

HEALTHCARE WORKPLACE SAFETY TREND REPORT

2023

Meeting Continuing
Challenges in the
Healthcare Industry

 **Stericycle**[®]
We protect what matters.

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Foreword

Creating healthy and safe environments is core to Stericycle’s mission and how we engage with our customers and the communities they serve. Stericycle was founded in response to the syringe tide back in the late ‘80s when sharps were washing up on beaches, solidifying the need for an essential suite of services to responsibly manage regulated medical waste.

For nearly 35 years, protecting health and well-being in a safe, responsible, and sustainable way has been our mission, and that’s even more important now than it was over three decades ago. Today, healthcare professionals – both providers and administrators – face challenges in ensuring needed levels of safety in their care environments. Proper disposal of medical and pharmaceutical waste helps reduce risk in both clinical spaces and surrounding communities, but the growth of at-home care creates a new complication to the industry. Patient challenges and staffing shortages continue to contribute to burnout amongst healthcare providers, and proper training and

resources to handle these challenges are top-of-mind. We believe it’s critically important to assess and explore key aspects of safety and health today to help us understand how to best manage the current – and future – environments of care.

Our latest Healthcare Workplace Safety Trend Report examines how providers and administrators in the U.S. view safety in their organizations and its impact on their peers, patients, and the communities around them. And for the first time, we’ve also asked consumers about their concerns around safety when seeking care. We found that both consumers and providers recognize creating a well-trained and well-resourced workforce is essential to the healthcare industry’s role in society. At Stericycle, our team is ready to support healthcare organizations as they navigate both existing and new challenges and to help ensure the health and safety of patients, providers, and the communities they serve. We do all that we can to help shape a healthier and safer world for everyone, everywhere, every day.

S. Cory White

Executive Vice President and Chief Commercial Officer
Stericycle, Inc.

KEY TAKEAWAYS FROM THE REPORT:

- Stress levels have decreased as the height of the pandemic passes, but remain high
- Ongoing staffing and patient challenges perpetuate burnout amongst providers
- Proper disposal of medical waste cannot be overlooked
- The rise of at-home care continues to create new challenges for healthcare workers
- Amidst an opioid epidemic, drug diversion requires proactive measures
- Risks to the environment cannot be overlooked



Executive Summary

Healthcare environments continue to face challenges even as the height of the COVID-19 pandemic passes. While the issue of burn-out was exacerbated by the pandemic, it remains a core concern due to persistent staffing challenges. American healthcare faces a [staffing crisis](#)¹, which is demonstrably affecting care. All types of healthcare settings are experiencing staffing issues due to high costs, a tight labor market, and provider burnout. Many facilities are being staffed with temporary healthcare workers to fill gaps caused by high turnover rates.

The existing healthcare workforce shortage, compounded by lingering supply chain issues and an aging population needing increased care, has created further strain on healthcare systems across the country. As of mid-2023, quality of care has been negatively impacted as a result. Reduced staffing means delays in surgeries, longer wait times, and an alarming increase in adverse outcomes¹. It also means a lack of attention to and education around the proper management of medical waste, which creates more risk and further compounds these crucial issues.

The Joint Commission found that there were 1,441 sentinel events in 2022, up 19% from 2023². A sentinel event is defined by the commission as a patient safety event that reaches a patient and results in death, permanent harm, or severe harm. The report determined that the most common causes of these adverse events that resulted in harmful outcomes were failures in communication, in teamwork, and in consistently following policies.

HEALTHCARE PROFESSIONALS LEAVING DUE TO STRESS, BURNOUT, AND RETIREMENT³

100,000

registered nurses left in the past two years

610,000

plan to leave by 2027

PATIENTS ARE BEING TURNED AWAY DUE TO SHORTAGES³

Home healthcare providers turned away more than

25%

of referred patients

Creating healthier and safer care environments requires innovative approaches. For instance, at-home care has increased as a response to understaffing as well as regulatory and demographic changes, but this has only exacerbated medical waste management challenges. Whether at home or in a traditional care environment, medical waste management requires continuous communication and education, strong teamwork, and strict adherence to policies. More training is needed for healthcare providers so that they can be better equipped to serve their patients and their communities.

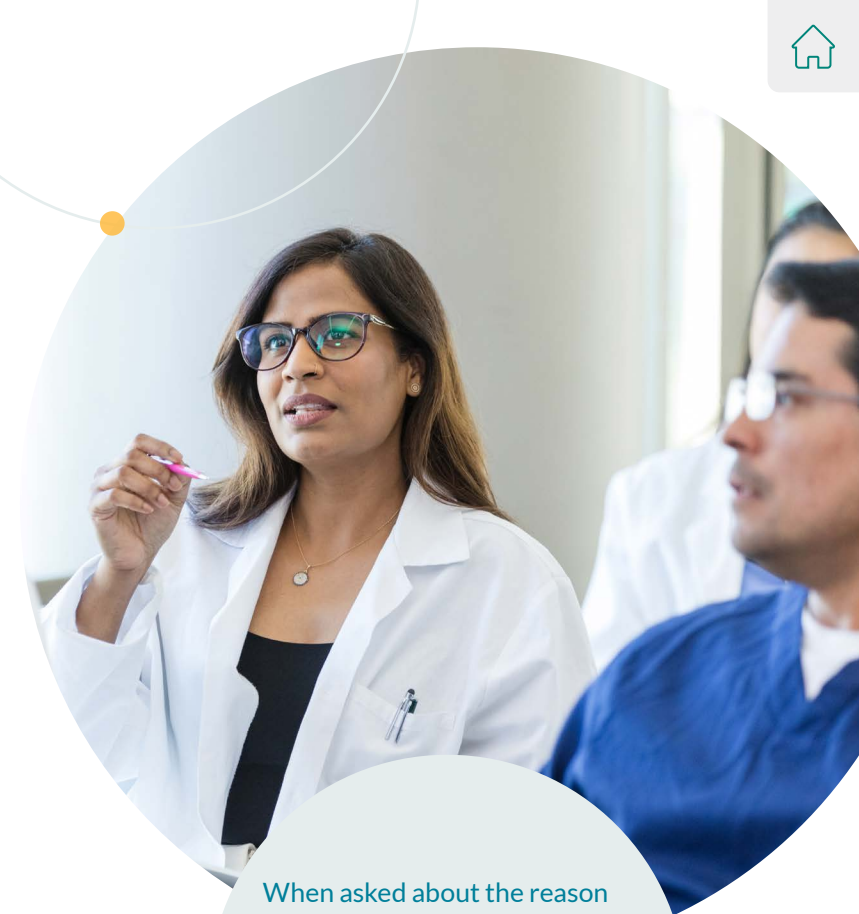
Recently, Stericycle conducted its third annual survey of healthcare providers and administrators in the U.S. to better understand how safety and standards in the environment of care can impact the quality of care delivered as well as the effects of the changing footprint of the healthcare system on the environment. Healthcare consumers were also surveyed to gain insights on their perceptions of care and safety.





Key Insights

Stericycle's 2023 Healthcare Workplace Safety Trend Report is based on in-depth 2023 survey data and analysis of U.S. healthcare professionals, including providers (HCPs) and administrators as well as U.S. healthcare consumers (new this year). The report provides crucial insights on healthcare concerns and challenges today. It also reveals healthcare professionals' perceptions of medical waste management, specifically regarding the drivers of well-being, such as creating a safer workplace environment, mitigating risk in home health settings, combating the opioid epidemic, and adopting services that reduce healthcare delivery's environmental impact. The report delivers actionable steps for healthcare organizations to help create a healthier and safer environment of care for their patients and staff.



SURVEY RESPONDENTS COMPRISED OF:



400
HCPs



100
HEALTHCARE
ADMINISTRATORS



700
HEALTHCARE
CONSUMERS

When asked about the reason for feelings of burn-out, exhaustion, or distraction at work, healthcare professionals said:

“Having to manage too many tasks at once while being understaffed.”



Stress Levels Have Decreased as the Height of the Pandemic Passes, But Remain High

— Sixty-three percent of the HCPs surveyed in 2023 are exhibiting negative feelings (e.g., “Stressed”, “Burnt out”, “Exhausted”, etc.) at work, and only a quarter of healthcare professionals feel “Safe” in their roles. While negative feelings have decreased since 2021, they are still very high after the pandemic. Many say their engagement, sense of drive, and sense of safety in the workplace are the same or better, compared to last year. However, 44% are feeling worse about their level of day-to-day stress. Moreover, over three-quarters of the healthcare professionals surveyed are at least occasionally (if not more often) feeling unmotivated (79%) or having trouble concentrating in the workplace (77%). HCPs, especially those in Emergency Medicine and Psychiatry, have much more negative feelings compared to the previous year.

Staffing and Patient Challenges are Leading to Burnout

— Being understaffed, patient volume, workload, hours, and administrative burdens are the top reasons why healthcare professionals (primarily providers) feel burnt out, exhausted, or distracted at work. Without prompting, staffing is also seen as the *number one challenge* in healthcare today among both HCPs and administrators. Ninety-eight percent report that having adequate staff is ‘very’ or ‘somewhat influential’ on their feeling of safety in the workplace. A troubling trend, many healthcare professionals believe that patients are refusing recommended care, behaving poorly, and becoming combative more frequently compared to 2022. Almost two-thirds (63%) are concerned that they will be injured at work as a result.

Proper Disposal of Medical Waste Cannot Be Overlooked

— While almost all agree that management of medical waste is critical to their organization’s day-to-day function and in maintaining a safe workplace, healthcare professionals are spending very little time on disposal. Ninety-five percent of the HCPs surveyed agree that improper disposal of medical waste puts the physical safety of HCP workers at risk. Nonetheless, only 33% strongly agree that they have a strong understanding of how their organization handles this type of waste. Improper handling and disposal is recognized as



“Doing the work of two people is what is causing my burn out. Too many patients and not enough breaks in between make for us to be overworked.”

– HCP

a major concern, which can negatively impact both the safety of workers and patients, but a shortage of personnel is hindering the possibility of top-quality care. Even further demonstrating the need for proper disposal methods, healthcare consumers are highly concerned about the impacts and risks of ineffective medical waste management.

The Rise of At-Home Care Breeds New Challenges For Healthcare Workers

— Most agree that at-home care is a growing trend in the medical field. A higher quality of care is expected in such settings, but close to 100% agree that at-home care settings introduce new challenges to proper disposal of pharmaceutical and medical waste and the ability to provide the best care. Unhygienic conditions, entering/working alone, and in-home violence are seen as the three biggest risks to HCP worker safety in at-home care settings. There is a strong belief that patients need more information and resources as a result and that healthcare professionals also require additional training.

Amidst an Opioid Epidemic, Drug Diversion Requires Proactive Measures

— Alongside a worsening opioid epidemic, healthcare professionals believe that many healthcare consumers keep their leftover prescription drugs for future use and don’t know how to properly dispose of them. Healthcare consumers, on the other hand, do not seem to be aware that they are doing anything wrong with their prescription medications. Most healthcare professionals agree that opioid diversion puts the health of the community at risk and are concerned about the risk of increased drug diversion.

Risks to the Environment Cannot Be Overlooked

— Almost all healthcare professionals agree that sustainable environmental practices benefit the health of the overall community and that improper medical/biohazardous waste management can harm the environment and/or have long-lasting impacts on health and well-being. Despite recognizing the harmful impacts on the environment, some healthcare professionals do not believe their organizations are doing enough to reduce those impacts. Many do not believe their organizations have innovative practices, the right number of people, or enough monetary resources for proper regulated medical/biohazardous waste disposal.

THE HEALTHCARE PROVIDER EXPERIENCE TODAY

High Stress Remains for Healthcare Professionals Even as the Height of the Pandemic Passes

But Have We Assumed a Return to “Normalcy?”

“[I am burned out due to] high patient volumes, complex needs with short schedule times, understaffing (providers and nursing staff), and no scheduled break times.”

- HCP



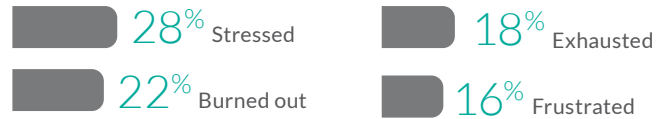


Negative Feelings Remain Worrisome Despite Improvements

Sixty-three percent of the HCPs surveyed are experiencing negative feelings at work and, while these feelings are less pronounced than they were during the height of the pandemic, they remain very concerning. A worrying trend – close to half (44%) say that their level of day-to-day stress in the workplace is getting worse. Most healthcare professionals are at least occasionally (if not more often) feeling unmotivated or having trouble concentrating in the workplace.

Negative feelings (like being stressed, burned out, exhausted, and frustrated) are much higher among HCPs (especially those in Emergency Medicine, who reported less engagement, drive, and sense of safety than other specialties) than among healthcare administrators.

Negative Feelings at Work



77%
OF
HEALTHCARE PROFESSIONALS
say they have had trouble concentrating

79%
OF
HEALTHCARE PROFESSIONALS
say they have felt unmotivated

44%
OF
HEALTHCARE PROFESSIONALS
say their level of day-to-day stress in the workplace is worse than last year

Staffing and Patient Challenges Continue to Lead to Burnout

There is a [growing concern in the United States](#) around healthcare worker shortages⁴. There simply are not enough healthcare workers across the country. Even more so than last year, healthcare professionals believe that having adequate staff has a notable influence on their feelings of safety (or lack thereof). It is not surprising that among both HCPs and administrators surveyed, staffing was seen as the number one challenge in healthcare today.

Health Workforce Shortage Areas⁵

Over
17,000
PRIMARY CARE
PROVIDERS ARE NEEDED

Over
12,000
DENTAL CARE
PROVIDERS ARE NEEDED

Over
8,000
MENTAL HEALTH
PROVIDERS ARE NEEDED

Staff shortages make it increasingly difficult to deal with patients. Exacerbated by a lack of staff to deal with issues, HCPs continue to notice a troubling trend in patient behaviors, which is negatively impacting their feelings of safety at work. While behaviors seem to have improved since our 2022 survey, many healthcare professionals still report that patients are refusing recommended care, behaving poorly, and becoming combative more frequently. Emergency Medicine HCPs are most likely to see a growth in negative patient behaviors. For example, 77% of Emergency Medicine HCPs surveyed report an increase in patients refusing recommended care (versus 62% of all HCPs). Moreover, 74% say that more patients are behaving poorly (versus 57% of all HCPs).

There is also high concern about being injured or assaulted at work, as a result. Only a quarter of all healthcare professionals surveyed feel “Secure” or “Safe” at work (particularly low among HCPs). One-third of healthcare professionals (37%) have already been injured or have witnessed a staff injury at work. Sixty-three percent say they are concerned about future injuries and in their survey responses estimate that their organization loses more than \$350 million each year to workplace injuries.

“The patient to staff ratio does not allow any direct care person to provide quality care to the patient and not enough emphasis is put on protecting workers from injury and illness.”

- HCP



84%
OF
HEALTHCARE PROFESSIONALS
surveyed (82% of HCPs and 91% of administrators) report that patient attitudes and behaviors have a strong influence on their feeling of safety in the workplace

Rise of 6% since 2022 (78%)

93%
OF
HEALTHCARE PROFESSIONALS
surveyed (93% of HCPs and 92% of administrators) report that having adequate staff has a strong influence on their feeling of safety in the workplace

Rise of 7% since 2022 (86%)

60%
OF
HEALTHCARE PROFESSIONALS
surveyed say that patients are refusing recommended care or demanding alternative care more frequently

53%
OF
HEALTHCARE PROFESSIONALS
surveyed say that patients are behaving poorly or inappropriately more frequently

46%
OF
HEALTHCARE PROFESSIONALS
surveyed say that patients are becoming combative more frequently

PERCEPTIONS OF MEDICAL WASTE MANAGEMENT & THE HOSPITAL EXPERIENCE

Proper Disposal of Medical Waste Cannot Be Overlooked

Despite High Stress Levels, an Effective Waste Management Plan Should Not Fall to the Wayside

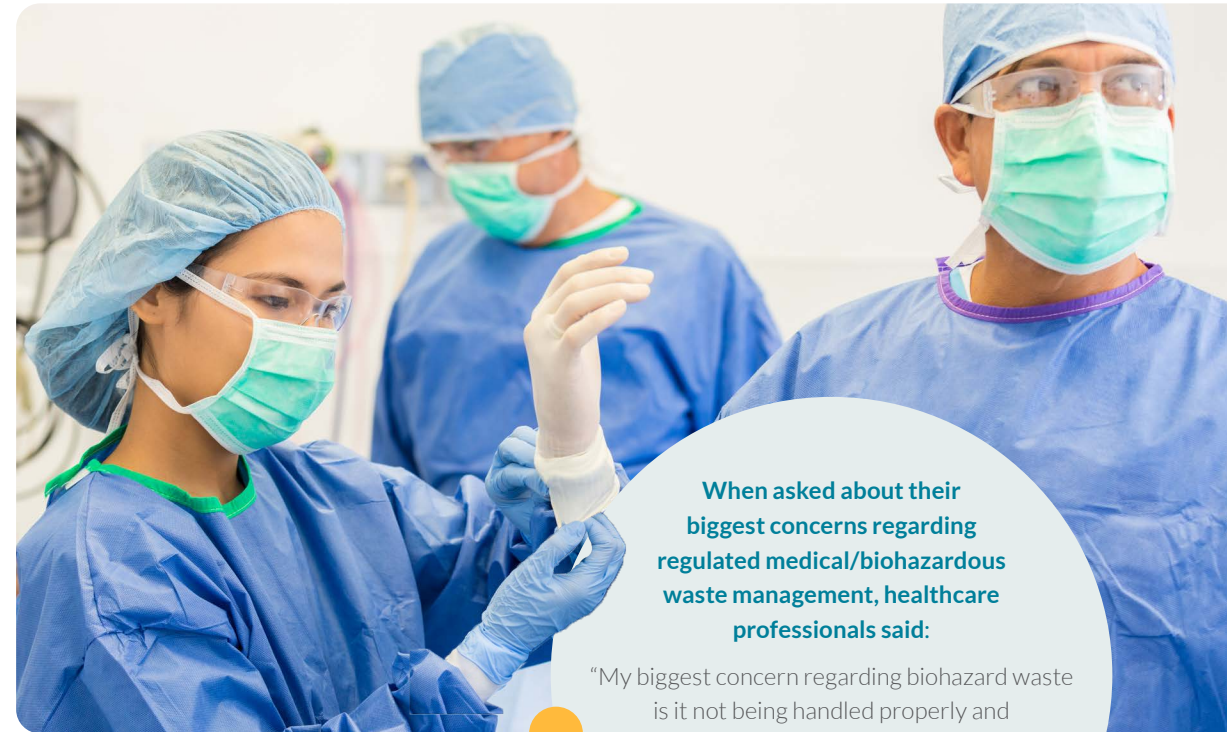
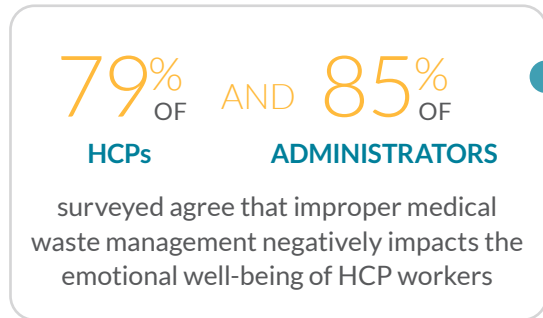
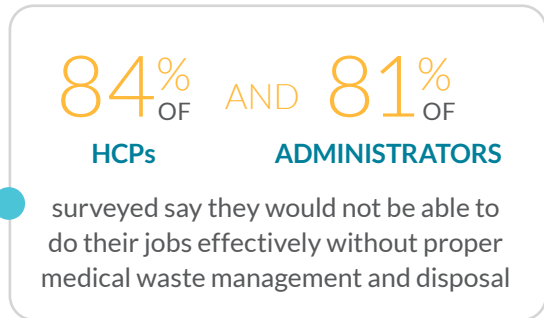
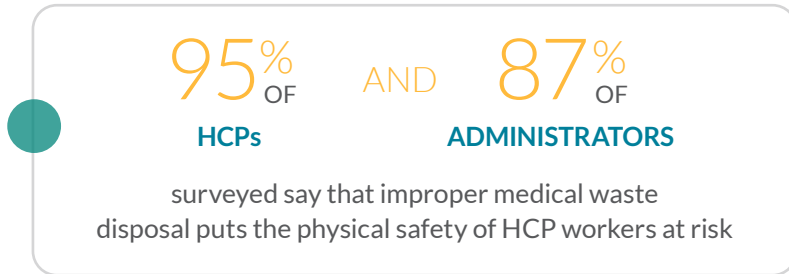
“I’m worried about ensuring that waste management staff have the necessary training and are aware of safety protocols throughout the entire waste management process.”

– Administrator



Healthcare Professionals Recognize the Vital Significance of Proper Medical Waste Management

Almost all surveyed agree that management and disposal of medical/biohazardous waste is at least somewhat critical to their organization's day-to-day function and in maintaining a safe workplace. Ninety-three percent also agree that improper disposal of medical/biohazardous waste puts the physical safety of HCP workers at risk and that it is important in delivering the best possible patient care (91%). Additionally, respondents agree that they could not do their jobs effectively without proper management and disposal (83%) and that improper disposal can also negatively impact emotional well-being (80%).



When asked about their biggest concerns regarding regulated medical/biohazardous waste management, healthcare professionals said:

“My biggest concern regarding biohazard waste is it not being handled properly and putting the patient, staff, and community at risk for bigger health concerns such as infection and HIV/AIDS.”

– HCP

Consumers Are Even More Concerned About Potential Impacts

The vast majority of healthcare consumers surveyed also recognize the importance of an effective medical waste management strategy. In total, 98% say it is at least somewhat critical. Forty-six percent say it is 'extremely critical,' and 22% say it is 'the most critical factor'. Compared to HCPs, consumers are even more concerned about the impacts and risks of ineffective regulated medical/biohazardous waste management and disposal.



Of those surveyed,

80% OF

HCPs

76% OF

ADMINISTRATORS

90% OF

HEALTHCARE CONSUMERS

report that proper medical waste management is at least very critical in maintaining a safe healthcare environment

Of those surveyed,

90% OF

HCPs

96% OF

ADMINISTRATORS

90% OF

HEALTHCARE CONSUMERS

agree that medical waste management is important to delivering the best possible patient care

Responding HCPs, administrators, and consumers are 'extremely' or 'very concerned' about medical waste management's:

Impact on the environment

HCPs 55%

Administrators 78%

Healthcare Consumers 78%

Risk to patient health and safety

HCPs 51%

Administrators 84%

Healthcare Consumers 82%

Risk to HCP health and safety

HCPs 49%

Administrators 85%

Healthcare Consumers 81%

Impact on community

HCPs 43%

Administrators 82%

Healthcare Consumers 74%



Despite High Concerns About Medical Waste Management, There is a Gap in Training Efforts

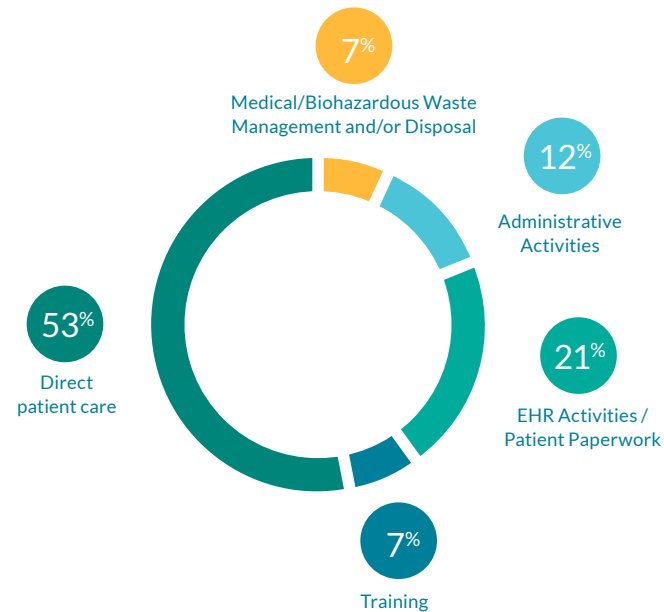
Consistent with the past two years, healthcare professionals overall are spending very little time on medical and biohazardous waste management and disposal. There are some differences in that time based on roles. For example, with less responsibility for direct patient care, administrators spend a bigger portion of their time on waste management (19% vs. just 4% for HCPs).

Additionally, just 70% of the HCPs surveyed say they have a strong understanding of how their organization disposes of medical waste, likely exacerbated by insufficient training. Nearly a quarter (23%) of the HCPs surveyed have not received refreshers or updated training on medical waste management. Administrators may be overestimating how much training their HCPs are receiving.

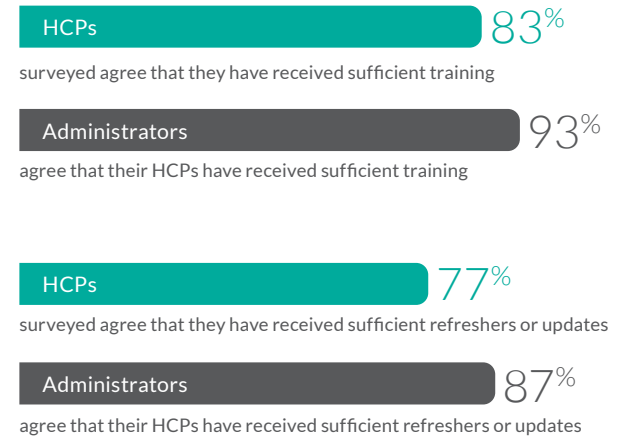
“The most critical issue is to ensure that medical facilities or biological laboratories comply with these regulations and properly sort, collect, store, transport, and dispose of waste. Compliance issues include licensing, registration, training, and record-keeping.”

– HCP

Distribution of Tasks Among Healthcare Professionals



When it comes to medical waste management education:



MEDICAL & PHARMACEUTICAL WASTE MANAGEMENT AND AT-HOME CARE

The Rise of At-Home Care Breeds New
Challenges For Healthcare Workers

*At-Home Care Continues to Increase Worker Risks
and Further Exacerbate the Education Gap*

“Patients going towards
home care
[is my biggest challenge].”

– *Administrator*





At-Home Care Needs Continue to Increase

At-home care is a growing trend in the medical field, and most of the healthcare professionals surveyed (89%) recognize and agree with this sentiment. The aging population and rising incidence of many age-related disorders has created a much larger – and growing – patient pool. Additionally, expansion of waivers from the Centers for Medicare and Medicaid Services is facilitating the growth of at-home care. The vast majority (90%) of the healthcare professionals surveyed expect the rate of at-home care to increase over the next five years. Close to three-quarters (73%) have worked with patients who required treatment or consultation in an at-home care setting.

There are clear benefits to at-home care; services provided are often less expensive and can be just as effective as hospital-based settings. Moreover, patient comfort is seen as the top benefit of providing care in at-home settings. Convenience, personalized care, and relief for family caregivers are other notable benefits.



“The global population is aging, leading to an increased demand for healthcare services, long-term care, and specialized treatment for age-related diseases and conditions.”

– Administrator

A Rapidly Aging Population (U.S. 2020 Census)⁶

The U.S. population age 65 and over grew nearly five times faster than the total population over the 100 years from 1920 to 2020, reaching

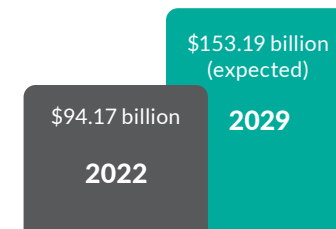
55.8 million

(16.8% of the United States population in 2020)

Top 3 Benefits of Providing Care in At-Home Settings



The U.S. Home Healthcare Services Market ⁷



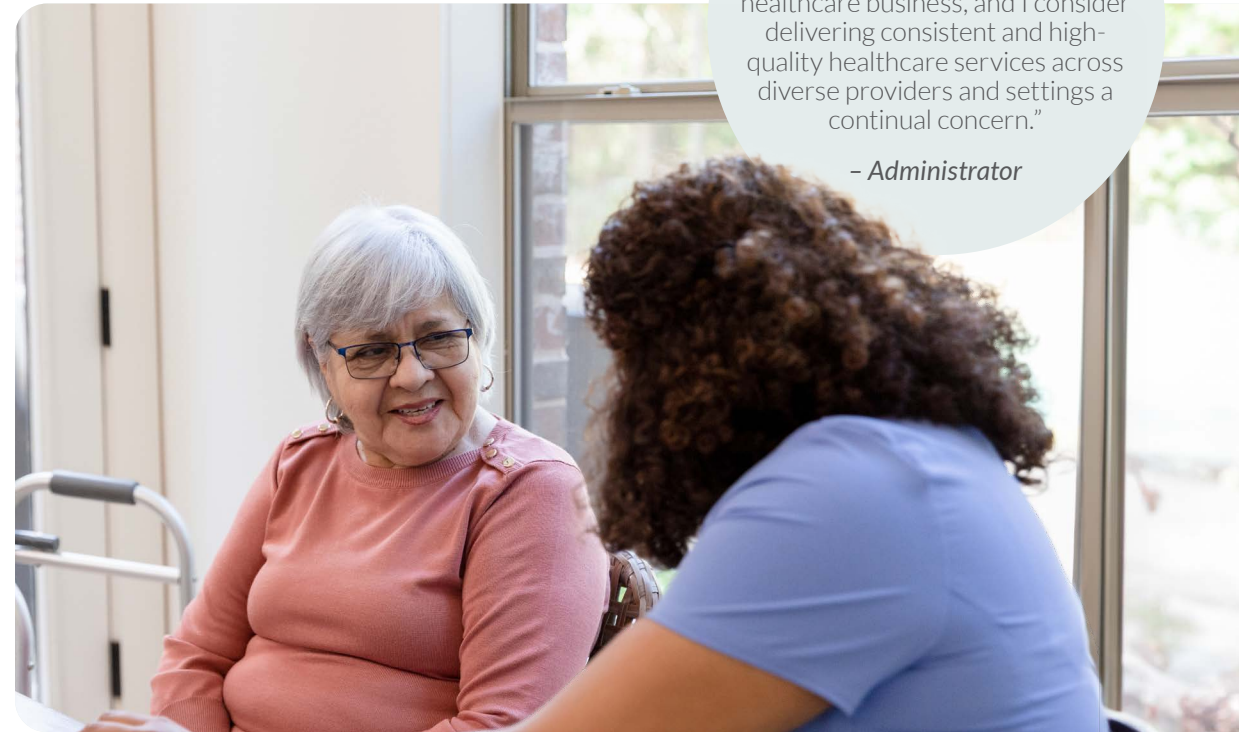


The Many Challenges and Risks of Providing Care in At-Home Settings

With the expected increases in demand for at-home care, new challenges are also anticipated. Most of the healthcare professionals surveyed (92%) believe that the rise in at-home care makes it more difficult to provide patients with the best possible care since they are being asked to provide the same top-quality care as is expected in traditional settings, where supplies, resources, and equipment are more readily available.

There are also risks to HCP worker safety due to unhygienic environments, working alone, and in-home violence such as hostile animals or violence aimed directly at HCPs. Eighty-one percent also believe that at-home care may pose significant risks to the physical health and well-being of HCPs. Healthcare professionals believe that both HCPs and patients require more support to provide the best possible care in at-home settings. Survey respondents are concerned about a lack of proper training, which is exacerbated both by rapid growth in at-home care and the understaffing issues discussed earlier.

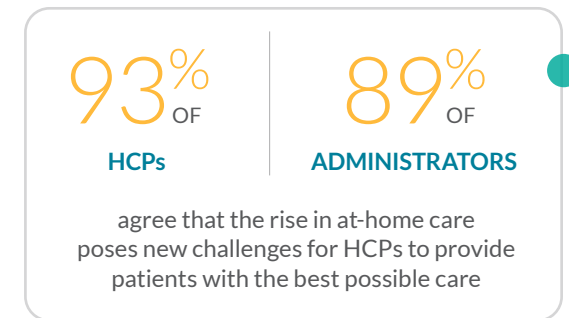
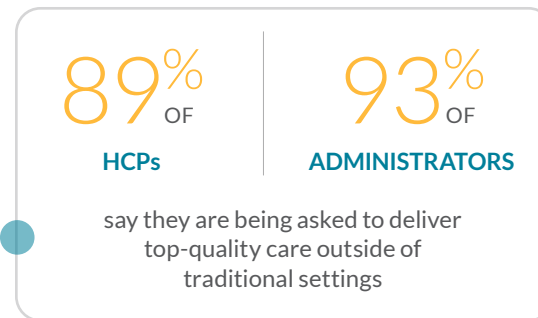
“The aging population and the rising frequency of chronic diseases represent substantial difficulties to the healthcare business, and I consider delivering consistent and high-quality healthcare services across diverse providers and settings a continual concern.”
- Administrator



Top 3 Challenges of Providing Care in At-Home Settings (all respondents)



Top 3 Risks to HCP Safety in At-Home Settings (all respondents)





Waste Management Remains a Core Challenge in At-Home Care Settings

Adding to stresses and concerns related to at-home care, most (87%) of the healthcare professionals surveyed agree that medical and pharmaceutical waste management are core challenges in at-home care settings. There is wide agreement that patients require more information and resources to be able to understand how to effectively deal with medical or pharmaceutical waste in at-home care settings (93%) while healthcare workers need additional training to uphold safe working conditions in at-home care settings (92%).

Almost half identified either pharmaceutical waste disposal management or medical waste disposal management as a challenge of providing care in at-home settings. Moreover, 42% indicated that improper management is a risk to HCP safety in at-home settings.

Most (92%) agree that additional training and support are needed for healthcare professionals to be able to better handle this core challenge. Patients also require more information. Most (86%) of the healthcare professionals surveyed do not strongly believe that patients are knowledgeable regarding proper disposal methods, nor do they have the proper training or resources needed (87%), likely exacerbated by the change in types of waste generated as acute care at home becomes more common. Less than half (48%) say that patients are provided with a clear process for disposing of medical or pharmaceutical waste when an at-home care provider is absent. According to healthcare professionals, just 54% of HCPs and 42% of patients have adequate tools and resources available to properly dispose of medical or pharmaceutical waste.

94%
OF
HEALTHCARE PROFESSIONALS

surveyed believe that at-home care introduces new challenges to safely dispose of pharmaceutical and medical waste

72%
OF
HEALTHCARE PROFESSIONALS

surveyed agree that there are not enough standards in place to safely remove medical or pharmaceutical waste from at-home settings

ONLY
58%
OF
HEALTHCARE PROFESSIONALS

surveyed feel that they know how to dispose of medical and pharmaceutical waste in a safe manner in at-home care settings

MORE THAN
90%
OF
HEALTHCARE PROFESSIONALS

surveyed believe that patients need more information and resources about proper disposal in at-home care settings

A MERE
39%
OF
HEALTHCARE PROFESSIONALS

surveyed are confident that most patients are safely managing their medical or pharmaceutical waste in at-home care settings

When asked about biggest concerns regarding regulated medical/biohazardous waste management in general, some healthcare professionals said:

“Leaving medical waste in homes or areas where children could access them.”

– HCP



PHARMACEUTICAL WASTE MANAGEMENT AND THE OPIOID EPIDEMIC

Amidst an Opioid Epidemic, Drug
Diversion Requires Proactive Measures

*Like Medical Waste Management, Pharmaceutical Waste Management
Needs More Vigilance*

“Disposal frequently contaminates
surface water and groundwater
supplies as harmful water pollution
(is our) biggest concern in medical/
biohazardous waste management.”

– *Administrator*





Proper Pharmaceutical Waste Management is Crucial

Pharmaceutical waste from expired or unused medications contributes to environmental pollution when disposed down the drain. According to the Organization for Economic Co-operation and Development (OECD), medications discarded in sinks and flushed down toilets enter sewage waters and, if not filtered out, leak into aquatic systems.⁸ These systems connect to local water supplies that serve communities.

In addition to concerns on the impact to communities, most (93%) of the healthcare professionals surveyed agree that proper pharmaceutical management is key to workplace safety and that it is critical in delivering top quality patient care (90%). Improper management, on the other hand, can negatively impact HCP well-being.

HCPs and consumers surveyed disagree on how well-informed consumers are about prescription drug disposal.

Only **16% OF CONSUMERS**

admit they don't know the proper way to dispose of leftover or unused prescription drugs,

but **92% OF HCPs**

believe consumers lack that important knowledge.

93%
OF

HEALTHCARE PROFESSIONALS surveyed agree that proper pharmaceutical waste management is key to workplace safety

90%
OF

HEALTHCARE PROFESSIONALS surveyed agree that proper pharmaceutical waste management is critical in delivering top quality patient care

81%
OF

HEALTHCARE PROFESSIONALS surveyed believe that proper pharmaceutical waste management can reduce HCP's stress in the workplace

While healthcare professionals are concerned about the proper management of pharmaceutical waste in the workplace, they're also aware that their patients may not understand its importance. One HCP indicated that "diversion of medication that's to be destroyed" is their biggest concern when it comes to proper pharmaceutical waste management. Healthcare consumers, however, may not even realize that there are options for disposing of their medicines.



Increased Knowledge of Potential Risks Can Help Limit Future Issues

In addition to environmental risks, there are concerns about the risk of increased drug diversion in the community. Accidental or intentional misuse can happen if medicines are extracted from healthcare consumers' waste bins and fall into the wrong hands. Opioid use has become a widespread problem across the globe, and, as drug use increases, healthcare professionals face more challenges as the opportunities for diversion also increase. Almost 90% of the healthcare professionals surveyed agree that they are concerned about the risks of drug diversion in the community.



Year over year, surveyed healthcare professionals agree that improper disposal of pharmaceutical waste is one of the most significant contributors to the opioid epidemic (54% of providers and 86% of administrators). In fact, the majority say the opioid epidemic has worsened in the past three years (85% of providers and 90% of administrators).

However, a lack of knowledge about real-life risks persists.

Many of the consumers surveyed are not as familiar with the dangers of drug diversion or its impact on the opioid epidemic. Compared to 92% of healthcare professionals, just 77% of consumers say that drug diversion puts the community at risk. Ninety-three percent of the providers and 91% of the administrators surveyed agree that consumers don't know the proper way of disposing of leftover or unused drugs. There is a clear need for greater public awareness about these risks and the unintended consequences of poor disposal practices.

"Patients may not be disposing of their unused medications properly and may be flushing them down the toilet or leaving them around for other people to abuse."

- HCP

In the United States, more than

932,000

people have died from a drug overdose since 1999, according to the Centers for Disease Control and Prevention (CDC)⁹

Healthcare Professionals

92%

Drug diversion puts the health of my community at risk

Healthcare Consumers

77%

Healthcare Professionals

92%

Consumers sharing or selling unused prescriptions, including opioids, is contributing to the opioid epidemic

Healthcare Consumers

82%

Reinforcing the need for more education, there is a disconnect between what administrators believe is occurring when it comes to training for HCPs and what is actually happening in healthcare environments, according to HCPs themselves.

72%
OF

HEALTHCARE PROFESSIONALS

surveyed agree that they have received sufficient training when it comes to effective pharmaceutical waste management

86%
OF

ADMINISTRATORS

surveyed agree that their HCPs have received sufficient training when it comes to effective pharmaceutical waste management

IMPACT OF MEDICAL WASTE DISPOSAL ON THE ENVIRONMENT

Beyond the Workplace, Untreated Medical Waste Can Be Harmful to the Environment

Without Proper Protections and Safeguards In Place, There is High Risk to Communities and the General Public

“A major concern with regulated medical/biohazardous waste management is making sure that the waste is handled, treated, and disposed of properly in order to prevent environmental pollution and safeguard public health.”

– Administrator





The Impact of Medical Waste on the Environment Cannot be Overstated

Improper disposal of medical waste has the potential to spread diseases to humans and animals. Needles discarded outside of appropriate containers can also expose people to potential infections. Although risks are generally higher for healthcare professionals, there are still concerns for healthcare consumers at large.

Healthcare professionals consistently recognize the importance of responsible practices as well as the detrimental effects of not employing these practices. Positive patient outcomes are made possible by proactively taking steps to ensure a healthy environment.

“I want to be sure we are not compromising the environment or the community with disposal.”
- HCP



5.9
MILLION TONS
of medical waste are generated in the U.S. each year¹⁰
hospitals alone are estimated to generate over 29 pounds of waste per bed per day

95% OF
HCPs surveyed agree sustainable environmental practices benefit the health of an overall community

OVER
90% OF
HCPs surveyed agree improper medical waste management is harmful to the environment and will have long-lasting impacts on human health and well-being

87% OF
HCPs surveyed agree positive patient outcomes are linked to the overall environmental health of the community



Not Enough is Being Done to Reduce Negative Impacts to the Environment

There is an opportunity to reduce environmental impacts by implementing effective measures to appropriately manage medical waste. However, there is a lack of concerted effort toward this end. Despite recognizing the potential harmful effects of improper waste management practices on the environment, some (75%) of the healthcare professionals surveyed do not believe their organizations are doing enough to reduce those impacts. Many (76%) do not strongly believe their organizations have innovative practices. Fifty-nine percent agree that their organization needs to increase the number of people and monetary resources dedicated to this issue. There is also a notable concern about a lack of proper training for HCPs.

ONLY

63% OF

HEALTHCARE PROFESSIONALS surveyed agree their organization is doing enough to reduce environmental impacts through compliant medical waste management, up from 58% in 2022

JUST OVER HALF, OR

60% OF

HEALTHCARE PROFESSIONALS surveyed have developed innovative practices for medical waste disposal and have stated sustainability goals

As a result,

59% OF

HEALTHCARE PROFESSIONALS

surveyed believe that their organization needs to increase the number of staff and monetary resources dedicated to medical waste disposal, consistent with 2022

“My biggest concern is that there are not enough biohazard disposal containers and that staff and students are not trained on how to properly dispose of material.”

- HCP



RECOMMENDATIONS:

Avoid Complacency and Stay Vigilant

The height of the pandemic may be over, but healthcare workers are continuing to deal with ongoing fallout. New and evolving challenges continue to put strains on the healthcare industry and its providers. The survey findings demonstrate the need for healthcare organizations to make a serious commitment to keep their employees, patients, and communities safe.



Recommendations

1. Consider the necessary resources healthcare providers need to ensure top-quality care

With the pandemic receding, stress levels may have decreased, but negative feelings remain and cannot be overlooked or ignored. Healthcare organizations should continue to provide more resources to healthcare professionals to help them deal with work-related stresses and navigate difficult patients. With a lack of staff, there are fewer resources available to deal with difficult patients and a greater burden placed on fewer individuals. These challenges make it more difficult for healthcare workers to provide effective care while also putting the safety of both workers and patients at risk.

2. Ensure all hospital staff are well-versed in proper compliance, safety, and medical waste disposal methods

Effective compliance, safety, and medical waste management training can help create a safer healthcare environment. Healthcare providers cite compliance issues as “most critical,” and only a quarter feel secure or safe at work. And consumers are even more concerned than professionals about the need for proper waste disposal methods. This should further reinforce the need for regular education and training for all staff about proper safety and compliance techniques. Nonetheless, many HCPs say they are not receiving refresher training in medical waste disposal, and there isn't widespread confidence that they have the right amount of knowledge in this area. This poses issues for creating and maintaining a safe care environment for both workers and their patients.

3. Partner with a trusted third-party medical waste management provider to meet sustainability goals

Given consumer and provider concerns about improper medical, biohazardous, and pharmaceutical waste management, healthcare



organizations should work with qualified partners to develop and communicate clear processes and guidance on how to create safe care environments for both providers and their patients. Third-party waste management partners can identify opportunities to help reduce negative impacts to the environment as well as help remain compliant with local and federal regulations. Partners with proper waste management expertise can also provide comprehensive solutions and training to implement more sustainable – and often more cost-effective – processes across all waste streams. Additionally, best-in-class partners can leverage innovative technologies and actionable data to reduce waste and help meet sustainability goals.

4. Develop a plan to effectively manage medical and pharmaceutical waste in all care environments, including at-home

With at-home care continuing to grow, healthcare organizations require a plan to minimize the improper disposal of medical and pharmaceutical waste. Home care presents its own unique set of challenges for providers and administrators, particularly when it comes to pharmaceutical waste management. Both healthcare consumers and healthcare workers strongly agree about the risks of drug diversion to the community, making proper disposal management essential to fighting the opioid epidemic. Healthcare organizations should also focus on giving providers and patients resources and training on methods to dispose of their medications in home-care environments, other than household trash and down drains. For example, some partners can provide specialty medical waste solutions such as sharps mail back containers, medication mail back envelopes, and medication collection kiosks.

Conclusion

Creating Safe Care Environments Requires Healthcare Workers to Be Well-Armed

Healthcare workers continue to face hardships in a continuously changing world. They need to quickly adapt to trends such as the rise in at-home care and an intensifying opioid epidemic. These developments only exacerbate the challenge of protecting healthcare workers, patients, and their surrounding communities from the risks of improper medical waste management. To prepare for the future, it's essential to understand healthcare workers' needs and concerns in the present.

This research has demonstrated that equipping healthcare workers with the proper tools and training on a regular basis is paramount. Not only do they require resources to better deal with the stresses caused by understaffing, but they also need regular training to manage difficult patients and properly dispose of medical and pharmaceutical waste. This training needs to focus on more than just hospital settings. Greater knowledge is needed about how to deal with these issues within an at-home care setting. This includes providing better information to patients about how to properly dispose of unused medications, as consumers may not be fully aware of the risks of improper disposal and diversion. These improvements can help lessen the burden on healthcare workers and decrease the potential for stress.

Proactively arming healthcare providers and administrators with more knowledge will help prepare them for the future of the industry. Being reactive or, worse, ignoring issues altogether, may be more costly in the long run. Enlisting the support of a trusted external partner can help guide healthcare organizations, both administrators and providers, through the many complexities of mounting trends. This will help mitigate potential medical waste management issues. Taking these steps toward better protection can benefit a healthcare organization's bottom line and brand reputation today and in the future.





Keep Your Employees, Customers, and Communities Safe

As a leading provider of regulated medical waste management and secure information destruction solutions, Stericycle helps organizations—large and small—solve complex challenges to enhance the patient experience.

For nearly 35 years, Stericycle has partnered with thousands of companies across the country to help them meet regulatory demands, protect patients and staff, and safeguard communities. Our suite of essential services helps protect public health and the environment, contributes to fighting the opioid epidemic, and helps our customers safeguard their confidential information. We take pride in caring for the health and well-being of the environment and the environment of care.



YOUR SINGLE NATIONWIDE PARTNER

We manage all healthcare regulated waste streams and offer related compliance support such as training and educational materials. Our network of localized team members across the country maintains a 97% on-time pickup rate.¹¹



YOUR RISK REDUCTION EXPERT

Our Regulatory Affairs team keeps up to date with regulatory changes and engages with federal, state, and local agencies as needed to help keep our customers informed and compliant.



YOUR SUSTAINABILITY CHAMPION

In 2022, Stericycle treated 1.5 billion pounds of medical waste prior to disposal, helping to protect the public from potentially harmful materials; shredded and recycled 1 billion pounds of paper, helping safeguard customers' confidential information; helped our customers divert 101 million pounds of plastic from landfills by offering reusable rather than single use sharps and pharmaceutical waste containers; and treated 38 million pounds of pharmaceutical waste prior to disposal, helping to keep active pharmaceutical ingredients out of waterways.

We protect what matters.™

Visit stericycle.com to learn more about workplace safety and how Stericycle can help you protect what matters.





Methodology

In partnership with The Logit Group, Stericycle conducted an online survey and interviewed healthcare professionals in July 2023, including healthcare providers (those who have direct patient interaction and currently practice as a physician, nurse, or another related role) and healthcare administrators (those who are currently at an executive leadership or senior management level in a healthcare organization). Both audiences are required to work in an organization that deals with medical waste management in some regard, whether they are personally responsible for decision making or not.

In total, the survey targeted 500 healthcare professionals and 700 consumers in the U.S. and was fielded entirely online. The average survey completion time was 20 minutes and ranged across healthcare workplace topics such as medical waste management overall, medical waste management in the hospital setting, medical waste management in the at-home setting, the impact of medical waste management on the environment, and the opioid crisis.



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