by 50% (normalized by COPS). Current status: reduced by 30%										
Nonhazardous waste landfilled										
Absolute (metric tonnes)	24,107	23,707	19,913	15,545	13,356	12,267	9,363	8,229	9,654	9,770
Normalized (metric tonnes per \$M COPS)	5.07	5.00	3.90	2.92	2.42	2.17	1.54	1.47	1.49	1.59
% landfilled	47%	50%	41%	32%	28%	26%	21%	19%	19%	21%
% diversion	53%	50%	59%	68%	72%	74%	79%	81%	81%	79%
2020 Goal: increase diversion rate by over 85	5% (absolute d	ıs % of tota	l nonhazard	dous waste)	. Current sto	atus: increas	sed by <b>79</b> %			
Nonhazardous waste incinerated										
Absolute (metric tonnes)	5,096	3,226	3,228	3,198	2,998	4,156	4,231	3,550	5,973	6,009
Absolute (metric tonnes)  Normalized (metric tonnes per \$M COPS)	5,096	3,226 0.68	3,228 0.63	3,198	2,998 0.54	4,156 0.74	4,231 0.70	3,550 0.64	5,973 0.92	6,009
Normalized (metric tonnes per \$M COPS)				· · · · · · · · · · · · · · · · · · ·						
Normalized (metric tonnes per \$M COPS) % incinerated	1.07	0.68	0.63	0.60	0.54	0.74	0.70	0.64	0.92	0.98
Normalized (metric tonnes per \$M COPS)  % incinerated  Nonhazardous waste recycled	1.07	0.68	0.63	0.60	0.54	0.74	0.70	0.64	0.92	0.98
	1.07	0.68	0.63	0.60	0.54	0.74	9%	0.64	0.92	0.98
Normalized (metric tonnes per \$M COPS) % incinerated  Nonhazardous waste recycled Absolute (metric tonnes)  Normalized (metric tonnes per \$M COPS)	1.07	0.68 7% 20,677	0.63 7% 25,788	0.60 7% 30,362	0.54	0.74 9% 30,377	0.70 9% 31,485	0.64 8% 32,380	0.92	0.98
Normalized (metric tonnes per \$M COPS)  % incinerated  Nonhazardous waste recycled  Absolute (metric tonnes)  Normalized (metric tonnes per \$M COPS)  % recycled	1.07 10% 21,678 4.56 43%	0.68 7% 20,677 4.36 43%	0.63 7% 25,788 5.04 53%	0.60 7% 30,362 5.70 62%	0.54 6% 31,409 5.68 66%	0.74 9% 30,377 5.38 65%	0.70 9% 31,485 5.18 70%	0.64 8% 32,380 5.80 73%	0.92 12% 34,189 5.27	0.98 13% 30,639 4.98
Normalized (metric tonnes per \$M COPS) % incinerated Nonhazardous waste recycled Absolute (metric tonnes)	1.07 10% 21,678 4.56 43%	0.68 7% 20,677 4.36 43%	0.63 7% 25,788 5.04 53%	0.60 7% 30,362 5.70 62%	0.54 6% 31,409 5.68 66%	0.74 9% 30,377 5.38 65%	0.70 9% 31,485 5.18 70%	0.64 8% 32,380 5.80 73%	0.92 12% 34,189 5.27	0.98 13% 30,639 4.98
Normalized (metric tonnes per \$M COPS)  % incinerated  Nonhazardous waste recycled  Absolute (metric tonnes)  Normalized (metric tonnes per \$M COPS)  % recycled  2020 Goal: increase recycling rate by over 70	1.07 10% 21,678 4.56 43%	0.68 7% 20,677 4.36 43%	0.63 7% 25,788 5.04 53%	0.60 7% 30,362 5.70 62%	0.54 6% 31,409 5.68 66%	0.74 9% 30,377 5.38 65%	0.70 9% 31,485 5.18 70%	0.64 8% 32,380 5.80 73%	0.92 12% 34,189 5.27	0.98 13% 30,639 4.98

### Air emissions

VOC and HAP emissions increased in FY2017, due to increased production or process changes at a number of our facilities.

Measurement and UOM	FY08 baseline	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
VOC emissions										
Absolute (metric tonnes)	197	138	116	107	132	123	140	138	149	178
Normalized (metric tonnes per \$M COPS)	0.041	0.029	0.023	0.020	0.024	0.022	0.023	0.025	0.023	0.029
HAP emissions	,									
Absolute (metric tonnes)	15	13	23	23	18	17	14	13	14	19
Normalized (metric tonnes per \$M COPS)	0.0032	0.0028	0.0044	0.0044	0.0032	0.0031	0.0023	0.0023	0.0021	0.0031
VOC + HAP emissions										
Absolute (metric tonnes)	212	151	138	131	150	141	154	151	162	197
Normalized (metric tonnes per \$M COPS)	0.045	0.032	0.027	0.025	0.027	0.025	0.025	0.027	0.025	0.032
2020 Goal: reduce VOC and HAP emissions by 6	55% (norma	lized by CO	PS). Curren	t status: rec	luced by 28	%				
Ozone-depleting substances emissions										
Absolute (metric tonnes)	322	274	249	254	235	236	228	218	195	186
Normalized (metric tonnes per \$M COPS)	0.068	0.058	0.049	0.048	0.043	0.042	0.038	0.039	0.03	0.03

<sup>2020</sup> Goal: reduce ozone-depleting substance emissions by 95% (normalized by COPS) reduced by 55%

2020 Goal: 100% elimination of use of HCFC141b in manufacturing. Current status: while a number of our facilities have completed conversion plans and eliminated the use of hydrochlorofluorocarbon (HCFC), we are continuing to implement conversion plans at remaining facilities and expect to complete all conversions as scheduled.

### Establish supplier responsibility evaluation methodology

### FY2017 performance highlights

The foundation of the BD supplier responsibility strategy is the expectation that suppliers take responsibility for their own social and environmental impacts. We clearly lay out our expectations in this area through the BD Expectations for Suppliers (EFS) document, and subsequently ask all of our suppliers to review and acknowledge them. BD continues to communicate the EFS with suppliers through formal means such as contracting, as well as various supplier forums held throughout the year. BD has conducted awareness-raising trainings on our EFS for key suppliers via Supplier Management meetings and summits in a number of regions where these suppliers are located.

As part of our overall supply risk model, suppliers complete an initial assessment against 12 risk factors, including corporate social and environmental risk factors, during their onboarding process.

An external reputation risk tool was implemented during FY2017. This tool allows BD to identify location- and sector-specific risk across our supply base and therefore advances the visibility of reputational risk so that it can be incorporated into sourcing strategies and supplier management.

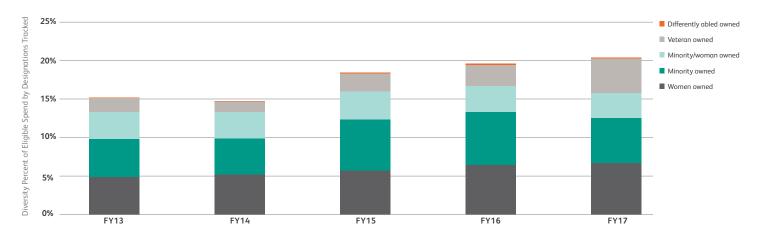
## Supplier Diversity Program

Supplier diversity encompasses more than simply tracking spending or "doing the right thing"—it supports our business objectives. Being committed to supplier diversity entails developing and implementing strategies that ensure our supply

base aligns with the diverse customers and communities we serve, as well as the diverse markets we seek.

Further details on our supplier diversity strategy can be found in our FY2016 report.

### Supplier Diversity Program: percent of spend by designation<sup>13</sup>



2020 goal

### Eliminate priority materials of concern in specified product categories.

BD is committed to eliminating priority materials of concern from our devices, instruments and packaging. Our Global Product Stewardship function continues to oversee the Company's efforts to remove these materials and provide governance over compliance activities carried out by our business units. Our Materials of concern (MOC) chemical/substance list is regularly updated to reflect changing regulatory and customer requirements.

### FY2017 performance highlights

### **Chemical Footprint Project**

In 2017 BD once again participated in the **Chemical Footprint Project** (CFP). The mission of the Chemical Footprint Project is to transform global chemical use by measuring and disclosing data on business progress to safer chemicals. It provides a tool for benchmarking companies as they select safer alternatives and reduce their use of chemicals of high concern. BD opted to make this year's response public via the Chemical Footprint Project site. BD was one of only a handful of companies who chose to do so, and as a result CFP ranked us as one of the top 5 leaders in survey transparency. This leadership was highlighted in the Chemical Footprint Project's 2017 Annual Report.

In 2017, we completed product changes that eliminate certain heavy metals and flame retardants, and bring impacted monitoring and control instruments into compliance with the EU RoHS Directive.<sup>14</sup> Projects are ongoing to ensure that impacted

Product highlight: BD™ Gravity IV Sets

In FY2017, BD launched the first products in a new portfolio of advanced (or "specialty") gravity IV sets in the CSA, Europe and Japan regions. These new advanced gravity IV sets contain features such as antirun dry technology, autoprime cap, needlefree injection ports and non-DEHP materials. These

products meet the requirements of phthalate restrictions under RoHS.<sup>15</sup>

Further details about the framework we've established to support this goal can be found in our FY2016 Sustainability Report.

BD has committed to eliminate priority materials of concern\* in each of the following product categories:

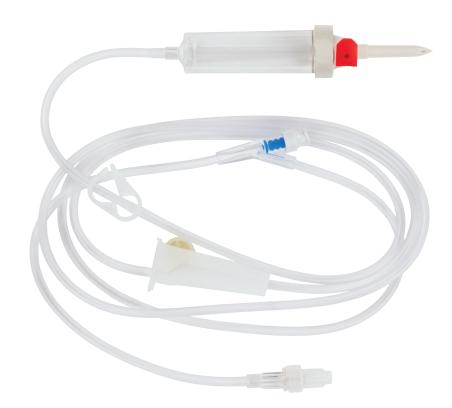
**Devices:** PVC and phthalates

**Instruments:** Phthalates, brominated flame retardants (BFRs) and heavy metals

Packaging: PVC and expanded polystyrene

\* intentionally added

products now also have non-PVC material options, made from thermoplastic elastomers (TPE). Specific benefits include reduced risk of air in the line, elimination of leakages during priming, reduction of accidental contact contamination and flow rate consistency improvement.



<sup>14</sup> Directive 2011 / 65 / EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

<sup>15</sup> Commission Delegated Directive (EU) 2015 / 863 of 31 March 2015 amending Annex II to Directive 2011 / 65 / EU of the European Parliament and of the Council as regards the list of restricted substances.

### Improve life cycle impacts of current and future products

### FY2017 performance highlights

BD continues to focus efforts on improving the lifecycle impacts of our products.

In 2017 we continued our engagement with the **Healthcare Plastics Recycling Council** (HPRC) both in the U.S. and the E.U.,
and the **Sustainable Healthcare Coalition** (SHC) in Europe. The

activities we undertake as part of our engagement with these entities support, among other projects, our efforts to limit and minimize waste produced during the lifecycle of our products.

Further details about the framework we've established to support this goal can be found in our FY2016 Sustainability Report.

### Case study: CARD your Sharps

Throughout FY2017 BD worked to develop a new program for Los Angeles County (*California*) to help ensure proper containment and disposal of household sharps, a health concern that when disposed of improperly could cause injury or spread infection according to the U.S. FDA and EPA.<sup>16,17</sup> The "Contain and Responsibly Dispose (CARD) Your Sharps" Initiative, which was launched in early 2018, provides patients with a new sharps containment device, at no cost, and directs them to the nearest sharps take-back location.

The CARD Your Sharps Initiative is an unbranded program that targets critical interactions between patients and retail pharmacists at the point of sale to educate new and returning

patients on the initiative. The program builds on patient-centric tools currently available through **SafeNeedleDisposal.org**, where patients can search for the most convenient local disposal options using their zip code.

The CARD Your Sharps Initiative is another example of our commitment to provide critical resources for people living with diabetes and other chronic diseases. It is a comprehensive program that provides practical solutions for patients, including the ability to receive a no-cost, FDA-cleared sharps container for LA County residents in need, regardless of their sharps provider.

For more information about the Card Your Sharps Initiative visit **CARDYourSharps.com**.

s 2018; FDA.gov. https://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/HomeHealthandConsumer/ConsumerProducts/Sharps/default.htm. Accessed January 30, 2018.

<sup>17 2018;</sup> EPA.gov. https://www.epa.gov/rcra/medical-waste#sharps. Accessed January 30, 2018.



# Empowerment

# Positive workforce and community impacts

### Introduction

We profoundly respect that what we do is for the good of people. That's why BD associates work with humanity and kindness across cultures, regions and relationships. It is the behavior that is necessary to be responsible global citizens. It is what it means to care.

2020 goal

Increase the diversity of our workplace, particularly in leadership roles.

### FY2017 performance highlights

Our focus is on furthering inclusion and diversity (I&D) at BD to drive innovation, to better understand patient and customer needs, and to make BD the best possible place for all people to work. Building and engaging diverse teams and individuals, and leveraging their unique ideas, backgrounds and experiences will deliver better outcomes for our global marketplace. Furthering I&D is not just the right thing to do—it is a strategic imperative.

At BD, we have a dedicated I&D leader with a small team who work with our business, functional and regional leaders. Together, they plan, develop and direct strategies to more effectively recruit, develop and retain the Company's diverse workforce.

We have also established a Global Strategic Framework for I&D (see image) and have committed to 2020 Diversity Goals. Over the past 2 years we have made good progress, particularly in the areas of leadership engagement, diverse hiring slates and employee engagement through Associate Resource Groups (ARGs). We have established a solid foundation and our focus over the next year will be on governance, development of diverse talent and the changing role of our ARGs.





<sup>18</sup> This number includes Bard associates. Bard was acquired in December, 2017. In FY2017 the total number of associates was 47,750.

### What's next?

In addition to the increased focus on workforce diversity, we are also intensifying our efforts across all of our strategic I&D pillars. In the coming months we will be adding to the dedicated I&D team, continue to strengthen our governance process, mature

These strategic pillars include:

**Intensify commitment**—launching a Global Inclusion Council comprised of highly influential, next-generation leaders to facilitate action and drive change for their business, region or function

**Build pipeline**—launching a targeted development program to accelerate the readiness of diverse internal pipeline talent, including the launch of a sponsorship program

**Reshape workplace**—completing a workplace fairness assessment of all talent processes and policies to refresh our offerings, starting with a launch of a global Flexible Workplace Policy

**Create mindset**—expanding our unconscious bias education and I&D roadshows globally

and expand our ARGs, and expand our training and development programs. We are also leveraging past learning and practices from BARD I&D efforts, most notably by implementing a Global Inclusion Council to better engage middle management.

**Set goals and measure outcomes**—analyzing results from our annual Voice of Associate (VoA) survey. This will inform the strategic actions we take to continuously improve our culture and better address the needs of all associates

**Associate Resource Groups**—launching two new ARGs and maturing our approach by refreshing sponsors and leaders, and enhancing the business focus of charters

**Communication**—communicating more frequently to all levels of the organization, with a particular focus on middle management to increase engagement and drive action

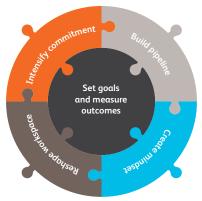
### Inclusion and diversity—strategic framework

# Intensify commitment

Incorporating inclusion and diversity into everyday conversations and behaviors while remaining accountable for meaningful change through role modeling

# Reshape workplace

Equip and educate leaders and adapt regionally relevant, family-friendly policies and programs for new ways to get work done in support of a more engaged and dynamic workplace for all associates



# Set goals and measure outcomes

Set the highest-level company benchmark, collect, analyze and act on **data** on **hiring**, **retention**, succession and **employee perception** while holding ourselves accountable by measuring progress

# Build pipeline

Create a competitive business advantage through increased leadership focus on attraction, development and retention of diverse associates

# Create mindset

Build inclusion and diversity as a critical element of our success, **training and developing** associates to bring about **lasting and meaningful change** 

### Progress toward workforce diversity

Over the past 18 months, we have seen good momentum and measurable progress toward the majority of our diversity goals, with improvement in three of the four leadership categories. Momentum in diverse hiring has increased, with 75% of director level and above searches having a diverse slate, resulting in a diverse hiring outcome 53% of the time.

However, given our position in the relevant labor market, a diverse hiring strategy alone will not be enough to achieve our goals. Therefore, our workforce diversity efforts are focused in three equally important areas: hiring external talent, developing internal talent and retaining talent.

### Workforce diversity

	End of FY16	End of FY17
Executive gender	22%	21%
Management gender	37%	38%
Executive ethnicity	14%	17%
Management ethnicity	26%	27%

Our goal is to achieve year-over-year progress to continuously improve the level of gender and ethnic diversity of our executives and management.

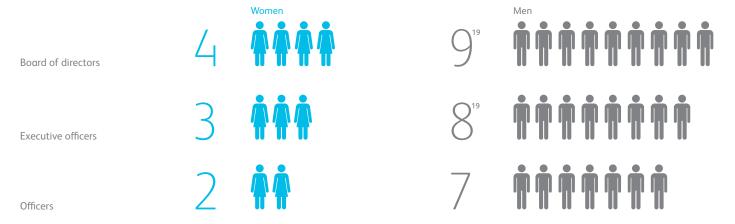
### Demographic data

As part of the integration activities following the acquisition of CareFusion, BD implemented a new single HR IT system to manage associate data; this improved our ability to collect demographic data (as permitted by law). Due to this changed reporting system, our data from FY2016 has been restated to align with this new system. Data excludes associates who were part of the Respiratory Solutions business, which was divested on October 3, 2016.

### FY2017 worldwide associates by gender



### Gender breakdown of the board of directors and executive officers



2017 board of directors—ethnicity	
Asian/Indian	0
Black or African American	2
Hispanic/Latino	0
Other	0
White	11

<sup>19</sup> Includes Vincent A. Forlenza, Chairman of the Board, CEO.

### **Executive and management positions**

For the following tables, the total number of associates for each disclosure in executive and management positions is noted in the corresponding table.

### Executives and management positions by gender (worldwide)

	Executive		Manage	ment
	2016	2017	2016	2017
Female	22%	21%	38%	38%
Male	78%	79%	62%	62%
Total	295	280	6,923	7,340

BD defines executives as those in VP, SVP, or EVP roles. Management positions are defined as those in manager, director, or equivalent roles.

### Executive and management positions by age (worldwide)

	Executive		Management		
	2016	2017	2016	2017	
Under 35	0%	1%	11%	11%	
35-54	72%	70%	72%	72%	
55 and older	27%	29%	17%	17%	
Total	295	280	6,923	7,340	

BD defines executives as those in VP, SVP, or EVP roles. Management positions are defined as those in manager, director, or equivalent roles.

### Executive and management positions by ethnicity (U.S. only)

	Executive		Managen	nent
	2016	2017	2016	2017
Asian/Indian	9%	11%	14%	15%
Black or African American	3%	3%	4%	4%
Hispanic/Latino	2%	3%	5%	7%
Not disclosed	5%	2%	4%	3%
Other	0%	1%	3%	2%
White	81%	81%	71%	71%
Total	237	225	4,354	4,555

BD defines executives as those in VP, SVP, or EVP roles. Management positions are defined as those in manager, director, or equivalent roles.

### Associates

For the following tables, the total number of associates for each disclosure is noted in the corresponding table.`

Associates by age (worldwide)				
	FY2016	FY2017		
Under 35	35%	36%		
35-54	52%	51%		
55 αnd older	12%	12%		
Total	45,814	47,750		
In 2016 and 2017, age was not disclosed for 1% of the dataset. Workforce includes all				

Associates by ethnicity (U.S. only)		
	FY2016	FY2017
Asian/Indian	13%	13%
Black or African American	7%	8%
Hispanic/Latino	13%	16%
Not Disclosed	5%	3%
Other	3%	2%
White	59%	59%
Total	17,375	17,528

Ethnicity data reflects that of the U.S. workforce including Alaska and Hawaii, but excluding Puerto Rico or any other U.S. territories. Workforce includes all associates, both management and nonmanagement.

New hire rate by age (worldwide)				
	FY2016	FY2017		
Under 35	10%	13%		
35-54	6%	5%		
55 and older	1%	0%		
Workforce includes all associates, both management and nonmanagement.				

New hires by gender (worldwide)				
	FY2016	FY2017		
Female	8%	10%		
ΜαΙε	9%	9%		
Workforce includes all associates, both management and nonmanagement.				

Turnover rate by age (worldwide)		
	FY2016	FY2017
Under 35	13%	15%
35-54	7%	7%
55 and older	13%	2%

By turnovers, we mean the associates in the workforce who were with the Company on the last day of the previous financial year (September 30, 2016) but no longer with the Company in the reporting time period. Workforce includes all associates, both management and nonmanagement.

Turnover rate by gender (worldwide)					
	FY2016	FY2017			
Female	12%	14%			
ΜαΙε	9%	10%			

By turnovers, we mean the associates in the workforce who were with the Company on the last day of the previous financial year *(September 30, 2016)* but no longer with the Company in the reporting time period. Workforce includes all associates, both management and nonmanagement.

### Achieve best-in-class associate safety performance

### FY2017 performance highlights

Advancing the world of health starts with the health and safety of all our associates. Our **Safety and Environmental Policy**, updated in FY2017, guides our comprehensive efforts to ensure all associates are working safely in an environment designed to protect and maintain their health. In addition, our standalone Safety Policy provides our vision and sets the tone for how we engage everyone in safety, on and off the job.

In FY2017 BD completed the integration of Health and Safety metrics, following the CareFusion acquisition. We are therefore expanding the health and safety metrics reported this year to cover our lost time injury frequency rate (LTIFR) and occupational illness frequency rate (OIFR), in addition to our occupational injury and illness rate (IIR). We are working to

**BD** Safety Policy

We are committed to driving a culture in which the health, safety and well-being of our associates, visitors and contractors is an integral part of every decision we make. Each of us must take personal responsibility for the safety and care of each other to ensure that we all remain safe at work each and every day.

Vincent A. Forlenza
Chairman and Chief Executive Officer



integrate BARD data into our Health and Safety metrics over the coming months, for inclusion in future reporting. We will also continue to report fatalities, if they occur. In FY2017 there were no fatalities of BD associates or contractors.

BD continues to place a focus on proactive procedures, policies and governance programs that ensure compliance, promote the identification of workplace hazards, and implement corrective actions that prevent injuries and workplace illnesses. Management and leadership engagement, peer-to-peer coaching, education and training are critical components of fostering our culture of safety. The following continue as core elements of our safety program:

- Interventions that address safety risks unique to our operations, such as ergonomics, fall protection, the control of hazardous energy and machine guarding
- Cross-business teams of safety representatives and plant managers who meet to share best practices and accelerate safety improvements
- Measurement of leading indicators across all sites, which include root cause analysis of incidents and serious near misses, identification of safety opportunities, and the completion of risk assessments and inspections
- Teams to identify program elements for specific segments of our associate population, such as field service engineers, fleet operators, office and R&D associates and construction contractors

	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
LTIFR per 200,000 hours worked									0.29	0.32
OIFR per 200,000 hours worked									0.04	0.03
Occupational IIR rate per 200,000 hours worked	1.4	1.2	1.1	1.0	1.0	0.9	1.1	0.9	0.7	0.7
Data provided reflects manufacturing sites or	nly									

# Social investing

Advancing the world of health is the inspiration behind our global enterprise and is a call to action that resounds with BD associates around the world. By giving our time, our talent and our resources through philanthropic and charitable efforts, we seek to improve global health standards and access to

healthcare for all communities. Since we were founded over 110 years ago, BD has actively donated cash, products and expertise to nonprofit and educational organizations in North America and throughout the world.

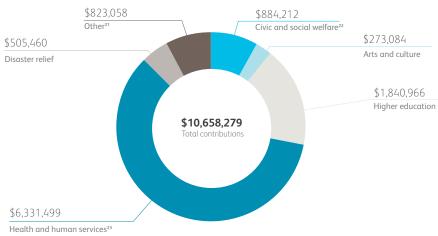
### BD FY2017 charitable giving summary, by the numbers

Total cash donations	\$10.7 million
Total product donations:	\$6.8 million
Value of company match to associate donation	\$1.3 million
Employee funds raised and matched for disaster relief through AmeriCares	\$160,000
No. of grants issued, worldwide	613
No. of nonprofit beneficiaries	542
No. of matching gifts distributed	19,327
No. of families BD assisted in Puerto Rico through the newly established Employee Disaster Relief Fund	549

FY2017 charitable giving summary



## FY2017 cash contributions



- ${\bf 20} \quad \text{Including matching gifts and contributions from individual BD locations}$
- ${\bf 21}$   $\,$  Includes diversity and volunteer associate engagement
- 22 Includes basic needs/hometown giving
- 23 Includes care for the uninsured/underinsured, diabetes and prevention, global health, infection prevention, maternal and newborn health, vaccine preventable diseases, women's health, cancer and other health

### Partner with nonprofits to address unmet needs locally and globally

### FY2017 performance highlights

### U.S. Fund for UNICEF

BD continues its commitment to the Maternal and Neonatal Tetanus (MNT) Initiative, which we have supported since 1997, making this partnership our longest-standing commitment to a single cause. To date, BD has committed \$9.8 million in cash and products and other in-kind support to this campaign, including 55 million safe injection devices and \$6 million cash. Key program results include:

- Globally, 45 out of 59 priority countries have been officially validated for MNT elimination.
- More than 151 million women in 53 countries have been protected against tetanus with 2+ doses of the tetanus vaccines.

BD is committed to seeing the campaign into its final phase. Much progress has been made, but there are currently 15 countries still at risk for MNT.

### BD Helping Build Health Communities™ initiative

The BD Helping Build Healthy Communities™ initiative (www.directrelief.org/bdhbhc) is a multiyear partnership, funded by BD and implemented by Direct Relief and the National Association of Community Health Centers. It seeks to expand access to quality healthcare among vulnerable populations in the United States, by providing grants to community health centers that implement innovative approaches for providing at-risk populations with primary and preventive healthcare.

In the program's fifth year, BD invested \$1 million, with five health centers each receiving \$200,000.

Since 2013, BD has awarded 31 community health centers, from 13 states, with more than \$3.6 million in grants. BD has donated more than 22 million insulin syringes and 3,200 pen needles to more than 845 community health centers, free clinics and community clinics in 48 states and Puerto Rico, with a wholesale value of \$6.4 million.

### BD Helping Build Healthy Communities™ initiative: by the numbers



The program won the **2017** U.S. Chamber of Commerce Foundation **Healthy10** Award.



Since 2013, **45,000** patients have been impacted.



Since 2013, **31** community health centers in **13 states** have received **\$3.6 million** in grants.

Since 2013, BD has provided **Direct Relief** with more than **22 million insulin syringes** and more than **3,200 pen needles**, valued at **\$6.4 million**.

These items have been distributed to **845** community health centers, free clinics and community clinics in **49 states and Puerto Rico**.





### **Expanding on program success**

In response to the success of the BD Helping Build Healthy Communities program, and to further extend our reach to vulnerable populations in the United States, BD worked with the **National Association of Free and Charitable Clinics** (NAFC) to introduce three companion programs in 2017, which support free and charitable clinics.



# BD advancing community health: Driving Quality Outcomes Award program

Conducted in partnership with **AmeriCares**, this evidence-based patient-centered medical home program helps community clinics develop and implement best practices in team-based, coordinated and integrated care. In 2017, BD awarded \$100,000 grants to two free clinics, CommunityHealth of Chicago and the Community Health Care Clinic of Normal, IL.

### BD advancing community health: Enhancing Clinical Effectiveness program

Codeveloped with **Heart to Heart International**, this program is designed to improve the diagnosis and treatment of chronic disease among vulnerable populations, through the installation of point-of-care (POC) labs.



In 2017, BD awarded **\$250,000** in funding to support lab installation at three community clinics, **Community Health Services** of Union County (*Monroe, SC*), **Downtown Clinic** (*Laramie, WY*) and the **Free Clinic** of Franklin County (*Rocky Mount, VA*). This program is estimated to have impacted **48,000+ vulnerable patients**, and reduced the wait time for lab results from as many as 7 days to as little as 20–30 minutes. The percentage of diabetic patients with poorly controlled diabetes was reduced by **30+%** at one of the participating clinics. At another participating clinic, the percentage of patients in compliance with their lab testing schedule improved by **70+%**.



### BD Continuity in Care Grant program

Developed in partnership with **Direct Relief** and the **NAFC**, this program provides **1-year grants**, ranging from **\$5,000–\$20,000**, to help NAFC member organizations expand their capacity to provide healthcare to medically underserved populations. BD invested a total of **\$115,000** in this program in FY2017, awarding grants to **nine clinics**.

### Drive social impact and associate engagement through volunteer programs

### 2017 performance highlights

### **BD Volunteer Service Trip program**

Our Volunteer Service Trip (VST) program celebrated its twelfth year in 2017. The VST program sends teams of BD associates to developing countries to help strengthen local health systems through training, education, laboratory services and construction projects. The program enables BD to share its collective knowledge while also providing associates with a unique opportunity to advance the Company's purpose of *advancing the world of health*. In 2017, BD deployed our associate talent to the following volunteer trips:

**Cameroon:** In partnership with Heart to Heart International and Hope for Health, 12 BD volunteer associates worked in Fotabong, Cameroon, to strengthen the capacity of the local hospital,

which serves a population of more than 21,000 and typically receives 100 patients daily. The volunteers trained community healthcare workers, improved laboratory quality, upgraded the hospital's infrastructure and worked with hospital leadership to develop a plan for financial sustainability.

**Papua New Guinea**: In partnership with Australia Doctors International, four BD volunteer associates provided muchneeded infection prevention and control training to rural healthcare workers and nurses at three hospitals in the region.

BD will continue to support this program in the coming years, with a 2018 trip to Mexico that will be the first VST to include legacy BARD associates.

### **BD Volunteer Service Trips: by the numbers**

12 🗯

years of VST programs

222 8

VST

89

BD sites, globally

30 🕮

country locations **(() (** 

NGO partners

**22** 

rs million in

skills-based service and other volunteer

### Henry P. Becton Volunteer Impact Awards

This program recognizes the outstanding and creative volunteer service of BD associates and retirees. In FY2017, BD awarded grants totaling \$60,000 to 35 nonprofit organizations around

the world, recognizing the community service of 35 associates from eight countries. In FY2018, BD expects to increase the total grants awarded through this program to \$75,000.

\$60,000 in grants

35 nonprofit organizations

35 BD associates recognized for volunteerism

### Dr. Martin Luther King, Jr. Day of Service

Each year, BD associates from around the world join together to serve their local communities through volunteerism. In doing so, they are bringing the Company's values to life, while they make a meaningful difference in the world around them.

As just a single example of this team-based volunteerism, 500+ BD associates at seven sites across the United States celebrated the Dr. Martin Luther King Jr. Day of Service

by packaging 113,600+ meals over 3 days for Rise Against Hunger programs.

BD plans to expand this nationwide volunteer service event in FY2018, to include additional locations, and to engage associate resource groups in mobilizing their members to participate.

### BD matching gift program

In FY2017, BD matched 19,327 associate donations to 501(c) (3) organizations in the United States, for a total investment of \$1.3 million. In FY2018, BD is working to harmonize its

matching gift program with BARD, to ensure all associates qualify to receive the same match for their community giving by FY2019.

# Awards, recognitions and affiliations

# FY2017

### Corporate recognition

Dow Jones Sustainability North America Index since 2005

FORTUNE's 2017 World's Most Admired Companies list

FTSE4Good Index since 2003

CR Magazine's 100 Best Corporate Citizens List

2017 CPA-Zicklin Index on Corporate Political Disclosure and Accountability—Center for Political Accountability

### Innovation

Global Patient Safety Visionary Innovation Leadership Award—Frost and Sullivan 2017 Best Practices Awards (EU)

2017 Top 100 Global Innovators list—Clarivate Analytics

### **Efficiency**

Low Carbon Hero Award—Sustainable Production and Consumption Association (*Turkey*)

U.S. EPA Green Power Partner

U.S. EPA SmartWay® Transport Partner

### **Empowerment**

AON Best Employer list (China)

Best Companies to Work for in the Health Sector list—Great Place to Work Institute (*Brazil*)

Employer of Choice for Gender Equality—Australia Workplace Gender Equality Agency (Australia)

Healthy10 Award—U.S. Chamber of Commerce Foundation (U.S.)

Top Employers Africa 2017—Top Employers Institute (Africa)

Dow Jones
Sustainability Indices
In Collaboration with RobecoSAM •











To find out more about sustainability at BD or to provide feedback on our reporting, please contact BD\_Sustainability\_Office@bd.com

BD, Franklin Lakes, NJ, 07417, U.S.



