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Attorneys for Plaintiff, Individually and On
Behalf of All Others Similarly Situated

**UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA**

HRAYR SHAHINIAN, M.D., F.A.C.S.,
an individual, on behalf of himself and
all others similarly situated; PRIME
HEALTHCARE CENTINELA, LLC, a
Delaware limited liability company, on
behalf of itself and all others similarly
situated; PRIME HEALTHCARE
SERVICES – GARDEN GROVE,
LLC, a Delaware limited liability
company, on behalf of itself and all
others similarly situated; BAHAMAS
SURGERY CENTER, LLC dba
Bahamas Surgery Center, a California
limited liability company, on behalf of
itself and all others similarly situated;
PRIME HEALTHCARE SERVICES –
HARLINGEN, LLC, a Delaware
limited liability company, on behalf of
itself and all others similarly situated;
KNAPP MEDICAL CENTER, LLC, a
Texas limited liability company, on
behalf of itself and all others similarly
situated; and PRIME HEALTHCARE
SERVICES – LANDMARK, LLC, a
Delaware limited liability company, on
behalf of itself and all others similarly
situated;

Plaintiffs,

vs.

CASE NO.: 14-CV-08390-DMG(PLAx)

**SECOND AMENDED NATIONWIDE
AND CALIFORNIA, TEXAS, AND
RHODE ISLAND CLASS ACTION
COMPLAINT FOR:**

- 1. FRAUDULENT
CONCEALMENT/NON-
DISCLOSURE;**
- 2. FRAUD (AFFIRMATIVE
MISREPRESENTATIONS);**
- 3. UNFAIR BUSINESS
PRACTICES (Cal. Bus. & Prof.
Code § 17200 *et seq.*)**

DEMAND FOR JURY TRIAL

1 KIMBERLY-CLARK
2 CORPORATION, a Delaware
3 Corporation; and HALYARD
4 HEALTH, INC., a Delaware
5 Corporation,

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Defendants.

1 Plaintiffs Hrayr Shahinian, M.D., F.A.C.S., Prime Healthcare Centinela, LLC,
 2 Prime Healthcare Services – Garden Grove, LLC, Bahamas Surgery Center, LLC,
 3 Prime Healthcare Services – Harlingen, LLC, Knapp Medical Center, LLC, and Prime
 4 Healthcare Services – Landmark, LLC (collectively, “Plaintiffs”), on behalf of
 5 themselves and various classes of all others similarly situated, hereby allege as follows:

6 7 **I. BACKGROUND**

8 1. This action is brought against defendants Kimberly-Clark Corporation
 9 (“Kimberly-Clark”) and Halyard Health, Inc. (“Halyard”) (collectively, “Defendants”)
 10 for marketing and selling medical gowns represented to provide the highest level of
 11 liquid barrier protection (AAMI Level 4) from the transfer of bodily fluids, bacteria,
 12 and infection between a patient and healthcare professional. Contrary to their
 13 representations, Defendants have known since at least as early as 2012 that their
 14 purported High Performance Gowns failed industry standard tests conducted in
 15 accordance with American Society for Testing and Material (“ASTM”) protocol, they
 16 do not meet the relevant standards for gowns represented to be AAMI Level 4 and are
 17 unsafe as a result. Specifically, during ASTM F1671 tests of numerous random
 18 samples taken from multiple separate manufacturing lots of the gowns, Defendants’
 19 High Performance Gowns failed to meet the standards set by AAMI Level 4, with many
 20 of the failures so great that they can only be described as catastrophic. Among other
 21 things, the tests revealed that the gowns allowed liquid and bacterial and viral
 22 pathogens to penetrate the gowns. And yet from at least as early as 2012 to the present,
 23 Defendants have continued to fraudulently sell these gowns as AAMI Level 4 and
 24 misrepresent to Plaintiffs and other of its customers and the general public that these
 25 gowns are impermeable and are effective when treating patients with serious diseases
 26 such as Ebola; despite all the while knowing and failing to disclose that they are unsafe
 27 for AAMI Level 4 medical procedures and pose great risk of bodily harm and possibly
 28 death to patients and healthcare professionals worldwide. Defendants’ recklessness and

1 indifference as to the fact that they are responsible for placing patients and healthcare
2 professionals at great and unnecessary risk of infection and bodily harm is nothing short
3 of astonishing and utterly reprehensible.
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5 **II. PARTIES**

6 2. Plaintiff Hrayr Shahinian, M.D., F.A.C.S. (“Dr. Shahinian”) is a citizen of
7 the State of California, and resident of Los Angeles County. Plaintiff Shahinian is a
8 medical doctor and experienced surgeon who practices and resides in the County of Los
9 Angeles, State of California, within the Central District.

10 3. Dr. Shahinian is a skull base surgeon and founder of the Skull Base
11 Institute (SBI). Since 1994, he has pioneered numerous new endoscopic surgical
12 techniques to treat a variety of skull base disorders and is nationally and internationally
13 recognized as one of the first surgeons in the world to use and pioneer endoscopic skull
14 base surgery. He is Board Certified by the American Board of Surgery and has been
15 licensed to practice in California since 1996. He completed his undergraduate studies
16 at the American University of Beirut in 1981 and earned his M.D. in 1985. He earned
17 both degrees with distinction and has been an active member of the honor medical
18 society, Alpha Omega Alpha. In 1986, Dr. Shahinian was recruited to Vanderbilt
19 University Medical Center, where he completed an internship and residency in general
20 surgery. In 1991, Dr. Shahinian went to New York University’s Institute of
21 Reconstructive Plastic Surgery, the premier craniofacial program in the nation where he
22 completed a two-year fellowship in plastic and reconstructive surgery. Thereafter, in
23 1993, he completed a fellowship in skull base surgery and neurotology in the
24 Department of Head and Neck Surgery in Zurich, Switzerland under the tutelage of
25 Professor Ugo Fisch, the preeminent skull base surgeon in the world at the time. In
26 1994, Dr. Shahinian completed a second fellowship, in craniofacial surgery, at New
27 York University. He was certified by the American Board of Surgery in 1992,
28 recertified in 2003 and 2014, and is a Fellow of the American College of Surgeons

1 since 2002. From 1994-1996, Dr. Shahinian served as an Assistant Professor of
2 Surgery and Neurosurgery at the State University of New York at Stonybrook, during
3 which time he was also Co-Director (1994-1995), and then Director (1995-1996) of the
4 University's Skull Base Institute. In 1996, Dr. Shahinian was recruited by Cedars-Sinai
5 Medical Center to establish and head its Division of Skull Base Surgery and to direct its
6 Skull Base Institute. Dr. Shahinian accepted the offer, relocated to California and was
7 instrumental in establishing what has become one of the country's largest practices
8 specializing in minimally-invasive endoscopic skull base and brain tumor surgery: The
9 Skull Base Institute (SBI) in Los Angeles. Neurosurgeons from the United States as
10 well as Barcelona, Marseilles, Brussels, Cairo, Kiev, Rome and Czech Republic have
11 travelled to Dr. Shahinian for observation and training in Skull Base Surgery. Patients
12 from around the world and most of the 50 states also routinely travel to Los Angeles to
13 be treated by Dr. Shahinian. Dr. Shahinian has received many awards for his work in
14 skull base surgery and has shared his experience and expertise in numerous journal
15 articles, textbook chapters, and national and international presentations. He is also the
16 author of the textbook, "Endoscopic Skull Base Surgery," which was published by
17 Humana Press in 2009. Dr. Shahinian holds a number of patents and has thrice
18 received the National Aeronautics and Space Administration (NASA) Innovation
19 Award (in 2008, 2011 and 2012) for his work in the field of advanced medical
20 technology.

21 4. In the course of his medical practice within the Central District during the
22 time period approximately June 2012 through May 2014, Dr. Shahinian repeatedly
23 purchased and made use of the High Performance medical gowns manufactured and
24 sold by Kimberly-Clark that are at issue in this lawsuit.

25 5. Plaintiff Prime Healthcare Centinela, LLC ("Prime Healthcare Centinela")
26 is a Delaware limited liability company whose principal place of business is located in
27 the County of Los Angeles, State of California, within the Central District.
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1 6. Plaintiff Prime Healthcare Services – Garden Grove, LLC (“Prime
2 Healthcare Garden Grove”) is a Delaware limited liability company whose principal
3 place of business is located in the County of Orange, State of California, within the
4 Central District.

5 7. Plaintiff Bahamas Surgery Center, LLC dba Bahamas Surgery Center
6 (“Bahamas Surgery Center”) is a California limited liability company whose principal
7 place of business is located in Kern County, State of California.

8 8. Plaintiffs Dr. Shahinian, Prime Healthcare Centinela, Prime Healthcare
9 Garden Grove, and Bahamas Surgery Center shall collectively be referred to hereinafter
10 as the “California Plaintiffs.”

11 9. Plaintiff Prime Healthcare Services – Harlingen, LLC (“Prime Healthcare
12 Harlingen”) is a Delaware limited liability company whose principal place of business
13 is located in the city of Harlingen, State of Texas.

14 10. Plaintiff Knapp Medical Center, LLC (“Knapp Medical Center”) is a
15 Texas limited liability company whose principal place of business is located in the city
16 of Weslaco, State of Texas.

17 11. Plaintiff Prime Healthcare Services – Landmark, LLC (“Prime Healthcare
18 Landmark”) is a Delaware limited liability company whose principal place of business
19 is located in the city of Woonsocket, State of Rhode Island.

20 12. Kimberly-Clark is a Delaware corporation with its principal executive
21 offices located in Dallas, Texas. Kimberly-Clark describes itself as a global company
22 focusing on leading the world in essentials for a better life through product innovation
23 and building its personal care, consumer tissue, K-C Professional, and healthcare
24 brands. Kimberly-Clark is principally engaged in the manufacturing and marketing of a
25 wide range of products mostly made from natural or synthetic fibers using advanced
26 technologies in fibers, nonwovens, and absorbency. Kimberly-Clark owns several
27 well-recognized consumer brands in the field of personal care and tissues, including,
28

1 among others, Huggies, Pull-Ups, Kotex, Depend, Kleenex, Scott, Cottonelle, Viva,
2 and other brand names.

3 13. Among its business segments, Kimberly-Clark operated a healthcare
4 segment, which it described as providing “essentials that help restore patients to better
5 health and improve the quality of patients’ lives.” In 2013, Kimberly-Clark reported
6 net sales of over \$1.6 billion from its healthcare segment alone. This segment was
7 focused on the sale of surgical and infection prevention products for the operating room
8 and other medical supplies, and medical devices focused on pain management,
9 respiratory, and digestive health. Kimberly-Clark described itself as “a global leader in
10 education to prevent healthcare-associated infections.” Kimberly-Clark’s healthcare
11 products were sold under the “Kimberly-Clark” and “ON-Q” brand names. Its
12 healthcare products included medical exam gloves, facial masks and respirators, and
13 surgical drapes and gowns. According to its 2013 Annual Report, Kimberly-Clark sold
14 its products to, among other entities, “healthcare establishments and high volume public
15 facilities.” On information and belief, during all relevant times, Kimberly-Clark’s
16 market share of the surgical gown market at issue in this lawsuit exceeded 50%.

17 14. Defendant Halyard is a Delaware corporation with its principal executive
18 offices located in Alpharetta, Georgia. Halyard describes itself as a global company
19 which seeks to advance health and healthcare by preventing infection, eliminating pain,
20 and speeding recovery. Halyard sells its products in more than 100 countries. It claims
21 that it markets and supports the efficacy, safety, and economic benefit of its products
22 with a significant body of clinical evidence. Halyard has two business segments:
23 Surgical and Infection Prevention, and Medical Devices.

24 15. Halyard is a publicly traded spin-off company of the healthcare division of
25 Kimberly-Clark known as Kimberly-Clark Health Care. The spin-off was completed
26 on or about October 31, 2014. Since that date, Halyard, as opposed to Kimberly-Clark,
27 has sold the “MICROCOOL* Breathable High Performance Surgical Gowns”
28 (hereafter, the “High Performance Gowns” or “MICROCOOL”). Halyard was

1 incorporated in February 2014 in anticipation of the spin-off and Kimberly-Clark
2 transferred its healthcare business to Halyard, including the transfer of employees with
3 knowledge relevant to the allegations and conduct described herein, prior to the spin-
4 off. Therefore, the knowledge of Kimberly-Clark Health Care and its employees,
5 executives, executive officers, and others alleged in this Second Amended Complaint is
6 imputed to Halyard and its employees, executives, executive officers, and others, and
7 Halyard is thus liable for the acts and omissions alleged in this Second Amended
8 Complaint occurring prior to the spin-off. Halyard is also liable for the acts and
9 omissions as alleged in this Second Amended Complaint occurring after the completion
10 of the spin-off.

11 16. The true names and capacities of defendants DOES 1 through 100,
12 inclusive, whether individual, plural, corporate, partnership, associate or otherwise, are
13 not known to Plaintiffs, who therefore sue said defendants by such fictitious names.
14 Plaintiffs are informed and believe and thereon allege that each of the defendants
15 designated herein as DOE are in some manner responsible for the acts and occurrences
16 set forth herein. Plaintiffs will seek leave of court to amend this Complaint to show the
17 true names and capacities of defendants DOES 1 through 100, inclusive, as well as the
18 manner in which each DOE defendant is responsible, when the same have been
19 ascertained.

20 17. Plaintiffs are informed and believe, and upon such basis allege, that at all
21 times herein mentioned, each of the Defendants herein was an agent, servant, employee,
22 co-conspirator, partner, joint venturer, wholly owned and controlled subsidiary and/or
23 alter ego of each of the remaining Defendants, and was at all times acting within the
24 course and scope of said agency, service, employment, conspiracy, partnership and/or
25 joint venture.

26 18. Defendants, and each of them, aided and abetted, encouraged and rendered
27 substantial assistance in accomplishing the wrongful conduct and their wrongful goals
28 and other wrongdoing complained of herein. In taking action, as particularized herein,

1 to aid and abet and substantially assist the commission of these wrongful acts and other
2 wrongdoings complained of, each of the Defendants acted with an awareness of its
3 primary wrongdoing and realized that its conduct would substantially assist the
4 accomplishment of the wrongful conduct, wrongful goals, and wrongdoing.

5 6 **III. JURISDICTION AND VENUE**

7 19. This Court has subject matter jurisdiction over this action pursuant to the
8 Class Action Fairness Act of 2005 and 28 U.S.C. § 1332 because there are over 100
9 members of the proposed class, at least one member of the proposed class has a
10 different citizenship from a defendant and the total matter in controversy exceeds
11 \$5,000,000.

12 20. Venue is proper pursuant to 28 U.S.C. § 1391(b) & (c) because a
13 substantial part of the events or omissions giving rise to the claim occurred in this
14 judicial district, and because Defendant is subject to the Court's personal jurisdiction in
15 this judicial district.

16 17 **IV. GENERAL ALLEGATIONS**

18 21. As noted above, this action is brought against Defendants for marketing
19 and selling medical/surgical gowns as meeting AAMI Level 4 standards, being
20 impermeable and providing the highest level of protection from the transfer of bodily
21 fluids, bacteria, and infection between patient and healthcare professional. In reality,
22 Defendants have known since at least as early as 2012 that these gowns failed industry
23 tests and do not meet relevant standards.

24 25 **A. Defendants' Representations Concerning the Impermeability and** 26 **Liquid Barrier Protection of the High Performance Gowns.**

27 22. From approximately 2011 to the present and continuing, Defendants have
28 promoted, marketed, and offered for sale to consumers, patients, doctors, clinics, and

1 healthcare facilities worldwide surgical gowns sold under the name “MICROCOOL*
2 Breathable High Performance Surgical Gowns” (hereafter, the “High Performance
3 Gowns” or “MICROCOOL”). Defendants uniformly claimed to their prospective
4 customers that the High Performance Gowns provide the highest level of liquid barrier
5 protection available. According to Defendants, the High Performance Gowns are
6 “AAMI Level 4.” Indeed, in a press release introducing the High Performance Gowns,
7 Kimberly-Clark stated they met the AAMI Level 4 Standard for liquid barrier
8 protection and represented that the “gown helps prevent blood and other bodily fluids
9 from penetrating through to the clinician’s skin during any procedure and is specifically
10 designed for the most demanding and fluid-intensive procedures.” Kimberly-Clark’s
11 Vice President of Global Sales and Marketing, Mr. John Amat, was quoted as saying
12 “[t]he gown delivers surgeons and surgical staff a full spectrum of protection and the
13 assurance of barrier integrity, allowing them to concentrate solely on patient care
14 during long and stressful procedures and not on their risk of exposure.” Attached as
15 Exhibit A and incorporated herein by this reference is a true and correct copy of the
16 press release dated May 16, 2011.

17 23. “AAMI” stands for the Association for the Advancement of Medical
18 Instrumentation. AAMI developed the liquid barrier standard to assist healthcare
19 personnel in the selection and use of surgical gowns, drapes, and other protective
20 apparel. “AAMI Level 4” refers to the AAMI Level 4 Liquid Barrier Standard. AAMI
21 performance levels range from 1 (least protective) to 4 (most protective). AAMI
22 guidelines are a widely accepted system of classification for protective apparel and
23 drapes based on liquid barrier performance. Therefore, by claiming the High
24 Performance Gowns are AAMI Level 4 gowns, Defendants represent that they provide
25 “the highest barrier protection rating available for gowns.” Defendants further
26 represent that the High Performance Gowns provide “Level 4” liquid barrier protection
27 to “critical zones.” These “critical zones,” according to Defendants, include the front
28 area of the gown from chest to knees and “the sleeves from the cuff to above the

1 elbow.” Attached as Exhibit B and incorporated herein by this reference is a true and
2 correct copy of Kimberly-Clark’s full description of the High Performance Gowns,
3 available on its website as of the original filing date of the Complaint in this action.

4 24. Defendants also represent that the High Performance Gowns are
5 impermeable and meet and exceed: (a) ANSI/AAMI PB70; (b) ASTM F1670 and
6 ASTM F1671 standards for resistance of materials used in protective clothing; and (c)
7 the ASTM F1671 standard for bacteriophage penetration, as well as the European
8 Norms (ENISO 22610) for resistance to wet microbial penetration.

9 25. ANSI/AAMI PB70 is set forth in a document published by AAMI entitled
10 “Liquid barrier performance and classification of protective apparel and drapes
11 intended for use in healthcare facilities.” The document discusses a standard
12 establishing minimum barrier performance requirements, a classification system, and
13 associated labeling requirements for protective apparel, surgical drapes, and drape
14 accessories intended for use in healthcare facilities.

15 26. ASTM F1670 and ASTM F1671 refer to standard test methods for the
16 resistance of materials used in protective clothing to penetration by synthetic blood and
17 blood-borne pathogens. The methods are based on a test method for measuring
18 resistance of chemical protective clothing materials to penetration by liquids. They are
19 normally used to evaluate specimens from individual finished items of protective
20 clothing, including gowns and their seamed and other discontinuous regions, and
21 individual samples of materials that are candidates for items of protective clothing.

22 27. From a regulatory perspective, Defendants knew at all relevant times that
23 surgical gowns such as the High Performance Gowns at issue, are “class II” devices
24 that fall under the classification of “surgical apparel” pursuant to 21 C.F.R. § 878.4040.
25 The regulation describes surgical apparel as follows:

26 Surgical apparel are devices that are intended to be worn by
27 operating room personnel during surgical procedures **to**
28 **protect both the surgical patient and the operating room**
personnel from transfer of microorganisms, body fluids,

1 **and particulate material.** Examples include surgical caps,
 2 hoods, masks, gowns, operating room shoes and shoe covers,
 3 and isolation masks and gowns. Surgical suits and dresses,
 4 commonly known as scrub suits, are excluded. 21 C.F.R. §
 5 878.4040 (emphasis added).

6 28. Thus, in its submission to the FDA in connection with the gowns at issue,
 7 Kimberly-Clark described the intended use of the gowns as follows:

8 The Kimberly-Clark* MicroCOOL* Breathable High
 9 Performance Surgical Gowns, are sterile, single use surgical
 10 apparel intended to be worn by healthcare professionals to
 11 **help protect both the patient and the healthcare worker**
 12 **from the transfer of microorganisms, body fluids, and**
 13 **particulate matter.** The MicroCool Breathable High
 14 Performance Surgical Gowns meet the Level 4 requirements
 15 of the AAMI Liquid Barrier classifications. (emphasis
 16 added).

17 29. With respect to testing of the High Performance Gowns, Kimberly-Clark
 18 represented to the FDA as follows:

19 The Kimberly-Clark* MicroCool* Breathable High
 20 Performance Surgical Gown, has been tested in compliance
 21 with the requirements of Level 4 liquid barrier performance
 22 requirements of ANSI/AAMI PB70:2003 "*Liquid barrier*
 23 *performance and classification of protective apparel and*
 24 *drapes intended for use in healthcare facilities.*" The
 25 MicroCool* Breathable High Performance Surgical Gown
 26 also meets the requirements of ASTM1671:2003 *Standard*
 27 *test method for resistance of materials used in protective*
 28 *clothing to penetration by blood-borne pathogens using Phi-*
X174 bacteriophage penetration as a test system. The
 MicroCool* Breathable High Performance Surgical Gown
 also meets the requirements of Flame Resistant CPSC 1610
 Class 1. The MicroCool* Breathable High Performance
 Surgical Gown has also been tested in compliance with the
 biocompatibility requirements of ISO 10993 for surface
 devices with limited contact with breached or compromised
 surfaces. All results of testing met acceptance criteria.

B. Defendants Knew the High Performance Gowns Were Not Impermeable and Did Not Meet AAMI Level 4, But Claimed Otherwise and Failed to Disclose the Truth.

30. Defendants' representations concerning the level of protection of the High Performance Gowns are not true, and Defendants have known they are not true since at least 2013. Despite this knowledge, Defendants have not corrected their representations, have not stopped selling the High Performance Gowns, have not recalled the High Performance Gowns they have already sold and/or caused to be placed in the distribution channel, have not reported the truth to the FDA, and have not alerted their customers that have purchased these gowns that the gowns were not and are not as represented. In fact, not only do the High Performance Gowns not *meet* the relevant standards for liquid barrier protection, Kimberly-Clark has known since at least 2013 that its High Performance Gowns have *failed* the relevant tests, do not meet AAMI Level 4 and, thus, pose a serious risk of causing physicians, healthcare professionals and patients to be unknowingly exposed to serious bacteria, viruses and illness, including but not limited to Ebola, and further causing such individuals to contract such diseases without warning.

31. In or around 2013 at the latest, Kimberly-Clark became aware of failed test results for the High Performance Gowns. By way of example only, through receipt and review of a detailed Test Report completed by Adrian Buzea and Susan Tousignant of Intertek Laboratory located in Cortland, New York (Report No. G100999513CRT-001 dated December 27, 2012), Kimberly-Clark learned that the High Performance Gowns were not as claimed and were not as Kimberly-Clark was leading its customers to believe. During tests conducted by Intertek, one of the leading laboratories in the world, ASTM F1671 tests of approximately 96 random samples of the High Performance Gowns from multiple separate manufacturing lots were conducted, *with over 48 of the gowns failing the test and no fewer than 32 of those gowns experiencing catastrophic failures*. Indeed, among other things, the tests revealed that the gowns

1 allowed liquid and bacterial and viral pathogens to penetrate the gowns, thus placing
2 physicians, healthcare professionals and patients at considerable risk. This failure rate
3 of approximately 50% is nothing short of shocking and greatly exceeds failure rates
4 acceptable for satisfying AAMI Level 4 standards.

5 32. As a result of these failed test results, Defendants knew that they could no
6 longer honestly represent the High Performance Gowns as being “impermeable,” of
7 meeting AAMI Level 4, of meeting ASTM F1670 and F1671 testing standards, and/or
8 of satisfying ANSI/AAMI PB70. They also knew that certain of their representations to
9 the FDA regarding the gowns were false. Defendants also knew they should take
10 immediate action to announce that the High Performance Gowns did not meet
11 appropriate standards; recall the gowns; alert Federal, State and local governments and
12 the FDA; alert physicians, healthcare professionals and patients worldwide; and
13 undertake efforts to immediately cause the gowns to be removed from the shelves and
14 distribution channels of healthcare facilities and distributors worldwide. In short,
15 Defendants knew as of 2013 at the latest and likely well over a year earlier that the
16 High Performance Gowns are not safe for the intended uses and place both patients *and*
17 healthcare professionals at risk of serious infection and bodily harm.

18 33. However, instead of taking appropriate and immediate action to protect
19 healthcare professionals and the public at large, Defendants did nothing of the sort.
20 Defendants did not disclose the truth to Plaintiffs and others regarding the gowns; did
21 not stop making its false representations to Plaintiffs and others regarding the gowns,
22 did not recall the gowns; did not alert Federal, State and local governments and the
23 FDA; did not alert physicians, healthcare professionals and patients worldwide; and did
24 not undertake efforts to immediately cause the gowns to be removed from the shelves
25 and distribution channels of healthcare facilities and distributors worldwide.
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C. Defendants Chose To Place Profits Over Quality and The Protection of Plaintiffs and Others by Shifting Their Testing Process to Temporary Contractors.

34. The independent test results from Intertek should have come as little surprise to Defendants. At all times relevant to this complaint, Defendants produced much of the non-woven fabric for the MICROCOOL gowns at various of their manufacturing facilities, including at their approximately 616,000 square foot facility in La Grange, Georgia (“La Grange Mill”). The La Grange Mill is a vertically integrated manufacturing facility meaning that it converts raw materials into finished MICROCOOL fabric all within the mill.

35. A critical part of manufacturing MICROCOOL non-woven fabric is rigorous and consistent testing, which is supposed to be conducted before it gets shipped to other of Defendants’ facilities, including one located in Honduras, to be finished into surgical gowns and drapes. This quality control testing is required to take place on-site and involves a series of tests on the non-woven fabric to assure that when fabricated into finished gowns and drapes, it will comply with, among other things, AAMI Level 4 requirements.

36. As part of these quality control procedures, Defendants are supposed to test the MICROCOOL non-woven fabric for, among other things, static electricity, color, blood strike through, strength, and liquid impact penetration. These tests were supposed to be performed at an onsite quality control laboratory.

37. For most of the history of the La Grange Mill, these tests had been performed by Defendants’ employees. In general, these were long-term employees of the La Grange Mill, were well trained, and had worked in a variety jobs within the La Grange Mill that contributed to their understanding of processes and quality challenges associated with producing non-woven fabric intended for a surgical environment.

38. In approximately late 2010 to early 2011, however, Kimberly-Clark chose profits over quality and the protection of healthcare workers by shifting away from

1 using exclusively Kimberly-Clark employees to maintain quality of the MICROCOOL
2 gowns. Instead, Kimberly-Clark assigned much of the quality control function to
3 contract workers who were not Kimberly-Clark employees. These contract workers
4 were not as well paid as Kimberly-Clark employees, were not as experienced as
5 Kimberly-Clark employees, were not properly trained, and had a much higher turnover
6 rate than Kimberly-Clark employees. The primary, if not sole, reason for this shift was
7 for Kimberly-Clark to reduce expenses and increase profits.

8 39. Prior to Kimberly-Clark deploying these lower-paid contract workers into
9 the quality control function, Kimberly-Clark managers were warned by existing
10 Kimberly-Clark quality control employees that the use of these contractors to perform
11 quality control was a mistake with significant consequences and that it would result in
12 diminished quality of Kimberly-Clark's non-woven fabrics, including MICROCOOL,
13 and thus placing healthcare professionals, including Plaintiff, at undue risk.
14 Notwithstanding these objections and warnings, Kimberly-Clark managers, in an effort
15 to boost profits, overruled these objections and substituted these lower-paid and less
16 experienced contract workers for Kimberly-Clark employees in the quality control
17 laboratory.

18 40. As a result of this substitution, the quality of non-woven fabrics, including
19 MICROCOOL, has suffered. This reduction on quality control has led to a reduction in
20 quality, which in turn contributed to the failure of the High Performance Gowns
21 described above.

22
23 **D. Kimberly-Clark, Its Distributor and Others Agreed to Purposely**
24 **Conceal the Truth About The High Performance Gowns.**

25 41. In early 2013 at the latest, in an effort to place their own monetary self-
26 interest ahead of the welfare of the general public and healthcare professionals
27 worldwide, Kimberly-Clark together with at least one of its major distributors, Cardinal
28 Health 200, LLC, and certain of its employees, executives, executive officers (e.g.

Executive Vice President Joanne Bauer), agents, and others took affirmative steps to conceal, not disclose and cover-up their knowledge of the true condition of the High Performance Gowns, as well as the Intertek test results, and purposely avoid and/or delay the disclosure of the truth about the problems with its gowns from Plaintiffs, other healthcare professionals, the government and the general public.

E. The Continued Sale of the High Performance Gowns Creates an Ongoing and Unacceptable Risk of Harm to Patients and Healthcare Workers.

42. Despite its knowledge as to its prior false representations and concealment, in relatively recent public statements, Kimberly-Clark has nevertheless represented that the High Performance Gowns are *safe to use in connection with patients suspected of contracting the Ebola virus*. Kimberly-Clark's website stated as follows:

As concerns around the spread of the Ebola virus continue to grow, the number of inquiries we receive regarding recommendations for PPE [i.e., "Personal Protective Equipment"] and our plans for Pandemic Preparedness are growing in tandem. Therefore, we want to proactively provide you with guidance on preparing for a pandemic **as well as solutions for proper PPE**. We are providing you with a clinical Kimberly-Clark Ebola Virus Precautions Brief and a Kimberly-Clark Personal Protection Solutions guide as well as other resources to answer questions you have about the Ebola Virus Disease.

43. Below this statement on its website, Kimberly-Clark shared a link inviting visitors to download the "Kimberly-Clark Personal Protection Solutions Guide," which advised healthcare facilities to use the High Performance Gowns in connection with treating patients who may be infected with the Ebola virus. The link to this list of Kimberly-Clark products, which included the High Performance Gowns, was also available on Kimberly-Clark's letter to customers entitled the "Kimberly-Clark Pandemic Preparedness Customer Letter" dated August 14, 2014. Attached hereto as

1 Exhibit C and incorporated herein by this reference is a true and correct copy of a page
2 relating to Ebola preparedness available on Kimberly-Clark's website. Attached hereto
3 as Exhibit D is a true and correct copy of Kimberly-Clark's August 14, 2014 letter
4 posted on its website. Attached hereto as Exhibit E and incorporated herein by this
5 reference is a true and correct copy of the list of Kimberly-Clark "Personal Protective
6 Equipment" products, which include the High Performance Gowns and which
7 Kimberly-Clark recommended in connection with the treatment of suspected or
8 confirmed Ebola patients.

9 44. Further, on September 19, 2014, Kimberly-Clark issued a document
10 entitled "Kimberly-Clark Ebola Virus Disease (EVD) Precautions Brief." In this
11 document, Kimberly-Clark provided a list of recommendations for "Personal
12 Protection" from the Ebola virus, as well as the use of "appropriate personal protective
13 equipment (PPE)." With respect to surgical gowns, Kimberly-Clark advised healthcare
14 professionals to use "Level 4" gowns—the represented clearance level for the High
15 Performance Gowns—for working with Ebola patients. Attached hereto as Exhibit F
16 and incorporated herein by this reference is a true and correct copy of this document.

17 45. In short, despite knowing since at least 2013 that its High Performance
18 Gowns failed industry tests and were at risk for allowing bodily fluid, bacteria, and
19 other harmful matter to pass between patients and healthcare professionals, Defendants
20 have recommended these gowns are safe for use in high-risk medical environments,
21 including when treating Ebola. Defendants' recklessness and indifference to the
22 prospect that it is responsible for placing patients and healthcare professionals at great
23 and unnecessary risk of infection and bodily harm is nothing short of astonishing and,
24 more to the point, utterly reprehensible.

25 46. On October 10, 2014, AAMI issued a press release entitled "Surgery
26 Protocol for Ebola Includes AAMI Gown Standard." In the press release, AAMI
27 recommended that surgeons and healthcare professionals wear "AAMI Level 4"
28 surgical gowns and drapes when operating on suspected or confirmed Ebola patients.

1 On October 21, 2014, the American College of Surgeons issued a statement echoing the
2 AAMI guidance by advising that due to the significant risk of exposure to blood or
3 bodily fluids, all operating room personnel should wear “AAMI Level 4” impervious
4 surgical gowns. Again, while the public and the healthcare community is being led to
5 believe that “AAMI Level 4” gowns manufactured and distributed by Defendants are
6 safe for Ebola patients or other sensitive operations, and Defendants’ gowns have met
7 critical industry standards and are “impermeable,” Defendants together with certain of
8 its employees, executives, agents, distributors, and others have been silent in disclosing
9 the truth.

10
11 **F. Plaintiffs Purchased the High Performance Gowns.**

12 47. Plaintiff Dr. Shahinian repeatedly purchased and made use of the High
13 Performance Gowns in Los Angeles, California during the time period approximately
14 June 2012 through May 2014.

15 48. As reflected in Defendants’ internal documents, Plaintiff Prime Healthcare
16 Centinela purchased and made use of the High Performance Gowns within the County
17 of Los Angeles, State of California, in the Central District during the class period
18 alleged below.

19 49. As reflected in Defendants’ internal documents, Plaintiff Prime Healthcare
20 Garden Grove purchased and made use of the High Performance Gowns within the
21 County of Orange, State of California, in the Central District during the class period
22 alleged below.

23 50. As reflected in Defendants’ internal documents, Plaintiff Bahamas Surgery
24 Center purchased and made use of the High Performance Gowns within the State of
25 California during the class period.

26 51. As reflected in Defendants’ internal documents, Plaintiff Prime Healthcare
27 Harlingen purchased and made use of the High Performance Gowns within the State of
28 Texas during the class period.

52. As reflected in Defendants' internal documents, Plaintiff Knapp Medical Center purchased and made use of the High Performance Gowns within the State of Texas during the class period.

53. As reflected in Defendants' internal documents, Plaintiff Prime Healthcare Landmark purchased and made use of the High Performance Gowns within the State of Rhode Island during the class period.

54. Plaintiffs made these purchases and used these gowns in reliance on Defendants' representations regarding the gowns (a) meeting AAMI Level 4 standards; (b) being impermeable; (c) providing the highest level of liquid barrier protection available; (d) helping prevent blood and other bodily fluids from penetrating through to the clinician's skin during any procedure and being specifically designed for the most demanding and fluid-intensive procedures; (e) meeting the highest barrier protection rating available for gowns; and (f) providing AAMI Level 4 liquid barrier protection to "critical zones", including the front area of the gown from the chest to knees and the sleeves from the cuff to above the elbow. Had Plaintiffs know the truth about the gowns and Defendants' misrepresentations and concealment as described above, he would not have purchased or made use of the gowns.

V. CLASS ACTION ALLEGATIONS

Fed. R. Civ. Proc. 23(b)(2)

55. Plaintiffs bring this action pursuant to Rule 23(b)(2) of the Federal Rules of Civil Procedure on behalf of themselves and all purchasers and users, including entities and natural persons, in the United States who purchased or used the High Performance Gowns from 2011 up to and including December 11, 2015 (the "Injunctive Relief Class"), with the following subclasses:

- (a) California Injunctive Relief Subclass: All purchasers and users, including entities and natural persons in California, who purchased

1 or used the High Performance Gowns from 2011 up to and including
 2 December 11, 2015 (the “California Injunctive Relief Subclass”).

3 (b) Texas Injunctive Relief Subclass: All purchasers and users,
 4 including entities and natural persons in Texas, who purchased or
 5 used the High Performance Gowns from 2011 up to and including
 6 December 11, 2015 (the “Texas Injunctive Relief Subclass”).

7 (c) Rhode Island Injunctive Relief Subclass: All purchasers and users,
 8 including entities and natural persons in Rhode Island, who
 9 purchased or used the High Performance Gowns from 2011 up to
 10 and including December 11, 2015 (the “Rhode Island Injunctive
 11 Relief Subclass”).

12 56. Excluded from the Injunctive Relief Class, the California Injunctive Relief
 13 Subclass, the Texas Injunctive Relief Subclass, and the Rhode Island Injunctive Relief
 14 Subclass, is (a) any governmental entity; (b) any person or entity in which any judge,
 15 justice, or judicial officer presiding over this matter and members of their immediate
 16 families and judicial staff, have any controlling interest; and (c) any partner or
 17 employee of Class Counsel.

18 57. Class certification is proper under Rule 23 of the Federal Rules of Civil
 19 Procedure because Defendants have acted (or refused to act) on grounds generally
 20 applicable to the Injunctive Relief Class, the California Injunctive Release Subclass, the
 21 Texas Injunctive Relief Subclass, and the Rhode Island Injunctive Relief Subclass,
 22 thereby making appropriate injunctive relief with respect to the classes as a whole.

23 58. Plaintiffs reserve the right to modify the definition of the Injunctive Relief
 24 Class, the California Injunctive Relief Subclass, the Texas Injunctive Relief Subclass,
 25 and the Rhode Island Injunctive Relief Subclass, after further discovery. Plaintiffs
 26 further reserve the right to only seek class certification under Rule 23(b)(2) for
 27 injunctive relief and not to seek class certification under Rule 23(b)(3) for monetary
 28 damages.

Fed. R. Civ. Proc. 23(b)(3)

59. Plaintiffs separately bring this action pursuant to Rule 23(b)(3) of the Federal Rules of Civil Procedure on behalf of themselves and all purchasers and users, including entities and natural persons, in the United States who purchased or used the High Performance Gowns from 2011 up to and including December 11, 2015 (the “Damages Class”), with the following subclasses:

(a) California Damages Subclass: All purchasers and users, including entities and natural persons in California, who purchased or used the High Performance Gowns from 2011 up to and including December 11, 2015 (the “California Damages Subclass”).

(b) Texas Damages Subclass: All purchasers and users, including entities and natural persons in Texas, who purchased or used the High Performance Gowns from 2011 up to and including December 11, 2015 (the “Texas Damages Subclass”).

(c) Rhode Island Damages Subclass: All purchasers and users, including entities and natural persons in Rhode Island, who purchased or used the High Performance Gowns from 2011 up to and including December 11, 2015 (the “Rhode Island Damages Subclass”).

60. Excluded from the Damages Class, the California Damages Subclass, the Texas Damages Subclass, and the Rhode Island Damages Subclass, is (a) any governmental entity; (b) any person or entity in which any judge, justice, or judicial officer presiding over this matter and members of their immediate families and judicial staff, have any controlling interest; and (c) any partner or employee of Class Counsel.

61. Questions of law or fact common to Damages Class, the California Damages Subclass, the Texas Damages Subclass, and the Rhode Island Damages Subclass, predominate over any questions affecting only individual class members, and a class action is superior to other available methods for fairly and efficiently adjudicating the controversy.

1 62. Plaintiffs reserve the right to modify the definition of the Damages Class,
2 the California Damages Subclass, the Texas Damages Subclass, and the Rhode Island
3 Damages Subclass, after further discovery. As indicated above, Plaintiffs further
4 reserve the right to only seek class certification under Rule 23(b)(2) for injunctive relief
5 and not to seek class certification under Rule 23(b)(3) for monetary damages.

6
7 **Fed. R. Civ. Proc. 23(a) Prerequisites**

8 63. The Injunctive Relief Class and Damages Class and related subclasses are
9 sometimes referred to collectively herein as the “Class” and the members of these
10 classes as “Class Members.”

11 64. Numerosity of the Class. The Class is so numerous that joinder of all
12 members in one action is impracticable. While the exact number and identities of the
13 Class Members are unknown to Plaintiffs at this time and can only be ascertained
14 through appropriate discovery, Plaintiffs believe and therefore allege that there are in
15 excess of 500,000 members of the Class.

16 65. Typicality of Claims. Plaintiffs’ claims are typical of those of other Class
17 Members, all of whom have suffered similar harm due to Defendants’ course of
18 conduct as described herein.

19 66. Adequacy of Representation. Plaintiffs are adequate representatives of the
20 Class and will fairly and adequately protect the interests of the Class. Plaintiffs have
21 retained attorneys who are highly experienced in the handling of class actions, and
22 Plaintiffs and their counsel intend to prosecute this action vigorously.

23 67. Predominance of Common Questions of Law or Fact. Common questions
24 of fact and law exist as to all Class Members that predominate over any questions
25 affecting only individual Class Members. These common legal and factual questions,
26 which do not vary among Class Members, and which may be determined without
27 reference to the individual circumstances of any Class member, include, but are not
28 limited to, the following:

- (a) Whether Defendants falsely represented that the High Performance Gowns meet AAMI Level 4 Liquid Barrier Standards;
- (b) Whether Defendants falsely represented that the High Performance Gowns are impermeable and protect both the surgical patient and the operating room personnel from transfer of microorganisms, body fluids, and particulate material;
- (c) Whether Defendants falsely represented that the High Performance Gowns provide “Level 4” liquid barrier protection to “critical zones,” which include “the sleeves from the cuff to above the elbow”;
- (d) Whether and when Defendants learned that the above representations were false;
- (e) Whether Defendants had a duty to disclose to their customers, patients, the government, healthcare professionals, and/or the general public that the above representations were false;
- (f) Whether the above representations and known problems with the gowns were material;
- (g) Whether Defendants intentionally or recklessly concealed that the High Performance Gowns were not impermeable, did not meet AAMI Level 4 Liquid Barrier Standards, and did not provide “Level 4” liquid barrier protection to all “critical zones”;
- (h) Whether Defendants had any reasonable grounds for believing the representations described above were true when they made them;
- (i) Whether Defendants’ conduct was undertaken with conscious disregard of the rights of the members of the Class, and was done with fraud, oppression, and/or malice;

- (j) Whether injunctive relief is appropriate and necessary to enjoin Defendants from selling the High Performance Gowns as AAMI Level 4 gowns;
- (k) Whether Defendants' disclosures regarding the lack of liquid barrier protection afforded by the High Performance Gowns were inadequate so as to be false, deceptive, and/or unfair;
- (l) Whether Defendants' conduct caused harm to the Class;
- (m) Whether the members of the Class are entitled to restitution and/or suffered damages.

68. Superiority. A class action is superior to other available methods for the fair and efficient adjudication of this controversy, because individual litigation of the claims of all Class Members is impracticable. Requiring each individual class member to file an individual lawsuit would unreasonably consume the amounts that may be recovered. Even if every Class Member could afford individual litigation, the adjudication of hundreds of thousands of identical claims would be unduly burdensome to the courts. Individualized litigation would also present the potential for varying, inconsistent, or contradictory judgments and would magnify the delay and expense to all parties and to the court system resulting from multiple trials of the same factual issues. By contrast, the conduct of this action as a class action, with respect to some or all of the issues presented herein, presents no management difficulties, conserves the resources of the parties and of the court system, and protects the rights of the Class Members. Plaintiffs anticipate no difficulty in the management of this action as a class action. The prosecution of separate actions by individual Class Members may create a risk of adjudications with respect to them that would, as a practical matter, be dispositive of the interests of the other Class Members not parties to such adjudications or that would substantially impair or impede the ability of such non-party Class members to protect their interests.

VI. CLAIMS FOR RELIEF

COUNT ONE

FRAUD (AFFIRMATIVE MISREPRESENTATIONS)

69. Plaintiffs restate and re-allege paragraphs 1 through 68 as if fully set forth herein.

70. Defendants uniformly represented that the High Performance Gowns:

- (a) meet AAMI Level 4 Liquid Barrier Standards;
- (b) meet ASTM F1670 and ASTM F1671 standards for resistance of materials used in protective clothing;
- (c) meet ASTM F1671 standards for bacteriophage penetration, as well as the European Norms (ENISO 22610) for resistance to wet microbial penetration;
- (d) provide “Level 4” liquid barrier protection to “critical zones,” which include the front area of the gown from chest to knees and “the sleeves from the cuff to above the elbow”;
- (e) are impermeable and protect both the patient and healthcare personnel from transfer of microorganisms, body fluids, and particulate material;
- (f) will not leak bodily fluids or pass bacterial organisms either from the healthcare worker to the patient, or vice versa, and are safe for use in the treatment of patients with infectious diseases or whose treatment require a sterile environment; and/or
- (g) provide the highest level of liquid barrier protection such that the gowns are recommended in the treatment of suspected or confirmed Ebola patients.

1 71. Each of Defendants' representations described above were false.
 2 Defendants intentionally and/or recklessly misrepresented the material facts set forth
 3 above. The true facts include, among other things, that the High Performance Gowns:

- 4 (a) failed ASTM F1671 tests at rates that exceeded failure rates
- 5 acceptable for satisfying AAMI Level 4 standards, and the tests
- 6 revealed that liquid and bacterial matter penetrated the gowns;
- 7 (b) did not meet AAMI Level 4 Liquid Barrier Standards;
- 8 (c) did not meet ASTM F1670 and ASTM F1671 standards for
- 9 resistance of materials used in protective clothing;
- 10 (d) did not meet ASTM F1671 standards for bacteriophage penetration,
- 11 as well as the European Norms (ENISO 22610) for resistance to wet
- 12 microbial penetration;
- 13 (e) were not impermeable and would not protect both the patient and
- 14 healthcare personnel from transfer of microorganisms, body fluids,
- 15 and particulate material;
- 16 (f) would not provide "Level 4" liquid barrier protection to the "critical
- 17 zone" of "the sleeves from the cuff to above the elbow";
- 18 (g) would not prevent the leakage of bodily fluids or the passing of
- 19 bacterial organisms between healthcare professionals and patients,
- 20 and was not safe for use in the treatment of patients with infectious
- 21 diseases or whose treatment require a sterile environment; and/or
- 22 (h) would not provide the highest level of liquid barrier protection such
- 23 that the gowns are recommended in the treatment of suspected or
- 24 confirmed Ebola patients.

25 72. Defendants' statements were made with the intent to deceive Plaintiffs and
 26 the Class, and to induce Plaintiffs and the Class to purchase and use the gowns in
 27 reliance thereon.

73. Plaintiffs and the Class, at the time these representations were made by Defendants, and at the time Plaintiffs and the Class took the actions herein alleged, were ignorant of the falsity of Defendants' representations and believed them to be true. Plaintiffs and the Class relied on Defendants' representations and had Plaintiffs and the Class known of the actual facts, Plaintiffs and the Class would not have taken the actions they did, including but not limited to purchasing the High Performance Gowns and using the High Performance Gowns in the treatment of patients. Plaintiffs and the Class' reliance on Defendants' representations was justified.

74. As a direct and proximate result of the above, Plaintiffs and the Class have suffered damages in an amount to be proven at trial.

75. Defendants undertook the aforesaid illegal acts intentionally or with conscious disregard of the rights of Plaintiffs and the Class, and did so with fraud, oppression, and/or malice. This despicable conduct subjected Plaintiffs and the Class to cruel and unjust hardship so as to justify an award of punitive damages in an amount sufficient to deter such wrongful conduct in the future. Therefore, Plaintiffs and the Class are also entitled to punitive damages against Defendants in an amount to be determined at trial.

COUNT TWO

FRAUDULENT CONCEALMENT/NON-DISCLOSURE

76. Plaintiffs restate and re-allege paragraphs 1 through 75 as if fully set forth herein

77. As alleged above, Defendants made a number of representations concerning the High Performance Gowns, including that the High Performance Gowns are impermeable, meet AAMI Level 4 Liquid Barrier Standards, meet ASTM F1670 and ASTM F1671 standards, and provide "Level 4" liquid barrier protection to "critical zones," which include "the sleeves from the cuff to above the elbow."

1 78. Defendants' representations described above were false. However, despite
 2 knowing of the falsity of their representations at least as of 2013, Defendants
 3 concealed, and/or failed to disclose material and contrary facts set forth above,
 4 including, among other things, that the High Performance Gowns:

- 5 (a) failed ASTM F1671 tests at rates that exceeded failure rates
- 6 acceptable for satisfying AAMI Level 4 standards, and the tests
- 7 revealed that liquid and bacterial matter penetrated the gowns;
- 8 (b) did not meet AAMI Level 4 Liquid Barrier Standards;
- 9 (c) did not meet ASTM F1670 and ASTM F1671 standards for
- 10 resistance of materials used in protective clothing;
- 11 (d) did not meet ASTM F1671 standards for bacteriophage penetration,
- 12 as well as the European Norms (ENISO 22610) for resistance to wet
- 13 microbial penetration;
- 14 (e) were not impermeable and would not protect both the surgical
- 15 patient and the operating room personnel from transfer of
- 16 microorganisms, body fluids, and particulate material;
- 17 (f) would not provide "Level 4" liquid barrier protection to the "critical
- 18 zone" of "the sleeves from the cuff to above the elbow";
- 19 (g) would not prevent the leakage of bodily fluids or the passing of
- 20 bacterial organisms between healthcare professionals and patients,
- 21 and was not safe for use in the treatment of patients with infectious
- 22 diseases or whose treatment require a sterile environment; and/or
- 23 (h) would not provide the highest level of liquid barrier protection such
- 24 that the gowns are recommended in the treatment of suspected or
- 25 confirmed Ebola patients.

26 79. Defendants had a duty to disclose this information to their customers
 27 because: (a) it is material information that poses a safety risk to customers and
 28 Defendants knew the information was not reasonably discoverable by their customers;

1 (b) Defendants made affirmative representations that were contrary and misleading
2 without the disclosure of this information; and/or (c) Defendants actively concealed this
3 information from its customers, the government and the public.

4 80. Defendants concealed and failed to disclose these material facts with the
5 intent to deceive Plaintiffs and the Class, including but not limited to concealing the
6 failed test results from Intertek.

7 81. Defendants' concealments and non-disclosure of material facts as set forth
8 above were made with the intent to induce Plaintiffs and the Class to purchase and use
9 the gowns.

10 82. Plaintiffs and the Class, at the time these failures to disclose and
11 suppressions of facts occurred, and at the time Plaintiffs and the Class purchased and
12 used the gowns, were ignorant of the existence of the facts that Defendants suppressed
13 and failed to disclose. If Plaintiffs and the Class had known of Defendants'
14 concealments and failures to disclose material facts, they would not have taken the
15 actions they did, including but not limited to purchasing the High Performance Gowns
16 and using the High Performance Gowns in the treatment of patients. Plaintiffs and the
17 Class' reliance was justified and reasonable as they had no basis to doubt the original
18 representations made to them, nor did they have reason to believe they were being
19 misled or material facts were being concealed from them.

20 83. As a direct and proximate result of the above, Plaintiffs and the Class have
21 suffered damages in an amount to be proven at trial.

22 84. Defendants undertook the aforesaid illegal acts intentionally or with
23 conscious disregard of the rights of Plaintiffs and the Class, and did so with fraud,
24 oppression, and/or malice. This despicable conduct subjected Plaintiffs and the Class to
25 cruel and unjust hardship so as to justify an award of punitive damages in an amount
26 sufficient to deter such wrongful conduct in the future. Therefore, Plaintiffs and the
27 Class are also entitled to punitive damages against Kimberly-Clark in an amount to be
28 determined at trial.

COUNT THREE

VIOLATION OF CALIFORNIA BUSINESS AND PROFESSIONS CODE

SECTION 17200 *ET SEQ.*

(On Behalf of the California Subclasses Only)

85. Plaintiffs restate and re-allege paragraphs 1 through 84 as if fully set forth herein.

86. California Business and Professions Code section 17200 *et seq.*, also known as the California Unfair Competition Law (“UCL”), prohibits acts of “unfair competition,” including any unlawful, unfair, fraudulent, or deceptive business act or practice as well as “unfair, deceptive, untrue or misleading advertising.”

87. By engaging in the false, deceptive, and misleading conduct alleged above, Defendants have engaged in unlawful business acts and practices in violation of the UCL, including by violating state and federal laws, including but not limited to 21 U.S.C. § 360; and 21 C.F.R. §§ 803.1 *et seq.*, 21 C.F.R. § 878.4040, and Cal. Bus. & Prof. Code §§ 17500 *et seq.*

88. Defendants’ conduct in misleading the California Plaintiffs and the California Subclasses through their affirmative misrepresentations and failures to disclose material facts to the aforementioned plaintiffs and the California Subclasses, as described above, also constitutes a “fraudulent” and “unfair” business practice within the meaning of the UCL.

89. The California Plaintiffs and each California Subclass Member suffered an injury in fact and lost money or property as a result of Defendants’ unlawful, unfair, and/or fraudulent business practices.

90. The California Plaintiffs, on behalf of themselves and the California Subclasses, seek restitution and disgorgement of all moneys received by Defendants through the unlawful, fraudulent and unfair conduct described above.

91. The California Plaintiffs, on behalf of themselves and the California Subclasses, seek a temporary, preliminary, and/or permanent injunction from this Court

1 prohibiting Defendants from engaging in the patterns and practices described herein,
2 including but not limited to representing that the High Performance gowns are AAMI
3 Level 4 gowns.

4
5 **VII. PRAYER FOR RELIEF**

6 WHEREFORE, Plaintiffs pray for judgment against Defendants, and each of
7 them, as follows:

8
9 **ON THE FIRST CAUSE OF ACTION FOR FRAUD (AFFIRMATIVE**
10 **MISREPRESENTATIONS)**

11 1. An Order certifying that the action be maintained as a class action under
12 Rule 23(b)(2) and/or Rule 23(b)(3) of the Federal Rules of Civil Procedure.

13 2. An injunction precluding the wrongful conduct described herein.

14 3. For compensatory damages in an amount that exceeds \$500 million, with
15 the exact amount to be proven at trial.

16 4. For punitive damages in an amount sufficient to punish Defendants and to
17 defer them from engaging in wrongful conduct in the future.

18 5. For pre and post judgment interest and costs of suit incurred herein.

19 6. For attorneys' fees incurred herein, to the extent permitted by law.

20 7. For such other and further relief as the Court may deem just and proper.

21
22 **ON THE SECOND CAUSE OF ACTION FOR FRAUDULENT**
23 **CONCEALMENT**

24 1. An Order certifying that the action be maintained as a class action under
25 Rule 23(b)(2) and/or Rule 23(b)(3) of the Federal Rules of Civil Procedure.

26 2. An injunction precluding the wrongful conduct described herein.

27 3. For compensatory damages in an amount that exceeds \$500 million, with
28 the exact amount to be proven at trial.

Exhibit A

MicroCool Surgical Gown Meets AAMI Level 4 Requirements

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<http://www.infectioncontrolday.com/>

By:

Posted on: 05/16/2011

 PRINT

Kimberly-Clark Health Care announces that it has been cleared by the Food and Drug Administration (FDA) to market its MicroCool® Breathable High Performance Surgical Gown as meeting the Association for the Advancement of Medical Instrumentation (AAMI) Level 4 Standard for liquid barrier protection. The AAMI Standard is a system of liquid barrier performance classification for protective apparel. The gown, featuring the updated labeling, is expected to be available in select locations beginning this month and to the complete market by the end of this year.

The AAMI Standard addresses four levels of barrier protection – ranging from Level 1 to Level 4. Gowns with a Level 4 classification provide the highest liquid barrier protection defined by the AAMI Standard. The classification of the entire surgical gown under the AAMI Standard is based on the lowest level of protection within any of its Critical Zones.

Kimberly-Clark Health Care, utilizing feedback from its customers, developed the new MicroCool® Breathable High Performance Surgical Gown, with the highest AAMI level of liquid barrier protection while still providing the same comfort and critical lint, abrasion, flame and bacteria resistance that its customers need.

The single-use gown helps prevent blood and other bodily fluids from penetrating through to the clinician's skin during any procedure and is specifically designed for the most demanding and fluid-intensive procedures. Incorporating adhesive laminate technology, the gown features an advanced microporous fabric, which utilizes two layers of nonwoven fabric to enclose a protective film layer that "breathes," dispelling body heat to keep the wearer cool and comfortable.

This level of innovation further illustrates Kimberly-Clark Health Care's commitment to designing products that meet customer needs.

"As a pioneer in the development of MicroCool® technology, Kimberly-Clark Health Care has a long heritage of providing the most innovative products to our customers," says John Amat, vice president of global sales and marketing, Kimberly-Clark Health Care. "The gown delivers surgeons and surgical staff a full spectrum of protection and the assurance of barrier integrity, allowing them to concentrate solely on patient care during long and stressful procedures and not on their risk of exposure," said Amat.

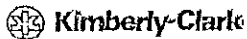
Consistent with Kimberly-Clark Health Care's commitment to sustainability and providing a "greener" healthcare community, the MicroCool® Breathable High Performance Surgical Gown's, AAMI Level 4 barrier performance fabric technology is PFOA-free and adheres to the Environmental Protection Agency's (EPA) standard for protecting the environment.

"We create our own fabrics in house. This vertical-integration system allows us to drastically reduce both our impact on the environment and our customers' pockets," Amat adds.

EXHIBIT A

Exhibit B

MICROCOOL* Breathable High Performance Surgical Gown - Kimberly-Clark Health Care, Page 1 of 5



Home > MICROCOOL* Breathable High Performance Surgical Gown

Surgical Solutions



MICROCOOL* Breathable High Performance Surgical Gown

- MICROCOOL* Gown meets both the AAMI Level 4 Liquid Barrier Standard and ASTM F1670 and ASTM F1671 standards for resistance of materials used in protective clothing ^{1,2}
- Meets the ASTM F1671 standard for bacteriophage penetration, as well as the European Norms (ENISO 22810) for resistance to wet microbial penetration ^{2,3}
- Meets the ISO standard for ignition resistance (ISO 11810-1 Class 11-21—No Ignition) ²
- Meets ASTM D4968 for abrasion resistance and produces fewer than 20 particles of lint at the 10-micron level on the Gelbo lint test ⁶
- MICROCOOL* fabric allows moisture vapor to pass through almost instantly, compared to competitive gown materials, as measured by the Moisture Vapor Transfer test ⁴
- Raglan sleeves
- Adjustable neckline
- Specialty options for seated procedures
- Generous cut
- Sterile and non-sterile options available

¹Meets AAMI level 4 Liquid Barrier Standard and ANSI/AAMI PB70: 2008 Liquid barrier performance and classification of protective apparel and drapes intended for use in healthcare facilities.

²Per Kimberly-Clark product specifications

³MICROCOOL* Surgical gowns pass ASTM F1671 Standard Test Method for resistance of materials used in protective clothing to penetration of bloodborne pathogens using

⁴Data on file, Kimberly-Clark Health Care

Description

MICROCOOL* Breathable High Performance Surgical Gown

The new MICROCOOL* Breathable High Performance Surgical Gown is the result of years of research to make MICROCOOL* more cool and protective than ever. Kimberly-Clark has a long heritage of medical fabric leadership, with over 650 US and international patents for advanced non-woven fabrics.

Patented Microporous Fabric

- Soft spunbound outer layer
- Proprietary breathable fabric
- SMS fabric inner liner layer

MICROCOOL* Gowns meet the AAMI Level 4 liquid barrier standard ¹

The Association for the Advancement of Medical Instrumentation (AAMI) developed the liquid barrier standard to assist healthcare personnel in the selection and use of surgical gowns, drapes and other protective apparel. MICROCOOL* Gowns are Level 4, the highest barrier protection rating available for gowns. KIMBERLY-CLARK* MICROCOOL* Breathable High Performance Surgical Gowns provide Level 4 liquid barrier in Zones A, B, and C. ^{2,3} For surgical gowns, the critical zones are, at a minimum, the front area of the gown from chest to knees (area A) and the sleeves from the cuff to above the elbow (area B). The standard requires that the entire front of a surgical gown (Areas A, B, and C) provide a liquid barrier of at least Level 1. The back of the gown (area D) may be non-protective.

100% Landfill free

EXHIBIT B

MICROCOOL* Breathable High Performance Surgical Gown - Kimberly-Clark Health C... Page 2 of 5

MICROCOOL* Gowns are produced in facilities dedicated to cleaner manufacturing and source reduction. Every month, over 6.5 million pounds of our manufacturing waste is diverted from landfills. And the facility which manufactures our MICROCOOL* fabric is 100% landfill-free.

Clean Incineration

MICROCOOL* Gowns are composed of over 90% Number 5 polypropylene, which incinerates very cleanly after use.⁴ (Compare that to reusable gowns, which require substantial amounts of water, energy, and harsh chemicals to decontaminate and clean according to industry standards for hospital laundry.⁵)

PFOA-free

In compliance with EPA recommendations, MICROCOOL* Gowns are PFOA-free.⁶

Environmental Leadership

Our sustainability standards have helped Kimberly-Clark to be repeatedly recognized for environmental leadership by the Dow Jones Sustainability Index and the Newsweek Green Rankings of the world's most environmentally-friendly companies.

⁴ Meets AAMI Level 4 Liquid Barrier Standard and ANSI/AAMI PB70: 2005 Liquid barrier performance and classification of protective apparel and drapes intended for use in healthcare facilities.

⁵ Integrated Paper Services (IPS) Test Reports: 26794, Dec 3, 2010, and 24232 Sept 1, 2010.

⁶ Data on file, Kimberly-Clark Health Care.

⁵ "A White Paper on Performance, Cost Per Use, and Environmental Impact of Single-Use and Reusable Surgical Gowns & Drapes" McVaine Company, 2009.

⁷ PFOA: Perfluorooctanoic acid; EPA recommendations to eliminate PFOA chemistry utilization. "PFOA-free" means that a product has PFOA below 20 ppb as manufactured. (Source: www.epa.gov/oppt/pfoa/pubs/stewardship/)

Specifications

Brand	MICROCOOL*
UNSPSC Code	42131702
Fabric	SFSMS
Name	MICROCOOL* Breathable High Performance Surgical Gown
Cut of Gown	Generous Cut
Procedure	Standing Procedures
Fold	Book
Low Lint	Yes
Neck Binding Color	Red
Sleeve Type	Raglan Sleeves
Specialty Gown	No
Abrasion Resistance	Meets ASTM D4966
Expected Fluid Contact	High; For Lengthy, Fluid-Intensive Procedures
Flame Resistance	Meets NFPA Class I and ISO 11810
AAMI Protection Level	AAMI Level 4 Liquid Barrier Protection
Closure	Hook-and-Loop

Selected Filters

Size	Gown Length	Sterile	Packaging
<input type="radio"/> Large	<input type="radio"/> Extra Long	<input type="radio"/> Yes	<input type="radio"/> Hand-Bln
<input type="radio"/> X-Large	<input type="radio"/> Standard	<input type="radio"/> No	<input type="radio"/> NA
<input type="radio"/> XX-Large			

MICROCOOL* Breathable High Performance Surgical Gown - Kimberly-Clark Health C... Page 3 of 5

12 Products Available

79729

Large Regular Non-Sterile Handi-Bin

Size:	Large	Units per Case:	628
Includes Towel:	No		
Gown Length:	Standard		
Sterile:	No		
Packaging:	Handi-Bin	See Packaging Specifications	»

79739

X-Large Regular Non-Sterile Handi-Bin

Size:	X-Large	Units per Case:	432
Includes Towel:	No		
Gown Length:	Standard		
Sterile:	No		
Packaging:	Handi-Bin	See Packaging Specifications	»

72438

Large Regular Non-Sterile

Size:	Large	Units per Case:	40
Includes Towel:	No		
Gown Length:	Standard		
Sterile:	No		
Packaging:	N/A	See Packaging Specifications	»

72445

X-Large Regular Non-Sterile

Size:	X-Large	Units per Case:	32
Includes Towel:	No		
Gown Length:	Standard		
Sterile:	No		
Packaging:	N/A	See Packaging Specifications	»

72447

XX-Large Regular Non-Sterile

Size:	XX-Large	Units per Case:	32
Includes Towel:	No		
Gown Length:	Standard		
Sterile:	No		
Packaging:	N/A	See Packaging Specifications	»

MICROCOOL* Breathable High Performance Surgical Gown - Kimberly-Clark Health C... Page 4 of 5

73038

Large X-Long Non-Sterile

Size:	Large	Units per Case:	36
Includes Towel:	No		
Gown Length:	Extra Long		
Sterile:	No		
Packaging:	N/A	See Packaging Specifications	»

73041

X-Large X-Long Non-Sterile

Size:	X-Large	Units per Case:	32
Includes Towel:	No		
Gown Length:	Extra Long		
Sterile:	No		
Packaging:	N/A	See Packaging Specifications	»

92038

Large Includes Towel X-Long Sterile

Size:	Large	Units per Case:	30
Includes Towel:	Yes		
Gown Length:	Extra Long		
Sterile:	Yes		
Packaging:	N/A	See Packaging Specifications	»

92042

X-Large Includes Towel X-Long Sterile

Size:	X-Large	Units per Case:	30
Includes Towel:	Yes		
Gown Length:	Extra Long		
Sterile:	Yes		
Packaging:	N/A	See Packaging Specifications	»

92340

Large Includes Towel Regular Sterile

Size:	Large	Units per Case:	30
Includes Towel:	Yes		
Gown Length:	Standard		
Sterile:	Yes		
Packaging:	N/A	See Packaging Specifications	»

MICROCOOL* Breathable High Performance Surgical Gown - Kimberly-Clark Health C... Page 5 of 5

92342

X-Large Includes Towel Regular Sterile

Size:	X-Large	Units per Case:	26
Includes Towel:	Yes		
Gown Length:	Standard		
Sterile:	Yes		
Packaging:	N/A	See Packaging Specifications	»

92344

XX-Large Includes Towel Regular Sterile

Size:	XX-Large	Units per Case:	26
Includes Towel:	Yes		
Gown Length:	Standard		
Sterile:	Yes		
Packaging:	N/A	See Packaging Specifications	»

Exhibit C

- News
- KC Advantage
- Retail Campus
- Contact Us
- Facility Addresses
- Sustainability
- Careers
- For Investors
- History
- Innovation
- Shipping Discrepancy
- Overstock Returns

NEWS

08/15/2014




Kimberly-Clark Pandemic Preparedness Customer Letter

As concerns around the spread of the Ebola virus continue to grow, the number of inquiries we receive at Kimberly-Clark regarding recommendations for PPE and our plans for Pandemic Preparedness are growing in tandem. Therefore, we wanted to proactively provide you with guidance on preparing for a pandemic, as well as solutions for proper PPE. We are providing you with a clinical Kimberly-Clark Ebola Virus Precautions Brief and a Kimberly-Clark Personal Protection Solutions guide.

[Click here to download the Kimberly-Clark Pandemic Preparedness Customer Letter](#)

[Click here to download the Kimberly-Clark Ebola Virus Diseases \(EVD\) Precautions Brief](#)

[Click here to download the Kimberly-Clark Personal Protection Solutions Guide](#)

FOLLOW US ON	  	PRODUCTS & SOLUTIONS	RESOURCES	ABOUT US	Customer Portal
HOME	Precision & Infection Prevention Single Solutions Respiratory Health Digestive Health Pain Management	PPEs Glossary Recent Shipping Discrepancy Overstock Returns Submit Product Idea	News Retail Campus Sustainability Contact Us Facility Addresses	Find a Sales Rep Site Search Subscribe Reimbursement Information Events	

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EXHIBIT C

Exhibit D



August 14, 2014

Dear Valued Kimberly-Clark Customer:

In North America, as we prepare to enter the flu season, news of the spread of the Ebola virus in West Africa reminds us about the importance of following good personal protection practices while treating patients with potentially communicable infections. Kimberly-Clark joins the world in the hope for the cessation of the spread of the virus and the discovery of a cure. While the transmission of the virus in West Africa has captured the attention of the world and increased anxiety about its potential to spread into North America, we want you to rest assured that Kimberly-Clark has activated its Pandemic Preparedness Plan which provides protocols for tracking the cadence of orders and monitoring supply of our critical Personal Protection Equipment products (PPE) including facial protection, exam gloves and protective apparel.

Kimberly-Clark Health Care has deployed our North American based manufacturing assets for Facial Protection to meet any increase in demand while monitoring the situation and its effects on supply chain. Our manufacturing locations in North America make us uniquely positioned to respond quickly to increased demand for facial protection. As a part of our Pandemic Preparedness Plan, it is a primary goal to always support existing customers to meet their immediate needs for Facial Protection.

Today orders for Facial Protection continue to be filled normally. As a reminder, should the demand for Facial Protection dramatically increase, we will prioritize demand that is above normal levels as follows:

1. Protection of "First-line Responders" – Medical personnel treating the sick; primarily hospitals.
2. Protection of Pharmaceutical Production – Medication production and vaccine research
3. Protection of Global Commerce/ Transportation – Global and local transportation, shipping and airline traffic
4. Protection of Public Transportation Employees
5. Protection of Major Infrastructure (Utilities, Critical Manufacturing Customers)
6. Protection of General Public

We will continue to provide updates as information becomes available.

As a leader in Infection Prevention, Kimberly-Clark is often sought out for recommendations on Infection prevention protocol in times when there is a potential pandemic. Since the onset of Ebola, we have received numerous inquiries to that end. Therefore, we are providing you with our initial guidance regarding the Ebola virus in the Kimberly-Clark Ebola Virus Disease (EVD) Precautions Brief: Update August 12, 2014. The following is an excerpt:

TRANSMISSION

Person-to-person transmission occurs by very close personal contact with an infected individual or with their body fluids during the late stages of infection or after their death^{3,4}. During the care of an infected individual, spread of the virus can occur through contact with infected body fluids on the patient, on their clothes or bedding, on surfaces such as bedrails, side tables, the floor, or on reused unsterilized syringes, needles, thermometers or other virus-contaminated medical equipment. Humans may also be

EXHIBIT D

infected by handling sick or dead non-human primates and are also at risk when handling the bodies of deceased humans in preparation for funerals^{5,6}.

Survival outside the body: The virus can survive and remain infective in liquid or dried material at room temperature for a number of days⁷ or at 39°F (4°C) for several days, and is indefinitely stable at -70°C. Infectivity can be preserved by lyophilization (freeze-drying)^{5,25}.

See attached Kimberly-Clark Ebola Virus Disease (EVD) Precautions Brief: Update August 12, 2014 for the complete Precautions Brief. For a list of PPE products available from Kimberly-Clark Health Care, please click here.

While Kimberly-Clark Corporation has long-standing relationships with American Red Cross Annual Disaster Giving Program and the United Way, Kimberly-Clark Health Care has also partnered with MedShare to facilitate our donation of PPE to West Africa to aid in the containment of the Ebola virus. If you would like information on how you too can contribute to these organizations, please visit their websites at:

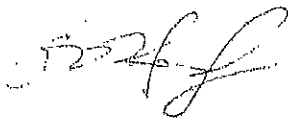
MedShare: <http://www.medshare.org/>

American Red Cross Annual Disaster Giving Program: <http://www.redcross.org>.

United Way: <http://www.unitedway.org/>

If you have any additional questions, please reach out to your Kimberly-Clark Sales Representative or contact Customer Care at: 1 (800) 742-1996.

Sincerely,



Alex Hodges
General Manager, North America
Surgical & Infection Prevention

REFERENCES

³ Plague In RG. Darling, & JB. Woods (Eds.), USAMRIID's Medical Management of Biological Casualties Handbook 5th ed. 2004; pp. 40-44, Fort Detrick M.D.; USAMRIID.

⁴ Acha PN, Szyfres B. In Pan American Health Organization Zoonoses and Communicable Diseases Common to Man and Animals. 3rd ed. 2003; pp. 142-145. Washington D.C.: Pan American Health Organization.

⁵ Mwanatambwe M, Yamada N, Arai S, et al. Ebola hemorrhagic fever (EHF): mechanism of transmission and pathogenicity. Journal of Nippon Medical School = Nihon Ika Daigaku Zasshi, 2001;68(5): 370-375.

⁶ Hewlett BS, Amolat RP. Cultural contexts of Ebola in Northern Uganda. Emerg Infect Dis.2003;9(10):1242-1248.

²⁵ Evans, AS, & Kaslow RA. (Eds.). Viral Infections of Humans - Epidemiology and Control (4th ed.). 1997; New York, NY: Plenum Publishing Corporation.

Exhibit E

© PPE Solutions

KIMBERLY-CLARK*
Personal Protective Equipment

Healthcare Worker Fluid Resistant Protection

Kimberly-Clark offers a full range of PPE solutions for healthcare facilities.

NIOSH Certified N95 Respirators – Pass ASTM F1862 at 160 mm Hg / High Fluid Exposure	Eaches/Case
46727 FLUIDSHIELD* N95 Particulate Filter Respirator and Surgical Mask, Regular	210
46827 FLUIDSHIELD* N95 Particulate Filter Respirator and Surgical Mask, Small	210
46787 FLUIDSHIELD* N95 Particulate Filter Respirator and Surgical Mask, Safety Seal, Regular	210
46867 FLUIDSHIELD* N95 Particulate Filter Respirator and Surgical Mask, Safety Seal, Small	210

Fluid-Resistant Face Masks – ASTM Level 3 / Pass ASTM F1862 at 160 mm Hg - High Fluid Exposure	Eaches/Case
48247 KC300 FLUIDSHIELD* Fog-Free Surgical Mask with WrapAround Anti-Glare Visor, ties	100
48207 KC300 FLUIDSHIELD* Fog-Free Surgical Mask, ties	300
47147 KC300 FLUIDSHIELD* Fog-Free Procedure Mask with WrapAround Visor, earloops	100
47107 KC300 FLUIDSHIELD* Fog-Free Procedure Mask, earloops	400

Fluid-Resistant Face Masks – ASTM Level 2 / Pass ASTM F1862 at 120 mm Hg - Moderate Fluid Exposure	Eaches/Case
62113 THE PROTECTOR* Fog-Free Surgical Mask, ties	300
62114 THE PROTECTOR* Fog-Free Surgical Mask, with WrapAround Visor, ties	100
62115 THE PROTECTOR* Procedure Mask, earloops	500
62116 THE PROTECTOR* Fog-Free Procedure Mask, with WrapAround Visor, earloops	100

Disposable Eye and Face Protection	Eaches/Case
41204 GUARDALL* Shield Face Shield, Fog-Resistant, full length	40

KIMBERLY-CLARK PROFESSIONAL* Reusable Eye Protection	Eaches/Case
16362 JACKSON SAFETY* V80 S634 Goggles	50
16369 JACKSON SAFETY* V80 MONOGOGGLE* 211 Goggles	36
16361 JACKSON SAFETY* V80 MONOGOGGLE* VPC Goggles	36
16879 JACKSON SAFETY* V80 MEXV* Goggles	30
18624 JACKSON SAFETY* V80 MONOGOGGLE* XTH* OTG Goggles	6
14398 JACKSON SAFETY* V80 REVOLUTION* OTG Goggles	30

Headwear – Light Fluid Contact	Eaches/Case
69083 SMS Bouffant Cap, White, Large 24"	300
69086 SMS Bouffant Cap, White, X-Large 27"	300
69110 Protective Surgical Hood with tie neck, Blue, Universal	3

EXHIBIT E

© PPE Solutions

KIMBERLY-CLARK*
Personal Protective Equipment

PURPLE NITRILE* Exam Gloves / Durable protection for procedures where risk of fluid exposure is moderate to high		Eaches/Case
55090 PURPLE NITRILE* Exam Gloves, 12" length, X-Small		500
55091 PURPLE NITRILE* Exam Gloves, 12" length, Small		500
55092 PURPLE NITRILE* Exam Gloves, 12" length, Medium		500
55093 PURPLE NITRILE* Exam Gloves, 12" length, Large		500
55094 PURPLE NITRILE* Exam Gloves, 12" length, X-Large		500
55099 PURPLE NITRILE* Exam Gloves, X-Small		1,000
55081 PURPLE NITRILE* Exam Gloves, Small		1,000
55082 PURPLE NITRILE* Exam Gloves, Medium		1,000
55083 PURPLE NITRILE* Exam Gloves, Large		1,000
55084 PURPLE NITRILE* Exam Gloves, X-Large		800

STERLING* Nitrile Exam Gloves / Good barrier protection where fluid exposure is low to moderate		Eaches/Case
53137 STERLING* NITRILE Exam Gloves, 12" length, X-Small		1,000
53138 STERLING* NITRILE Exam Gloves, 12" length, Small		1,000
53139 STERLING* NITRILE Exam Gloves, 12" length, Medium		1,000
53140 STERLING* NITRILE Exam Gloves, 12" length, Large		1,000
53141 STERLING* NITRILE Exam Gloves, 12" length, X-Large		1,000
50705 STERLING* NITRILE Exam Gloves, X-Small		2,000
50706 STERLING* NITRILE Exam Gloves, Small		2,000
50707 STERLING* NITRILE Exam Gloves, Medium		2,000
50708 STERLING* NITRILE Exam Gloves, Large		2,000
50709 STERLING* NITRILE Exam Gloves, X-Large		1,700

MICROCOOL* Surgical Gowns - AAMI Level 4 / Liquid Barrier Protection		Eaches/Case
72438 MICROCOOL* Breathable High Performance Surgical Gown, Non-Sterile, Large		40
72445 MICROCOOL* Breathable High Performance Surgical Gown, Non-Sterile, X-Large		32
72447 MICROCOOL* Breathable High Performance Surgical Gown, Non-Sterile, XX-Large		32

ULTRA Film Reinforced Surgical Gowns - AAMI Level 4 / Liquid Barrier Protection in the Critical Zones		Eaches/Case
74411 ULTRA Film Reinforced Surgical Gown, Non-Sterile, Large		40
74421 ULTRA Film Reinforced Surgical Gown, Non-Sterile, X-Large		32

Footwear		Eaches/Case
69571 HI GUARD* Regular Full-Coverage Boot, Universal		150
69671 HI GUARD* Regular Full-Coverage Boot, X-Large		150
69572 HI GUARD* Ultra Coverage Boot, Universal		120
69672 HI GUARD* Ultra Coverage Boot, X-Large		120

Isolation Gowns - AAMI Level 2 / For when expected risk of exposure to fluid is between low and moderate		Eaches/Case
69979 CONTROL* Cover Gown with Elastic Cuffs, Yellow, Universal		100
69988 CONTROL* Cover Gown with Elastic Cuffs, Yellow, X-Large		100

KIMBERLY-CLARK*
Personal Protective Equipment

Back Table Covers – Heavy Duty and Reinforced (Impervious)		Current Case UOM
89906 Back Table Cover – Heavy Duty, 60" X 90", Sterile		28
89808 Back Table Cover – Heavy Duty, 70" X 110", Sterile		15
78060 Back Table Cover – Reinforced, 60" X 60", Non-Sterile		800
78066 Back Table Cover – Heavy Duty, 60" X 90", Non-Sterile		400
79008 Back Table Cover – Heavy Duty, 70" X 110", Non-Sterile		280
29245NS Back Table Cover – Heavy Duty, 60" X 90", Fan Fold, Non-Sterile		240
29248NS Back Table Cover – Heavy Duty, 70" X 110", Fan Fold, Non-Sterile		176
Preparation Pads (If absorption is needed with floor pads.)		Eaches/Case
79713 Extremity Prep Pad, Bulk Pack		85

For more information, please contact your Kimberly-Clark sales representative, or visit www.kchealthcare.com or www.kcprofessional.com. You may also contact Kimberly-Clark Health Care at 1-800-KCHELPS or Kimberly-Clark Professional at 1-800-241-3146.

THE KIMBERLY-CLARK ADVANTAGE

Knowledge Network* Accredited Education
In-Services Training and Technical Support
Credentialed Sales Representatives
Tools & Best Practices
Clinical Research
Commitment to Excellence

For more information, please visit:

www.kchealthcare.com

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1-800-KCHELPS (1-800-524-3577) in the United States



Kimberly-Clark



www.facebook.com/kchealthcare
www.twitter.com/kchealthcare

Exhibit F

Kimberly-Clark Ebola Virus Disease (EVD) Precautions Brief: September 19, 2014

EBOLA: The Ebola virus is a lipid enveloped virus in the family Filoviridae. Members of this family also include Marburg, Lassa, and other viruses that cause hemorrhagic fever, a group of illnesses that damage the vascular system and in severe cases, lead to bleeding under the skin, in internal organs or from body orifices (e.g. mouth, eyes and ears)¹. Infection with the Ebola virus is now referred to as: Ebola virus disease (EVD)². There is a diagnostic test to determine if the patient has EVD. There is no current FDA approved effective medication or treatment for those who become infected with Ebola other than supportive hydration, electrolyte balancing and oxygen. The death rate of those infected is between 50-90%. There is no vaccine or preventative treatment.

TRANSMISSION

Person-to-person transmission occurs by very close personal contact with an infected individual or with their body fluids during the late stages of infection or after their death^{3,4}. During the care of an infected individual, spread of the virus can occur through contact with infected body fluids on the patient, on their clothes or bedding, on surfaces such as bedrails, side tables, the floor, or on reused unsterilized syringes, needles, thermometers or other virus-contaminated medical equipment. Transmission has occurred by handling the bodies of deceased humans in preparation for funerals^{5,6}. Bodies can remain contagious for up to 60 days. Infections may also occur when handling sick or dead non-human primates.

Virus containing body fluids from individuals infected with the Ebola virus:

- Blood
- Breast milk
- Organs and tissues
- Saliva
- Semen
- Stool
- Sweat
- Urine
- Vaginal secretions
- Vomit
- Amniotic fluid (possibly)

Note: Ebola virus has been isolated from semen 61 days after the initial symptoms of infection appear. Transmission through semen has occurred 7 weeks after clinical recovery^{3,4,7}.

Incubation period: It requires 2 to 21 days (more often 4-9 days) before symptoms of infection occur. The infected individual is not contagious until symptoms appear. Hemorrhage begins to present 4-5 days after general symptom onset^{8,9}.

Survival outside the body: The virus can survive and remain infective in liquid or dried organic matter at room temperature for a number of days¹⁰. A 2010 study recovered infective Ebola virus from an indoor environment six days after contamination (under optimal conditions for viral survival)¹¹. The Ebola virus can also survive for several days at 39°F (4°C), and is indefinitely stable at -70°C. Infectivity can be preserved by lyophilization (freeze-drying)^{5,29}.

How Ebola enters the body: Intact skin is a barrier, but scratches, cuts (large or tiny), rashes, and abrasions, ruin the barrier integrity and become routes for viral entry. Additionally, Ebola virus can enter the body through mucosal tissues after being deposited by contaminated fluids through physical contact, splashes, splatters,

Kimberly-Clark Ebola Virus Disease (EVD) Precautions Brief: September 19, 2014

sprays, or possibly aerosols. Mucosal tissues include the eyes, mouth, throat, lungs inside of nose, vaginal tissues, intestines, and urinary tract^{3,4}.

Aerosols: Infections have occurred after handling sick or dead infected non-human primates and the bodies of deceased humans in preparation for funerals. It is possible transmission could have occurred through aerosol droplets^{3,4,5}. Small-particle aerosol exposure and transmission has been demonstrated in non-human primates in the laboratory^{2,4}.

Infectious dose: 1 – 10 aerosolized infective viruses are enough to cause an infection in humans¹².

Preventing the spread of Ebola virus requires preventing contact with the virus by:

- Immediate isolation for patients who are confirmed or suspected of being infected with the Ebola virus.
- Protecting all the routes of entry into the body with appropriate personal protective equipment (PPE) as described below.
- Disinfecting, sterilizing or in any other effective way, destroying the viruses that may be contaminating surfaces, medical instruments, linens, etc., before they can contaminate and infect anyone else.
- Properly containing the body of deceased victims in fluid proof body bag and appropriately cremating or burying them immediately.

IMMEDIATE ISOLATION OF SUSPECTED OR CONFIRMED EVD PATIENT:

- Immediately place patient in a private room with personal toilet facilities and implement strict Standard, Contact, and Droplet precautions.
- The mattress and pillow must be fluid resistant.
- All devices used must be disposable or dedicated. If dedicated but to be used after patient discharge, a thorough disinfection must be completed. A week of post-disinfection quarantine if possible is an added safety measure as no reports of Ebola virus survival longer than 6 days have ever been reported.
- Avoid aerosol generating procedures if at all possible. If aerosol generating procedures are anticipated, place patient in an airborne isolation room initially to avoid patient transport, and wear a fluid resistant N95 respirator or greater when performing these procedures.

PERSONAL PROTECTION

- Make certain scratches, cuts, rashes, abrasions, etc., are covered with waterproof dressings.
- Remove jewelry
- The United States Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) recommend masks for protection from Ebola as part of Standard, Contact, and Droplet protection. Though not stated in the guidelines, it is critical that masks are fluid resistant to prevent splashes, sprays and cough-propelled droplets of virus-contaminated blood, saliva or other body fluid from penetrating the mask.
 - Because of the life-threatening nature of this disease, if a mask is worn, it should have an **ASTM F2100 Level 3 designation: the highest fluid penetration and filtration efficiency level**. The Level will be listed on the box label^{13,14,15}. ASTM Levels 1 or 2 could be used outside the Ebola isolation area.
 - To qualify for each ASTM designation, the mask material must also pass a particle filtration test with a challenge of 0.1 micron particles. However, this challenge size represents airborne particles that can float on air currents and be sucked through the gaps between the mask and the face when the wearer inhales. Although any mask with an ASTM Level Designation has

Kimberly-Clark Ebola Virus Disease (EVD) Precautions Brief: September 19, 2014

passed this 0.1 micron challenge, the test is not included in chart below for fear it will give the wearer or purchaser a false sense of security that a medical mask will protect against very small droplets. If anticipating exposure to small infectious aerosols, a fluid resistant respirator of N95 or greater designation must be worn.

Mask: ASTM F2100 Spray, Splatter, Droplet Protection Level Designation (Level 3 highest)		
Level	Test Description	Must Pass
3	ASTM F1862 Pressure spray synthetic blood: simulates high blood pressure ASTM 2101 Bacterial Filtration Efficiency (droplet)	160mm Hg ≥ 98
2	ASTM F1862 Pressure spray synthetic blood: simulates normal blood pressure ASTM 2101 Bacterial Filtration Efficiency (droplet)	120mm Hg ≥ 98
1	ASTM F1862 Pressure spray synthetic blood: simulates systolic blood pressure ASTM 2101 Bacterial Filtration Efficiency (droplet)	80mm Hg ≥ 95

- **Note:** When an Ebola virus infected patient is in the late stages of EVD, blood pressure will drop, but other sources of propelled fluids, including diarrhea and vomit, contain the infective virus and can be delivered with force. Fluid resistance is still essential.
- **Respirators.** CDC is recommending face masks; avoiding aerosol generating procedures, and; wearing a respirator if aerosol generating cannot be avoided. As noted, there have been studies and observations demonstrating a potential small droplet dispersal component of Ebola virus transmission^{2,3,4,5}. The highest probability of generating small droplets presenting the highest risk would occur during aerosol generating procedures, but should also be considered a risk during care of late stage EVD patients. Because disposable respirators are designed to prevent gaps in the respirator-to-face seal, small infectious droplets cannot be drawn into the mucosa-lined respiratory zone through mask-face skin gaps (area of least resistance) when the wearer inhales. A mask does not provide that seal and thus pulls a portion of inhaled air in through the gaps. The virus may land on the inside surface of the mask, the facial skin, or oropharyngeal mucosa. Respirators must be fit tested to the wearer, ensuring the size and model fit snugly¹⁶. *Every time a disposable respirator is donned, the wearer must immediately perform a seal check¹⁷. This critical verification takes only seconds. As with masks, respirators must also be fluid resistant for the same reason (wick-through; strike-through).*
 - **Avoid aerosol generating procedures.** Avoid aerosol-generating procedures if at all possible. If they must be performed, PPE must include an N95 respirator or higher level respiratory protection). Procedure should be performed in an airborne infection isolation room¹⁸.
 - **Note:** Some respirators possess staples in the filtration portion of the respirator. After the stress of use, holes can develop where the staples penetrate the fabric. This will not necessarily be detected during fit tests as the respirator has not yet been in actual use, subjected to the continual pull of the elastic attached to the staples.
- **Eye protection or face shield is essential.** If eye contamination suspected, rinse eyes immediately & excessively with saline or water. *Face shields do not take the place of face masks or respirators.*
- **Gowns or coveralls.** CDC recommends wearing a fluid resistant (front and back) gown or coverall with snug-fitting cuffs. ANSI/AAMI PB70:2012¹⁹ sets requirements for different performance levels. Level 4 is

Kimberly-Clark Ebola Virus Disease (EVD) Precautions Brief: September 19, 2014

the most protective and would be appropriate for working with Ebola patients, especially in the late stages of the disease. The lower fluid resistant levels are appropriate for Standard, Contact and Droplet precautions dealing with less lethal pathogens. For high exposure risk, a full body suit with Level 4 verified testing and adequate coverage would be appropriate.

ANSI/AAMI PB70:2012 The Most protective is Level 4			
Level	Test ID and description	Required	What's better
4	ASTM F1670:Penetration by forced spray synthetic blood	Pass	Pass
	ASTM F1671:Bloodborne pathogen penetration: bacteriophage virus in fluid pressed through	Pass	Pass
3	AATCC 42:Spray impact – amount penetrated after fluid drop impact	< 1.0g	Lower
	AATCC 127:Hydrostatic pressure – pressure needed to force water through	≥ 50cm	Higher
2	AATCC 42:Spray impact – amount penetrated after fluid drop impact	≤ 1.0g	Lower
	AATCC 127:Hydrostatic pressure – pressure needed to force water through	≥ 20cm	Higher
1	AATCC 42:Spray impact – amount penetrated after fluid drop impact	≤ 4.5g	Lower

- **Severe exposure:** For situations in the field or other similar conditions dealing with high levels of viral contamination and fluids, a full body fluid-resistant certified biohazard suit should be worn.
- **Head covers.** During later stage EVD, virus-contaminated droplets can fall onto exposed hair. When contaminated hair is touched, the hand can become contaminated and transport the virus to other places on the individual or to other animate and inanimate surfaces in the environment. Although not specified in many guidelines, wearing a fluid-resistant head cover while insuring the maximum amount of head, neck, and face coverage is achieved would be best practice within the Ebola isolation unit during late stage EVD.
 - **Note:** If coverage is not complete, wash exposed areas of the face and neck with soap and water to remove any contamination after tasks are completed or if contamination has occurred. Consider 70% alcohol wipe thereafter.
- **Foot/leg covers.** For additional protection during the late EVD stage, fluid resistant foot/leg covers can protect footwear and legs from contamination and prevent transporting the virus to others when the patient is in the late stages of EVD (bleeding, diarrhea, vomiting) when likelihood of fluid contamination is high, during patient fluid cleanup, etc.
- **Gloves.** Examination or surgical gloves as appropriate:
 - All gloves must be powder-free. Virus can readily contaminate powder particles and be dispersed throughout the vicinity as do glove powder particles.
 - Neither vinyl nor polyethylene gloves are appropriate for barrier protection when performing tasks with potentially infectious materials.

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- Good barrier powder-free gloves include nitrile, natural rubber latex, polyisoprene, and neoprene. In some situations, a medical glove beneath a thick orthopedic type surgical glove may be appropriate for procedures on a patient, or new thick utility glove as for cleaning.
- Double glove, making certain one glove is under the gown cuff and the other glove is over the cuff. It may be prudent to tape the glove to the cuff with duct tape to prevent cuff slip or roll down.
- **Be extremely careful not to disperse viral contaminants during PPE removal.** Assume outward facing surface of all PPE are contaminated with infectious Ebola. It is preferred that assistance in PPE removal is given by a designated individual who is scrupulously appareled and trained in appropriate PPE removal techniques, biohazard bag processing, disinfection of the area, etc. A written procedure should be clearly posted.
- **Hand hygiene.** Wash hands with soap and water immediately after removing PPE. Soap and water are recommended due to the amount of organic contamination (blood, vomit, etc.) present that can interfere with the efficacy of alcohol hand sanitizers. Soap helps organics and the virus slip off, and water rinses them into the sewage system where they are effectively destroyed by standard sewage treatment procedures.
 - **Note:** If caring for patients in an area without sewage treatment, wash with soap and water into a basin. After finishing, add 1 part household bleach to 10 parts of the water (10% v/v) in the basin to destroy any remaining infective virus. Hold for 10 minutes before assuming disinfection is complete.
- **70-90% ethyl alcohol (ethanol) based hand sanitizers** will destroy lipid enveloped viruses like Ebola very effectively if the organic soiling is not present. This higher concentration than normally recommended is appropriate for disinfecting non-enveloped viruses including Norovirus, thus providing an added safety factor for the more easily disinfected enveloped Ebola virus. (See further rationale for this non-enveloped virus safety factor in the Surface Disinfection section.) The alcohol based hand sanitizer can also be used after a soap and water wash first to remove organic matter (soiling), if present.

SURFACE DISINFECTION IS CRITICAL TO PREVENTING THE SPREAD OF EBOLA

The Ebola virus can stay infective for up to 6 days on surfaces in ideal conditions^{10,11}. Attention to rigorous disinfection practices is essential. Fortunately, the virus is destroyed by most standard disinfectants used in healthcare^{5,28,29,30,31}. However, because of the severe morbidity and high mortality risk posed by the virus, the high number of infective viruses in the blood during the late stages of the disease, the extremely low number of Ebola virus required to cause an infection, and the probable high level of organics presence in body fluid spills and splatters, higher disinfectant concentrations than normally used in standard healthcare environmental cleaning are appropriate.

In the United States, healthcare facilities are to use Environmental Protection Agency (EPA)-registered hospital disinfectants with a label claim for a non-enveloped (a.k.a hydrophilic) virus (e.g., norovirus, rotavirus, adenovirus, poliovirus) to disinfect surfaces in rooms of patients with suspected or confirmed Ebola virus infection. There are no specific label claims against Ebola. However, because it is much harder to destroy non-enveloped viruses than it is enveloped viruses (a.k.a hydrophobic) like Ebola, the use of disinfectants with a label

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claim of being effective against non-enveloped viruses will be effective against the Ebola virus while providing an added safety margin.

In situations or countries where EPA approved disinfectants against non-enveloped viruses (viruses much harder to destroy than enveloped viruses including Ebola) are not available, select disinfectants proven to be effective against non-enveloped viruses by recognized agencies.

If such approved disinfectants for non-enveloped viruses are not available, household bleach (hypochlorite at 5.25% to 6.25%) can be diluted to a working concentration appropriate for Ebola virus disinfection.

Important: *The effectiveness of many disinfectants, including hypochlorite, are weakened or inactivated by the presence of organic contamination of the surface to be disinfected^{20,21}.* Organic substances in this context include blood, vomit, feces, pus and sputum. Normally, cleaning with a detergent first to remove the organic contamination would be recommended. However, to reduce the risk of staff infection during clean-up procedures, a higher concentration of the disinfectant can reduce the viral load despite inactivation of a percentage of the disinfecting free chlorine. For example, hypochlorite is usually used at a working concentration of 100-500ppm chlorine for routine hospital disinfection, after cleaning with a detergent to remove organic matter. However, if heavily soiled with organic matter potentially containing Ebola (high lethality; high viral concentration in blood; very few viruses necessary for infection), a 1:10 solution of hypochlorite (household bleach) is appropriate (1 part bleach to 10 parts water v/v). This is equivalent to 5,000ppm chlorine. Another way to make this concentration is to add 1½ cups household bleach to one gallon of water. Because the effectiveness of diluted hypochlorite decays over time, working solutions should be prepared fresh every 24 hours^{22,23}.

Important: *Paper and cotton are cellulose based materials. Cellulose reduces the effectiveness of hypochlorite and hydrogen peroxide.* Higher concentrations of the disinfectant can compensate. Do not leave paper towels or cotton cloths in open cleaning bucket containing diluted hypochlorite, for example, as the effective concentration of chlorine will diminish significantly^{24,25}. The use of polypropylene wipes or wipes that contain coated cellulose specifically treated to prevent disinfectant inactivation and absorption exist but must be confirmed with official data from the manufacturer.

Important: Do not mix hypochlorite (bleach) with other cleaning agents (e.g. ammonia) as toxic fumes can be produced injuring healthcare staff and patients^{26,27}.

A written policy and procedure should be in place to address removal and cleaning of large spills or otherwise deposited, fluid-contaminated areas as well as for biohazard bag processing. The following example will discuss the use of hypochlorite, but other regulated disinfectants proven effective against non-enveloped viruses (as detailed above) are appropriate when available. For example, such an EPA approved disinfectant is required for healthcare facilities in the U.S.

1. Don appropriate PPE as described above, including fluid resistant foot and leg covers.
2. Use forceps to pick up any syringes, needles or other instruments from the spill prior to disinfection and place in impenetrable container to prevent accidental injury during cleanup.
3. Gently place paper towels over the contaminated fluid to avoid splatter and absorb contaminated fluid.
4. Carefully apply a 1:10 final dilution of household bleach (5,000ppm to overcome the cellulose and organic matter) starting at the perimeter and working towards the center^{20,21, 22}.

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5. Allow sufficient contact time which depends on the disinfectant, its concentration, and the amount and nature of the spill. For a 1:10 dilution of hypochlorite, with minimal fluid dilution from the contaminated surface, 10 minutes is sufficient⁴⁰.
6. After the label-required contact time, remove the saturated towels carefully and place into biohazard bags. Absorb any remaining fluid with additional paper towel and dispose into the biohazard bag. Assume the paper towels are still contaminated (extra precaution for the high-lethality and low infectious dose of this pathogen). Assuming the exterior of the biohazard bag to be contaminated and place in a rigid container to prevent re-contamination of the area and for later transport.
7. Now disinfect the area again, freed of the organic load and cellulose absorbing cover paper towels. This time the lower working concentration of 1:100 (500ppm free chlorine) would be effective, but the same 1:10 working solution (5,000ppm free chlorine) provides an added safety factor. The working hypochlorite solution may be poured onto the surface or spread with a polypropylene wipe or other approved wiper demonstrated to not absorb or inactivate the biocidal free chlorine. Wait for the required contact time. Place used wipes in biohazard bags as noted above.
8. Rinse disinfected surface with water after disinfection is completed to reduce damage to surfaces and remove the strong chlorine odor that can adversely affect already nauseated patients^{22,9}.
9. Steam sterilize (autoclave), incinerate biohazardous waste, or present for disposal by specialized biohazard team. Follow state or local regulations for handling biohazard waste disposal.

Note: The Ebola virus is destroyed by both steam sterilization and incineration. There will be no infectious viruses in the exhaust steam or incineration smoke.

Physical destruction: Ebola virus are also inactivated by:

- Heating for 30 to 60 minutes at 140°F (60°C)
- Boiling for 5 minutes
- Gamma irradiation (1.2 x10⁶ rads to 1.27 x10⁶ rads)
- UV radiation^{5,28,29,30,31} However, it is important to note, Ebola viruses incorporated within organic matter can survive UV radiation³².

LABORATORY SAFETY

Biosafety level: Ebola is a Group 4 pathogen with an infectious dose of 1 to 10 inhaled viruses. There can be no shortcuts to protection.

Laboratory-acquired infections: There are many opportunities for accidents to occur in the laboratory. One reported near-fatal Ebola case followed a minute finger prick in an English laboratory³³. A Swiss zoologist contracted Ebola virus after performing an autopsy on a chimpanzee in 1994^{4,34}. In 2004, a similar case was reported in the United States³⁵, and a fatal case in Russia³⁶. The Marburg virus is morphologically indistinguishable from the Ebola virus. In 1967, 31 workers at a laboratory in Marburg, Germany suffered from fever, diarrhea, vomiting, and massive bleeding from a variety of internal organs due to infection from the Marburg virus. Seven of the workers would eventually succumb to their infection³⁷.

Primary hazards in the laboratory: Accidental inoculation, inhalation of infectious aerosols and droplets, and/or direct contact of specimen, homogenates, dilutions, etc., with broken skin, rashes or mucous membranes including eyes, nares, mouth, and lungs. Use a certified Class II Biosafety cabinet or Plexiglas splash guard with PPE to protect skin and mucous membranes as noted in the PPE above when working with the specimen of

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suspected or confirmed EVD patients. All manufacturer-installed safety features for laboratory instruments should be used.

Important: Experimental work with Ebola virus is not addressed in this document. Experimental work often utilizes increased viral concentrations and extensive manipulations requiring a Containment Level 4 facility^{3,4,38,39}.

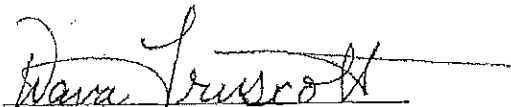
Protective clothing: Personnel entering a laboratory actively working with suspected Ebola specimen should remove jewelry and street clothing to change into dedicated laboratory clothing and shoes, or don full coverage protective apparel (i.e., completely covering all street clothing). Additional protection may be worn over laboratory clothing when infectious materials are directly handled. This protection includes items such as solid-front, and fluid resistant gowns with tight fitting wrists, gloves, and fluid resistant respiratory protection. A fluid-resistant respirator, N95 or greater, is necessary for any task that could generate aerosols. AVOID aerosol generation procedures if at all possible. Eye protection must be used where there is a known or potential risk of exposure to splashes or sprays⁴⁰. Shoe and legging covers should be worn if there are spills to be disinfected or risk of splatter or spray.

Sources/specimens: Sources of the virus include blood, serum, urine, respiratory and throat secretions, semen, organs and tissues or their homogenates from human or animal hosts^{5,4,39}.

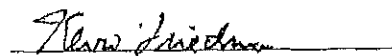
Transporting specimens within the hospital or institution: Per CDC, and in compliance with 29 CFR 1910.1030, specimens should be placed in a durable, leak-proof secondary container for transport within a facility. To reduce the risk of breakage or leaks, do not use any pneumatic tube system for transporting suspected EVD specimens. If necessary to hold specimen, they should be refrigerated at 2°-4°C, with all containment requirements in place.

Preparing specimen for transport: CDC has an Ebola specific laboratory specimen handling, packing and shipping instruction alert to which laboratories must comply. The CDC Guideline: Case Definition for Ebola Virus Disease (EVD), can be accessed at: <http://www.cdc.gov/vhf/ebola/hcp/interim-guidance-specimen-collection-submission-patients-suspected-infection-ebola.html>. No specimen will be accepted by the FDA without prior consultation. For consultation call the CDC's Emergency Operations Center (EOC) at 770-488-7100.

For more information and updates, please refer to subject matter expert websites that include those found in the Resources section of this document.



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