



Formulated with

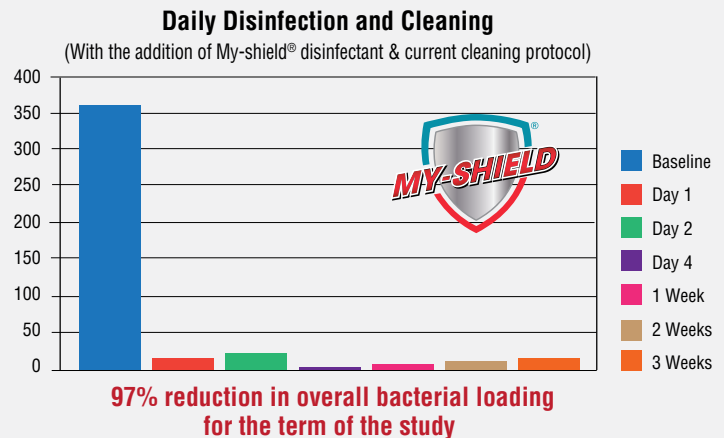
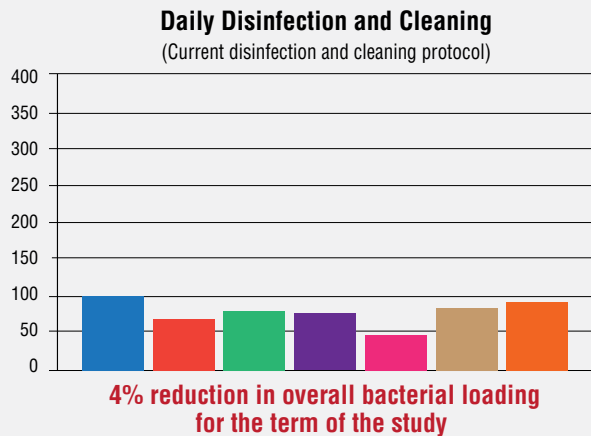
**Zetrisol**<sup>TM</sup>

A PROPRIETARY SILICONE QUATERNARY SOLUTION

## “Zetrisol” nano silicone-based Sanitizers and Disinfectants are proven to reduce and control bacterial loading on application and for extended periods in the working hospital environment – thus greatly reducing the threat of HAI (hospital acquired infection)

My-shield® Santizer/disinfectant participated in an extensive third-party sponsored 39-room, 27 day study at a prominent US-based hospital. The objective was to test the potential effectiveness and persistence of the product(s) and record any reduction of bacteria loadings over extended periods as compared to current cleaning & disinfection protocols currently incorporated by the medical facility.

### Baseline Microbial Loading Measured In Colonies (CFU's)



**Sponsor:** Highmark, Inc. “Medical Division” 501 Penn Ave, Pittsburgh, PA 15222

**Applicator:** Pelican Solutions Group, Wexford, PA 15090

**Medical facility:** Wheeling Mission Hospital, 1 Medical Park, Wheeling West Virginia 26003

**Microbial testing laboratory:** Wheeling Mission Hospital, “Analytical Department”  
1 Medical Park, Wheeling West Virginia 26003

**Objectives of the study:** To quantify the effectiveness of the My-shield® nano silicone sanitizer & disinfectant technologies in reducing microbial loadings in a working hospital environment over current cleaning & disinfection protocols.

**Study data summary and conclusions:** The study included an extensive microbial study with some 370 platelet lab tests conducted - all acquired from 39 different patient rooms in a major working hospital over the course of a 3-week period, under 5 varied cleaning & sanitation protocols.

**Category A: current hospital cleaning & disinfection by hospital cleaning staff with continued routine cleaning & disinfection for 26 days**

Room	Object Being Tested	Baseline	Day 1	Day 2	Day 4	1 Week	2 Weeks	3 Weeks	Baseline Culture
		1/6/10 & 1/7/10	1/8/10	1/9/10	1/11/10	1/13/10	1/20/10	1/27/10	1/6/10
103	Left-outside Bedrail Controls (patient perspective)	8	67	12	15	26	25	33	1. No Growth Day 2
103	Left Sink Handle (hot)	1	0	133	3	9	16	3	1. No Growth Day 2
103	Exterior Door Handle	22	8	52	2	75	30	53	1. 20 Colonies (CFU's) Micrococcus Species 2. 1 Colonies (CFU's) Bacillus Species (FAT GRAM POS ROD, SPORES)
103	Visitor Chair (tagged) Right Armrest	147	159	108	37	11	119	n/a	n/a
103	Bedside Table - around edges (non vanity side)	32	22	73	12	13	47	34	1. 100 Colonies (CFU's) Coagulase Negative Staphylococcus 2. 20 Colonies (CFU's) Micrococcus Species
104	Left-outside Bedrail Controls (patient perspective)	7	1	n/a	n/a	16	12	0	n/a
104	Left Sink Handle (hot)	117	0	n/a	n/a	11	4	2	n/a
104	Exterior Door Handle	74	26	n/a	n/a	9	66	336	n/a
104	Visitor Chair (tagged) Right Armrest	77	39	n/a	n/a	60	107	n/a	n/a
104	Bedside Table - around edges (non vanity side)	93	37	307	90	33	201	44	n/a
308	Left-outside Bedrail Controls (patient perspective)	82	45	n/a	n/a	3	18	27	1. 1 Colonies (CFUs) Diphtheroids (Gram Pos Rod)
308	Left Sink Handle (hot)	69	0	26	1	12	46	35	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
308	Exterior Door Handle	64	10	21	19	16	30	51	1. 6 Colonies (CFUs) Coagulase Negative Staphylococcus (Two Species)
308	Visitor Chair (tagged) Right Armrest	547	94	278	29	35	311	355	1. No Growth Day 2
308	Bedside Table - around edges (non vanity side)	93	21	23	40	188	56	n/a	1. 3 Colonies (CFUs) Coagulase Negative Staphylococcus
308	Bathroom Door Handle (outside)	101	n/a	41	1	369	52	43	n/a
308	Bathroom Lightswitch (in or out)	83	83	55	27	33	36	90	1. 19 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 1 Colonies (CFUs) Coagulase Negative Staphylococcus #2
308	Handicap Rail (BR)	98	15	29	6	44	9	152	1. No Growth Day 2
309	Left-outside Bedrail Controls (patient perspective)	612	19	13	18	0	50	46	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus #1 2. 1 Colonies (CFUs) Coagulase Negative Staphylococcus #2 3. 2 Colonies (CFUs) Coagulase Negative Staphylococcus #3
309	Left Sink Handle (hot)	60	375	390	14	368	156	325	1. No Growth Day 2
309	Exterior Door Handle	15	20	66	72	31	33	53	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus
309	Visitor Chair (tagged) Right Armrest	85	169	194	3	21	92	106	1. 50 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 15 Colonies (CFUs) Enterococcus Species 3. 2 Colonies (CFUs) Pseudomonas-related Gram Negative Rods
309	Bedside Table - around edges (non vanity side)	54	2	199	19	51	24	61	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 1 Colonies (CFUs) Coagulase Negative Staphylococcus #2 3. 8 Colonies (CFUs) Staphylococcus Aureus
309	Bathroom Lightswitch (in or out)	6	n/a	n/a	7	n/a	10	2	1. 5 Colonies (CFUs) Coagulase Negative Staphylococcus
309	Bathroom Door Handle (outside)	105	n/a	n/a	35	n/a	6	26	1. No Growth Day 2
309	Handicap Rail (BR)	16	n/a	n/a	2	n/a	17	21	1. 5 Colonies (CFUs) Coagulase Negative Staphylococcus
405	Left-outside Bedrail Controls (patient perspective)	120	13	25	108	32	n/a	56	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
405	Left Sink Handle (hot)	61	432	60	29	25	254	201	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 30 Colonies (CFUs) Staphylococcus Aureus 3. 10 Colonies (CFUs) Coagulase Negative Staphylococcus
405	Exterior Door Handle	19	98	67	55	32	78	65	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
405	Visitor Chair (tagged) Right Armrest	122	6	38	44	63	213	75	1. 6 Colonies (CFUs) Coagulase Negative Staphylococcus #1 2. 5 Colonies (CFUs) Coagulase Negative Staphylococcus #2
405	Bedside Table - around edges (non vanity side)	94	1	2	99	n/a	64	54	1. 5 Colonies (CFUs) Coagulase Negative Staphylococcus
405	Bathroom Lightswitch (in or out)	9	46	43	249	44	152	108	1. No Growth Day 2
405	Bathroom Door Handle (outside)	81	1	23	63	39	56	22	1. 3 Colonies (CFUs) Staphylococcus Aureus 2. 2 Colonies (CFUs) CNST
405	Handicap Rail (BR)	4	141	65	28	78	42	64	1. 30 Colonies (CFUs) Staphylococcus Aureus 2. 10 Colonies (CFUs) Coagulase Negative Staphylococcus
406	RIGHT-outside Bedrail Controls ("special bed")	525	166	182	62	n/a	88	135	1. No Growth Day 2
406	Left Sink Handle (hot)	41	0	96	78	6	95	88	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
406	Exterior Door Handle	59	11	12	103	1	155	66	1. No Growth Day 2
406	Visitor Chair (tagged) Right Armrest	n/a	404	419	154	61	n/a	302	n/a
406	Bedside Table - around edges (non vanity side)	94	210	210	10	n/a	193	505	n/a
406	Bathroom Lightswitch (in or out)	8	4	37	24	49	6	9	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
406	Bathroom Door Handle (outside)	34	15	39	39	73	65	23	n/a
406	Handicap Rail (BR)	22	62	48	107	2	85	44	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 12 Colonies (CFUs) Staphylococcus Aureus 3. 4 Colonies (CFUs) Coagulase Negative Staphylococcus #2 4. 35 Colonies (CFUs) Coagulase Negative Staphylococcus #3
531	Left-outside Bedrail Controls (patient perspective)	66	18	4	11	n/a	25	75	1. 3 Colonies (CFUs) Staphylococcus Aureus 2. 4 Colonies (CFUs) Coagulase Negative Staphylococcus 3. 2 Colonies (CFUs) Coagulase Negative Staphylococcus #2
531	Left Sink Handle (hot)	105	72	1	816	n/a	232	46	1. 7 Colonies (CFUs) Coagulase Negative Staphylococcus #1 2. 9 Colonies (CFUs) Coagulase Negative Staphylococcus #2
531	Exterior Door Handle	10	6	16	12	n/a	36	25	1. No Growth Day 2
531	Visitor Chair (tagged) Right Armrest	16	262	79	12	n/a	89	43	1. 50 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 50 Colonies (CFUs) Staphylococcus Aureus 3. 1 Colonies (CFUs) Coagulase Negative Staphylococcus #2
531	Bedside Table - around edges (non vanity side)	73	4	26	50	n/a	54	n/a	1. 1 Colonies (CFU's) Bacillus Species (FAT GRAM POS ROD, SPORES) 2. 12 Colonies (CFU's) Coagulase Negative Staphylococcus #1 3. 10 Colonies (CFUs) Coagulase Negative Staphylococcus #2 4. 3 Colonies (CFUs) Coagulase Negative Staphylococcus #3
531	Bathroom Lightswitch (in or out)	13	12	3	28	n/a	35	35	1. 1 Colonies (CFUs) Spore Forming Gram Positive Rods 2. 1 Colonies (CFUs) Staphylococcus Aureus
531	Bathroom Door Handle (outside)	23	0	47	18	n/a	25	33	1. 4 Colonies (CFUs) Coagulase Negative Staphylococcus
531	Handicap Rail (BR)	104	0	20	5	n/a	18	103	1. 8 Colonies (CFUs) Staphylococcus Aureus 2. 8 Colonies (CFUs) Coagulase Negative Staphylococcus

**Category A: current hospital cleaning & disinfection by hospital cleaning staff with continued routine cleaning & disinfection for 26 days (continued).**

Room	Object Being Tested	Baseline	Day 1	Day 2	Day 4	1 Week	2 Weeks	3 Weeks	Baseline Culture
		1/6/10 & 1/7/10	1/8/10	1/9/10	1/11/10	1/13/10	1/20/10	1/27/10	1/6/10
532	Left-outside Bedrail Controls (patient perspective)	20	n/a	n/a	0	n/a	26	6	1. No Growth Day 4
532	Left Sink Handle (hot)	29	n/a	n/a	23	n/a	28	9	1. No Growth Day 4
532	Exterior Door Handle	41	n/a	n/a	3	n/a	3	66	1. 1 Colonies (CFUs) Pseudomonas-related Gram Negative Rods 2. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
532	Visitor Chair (tagged) Right Armrest	n/a	n/a	n/a	27	n/a	120	242	1. 28 Colonies (CFUs) Coagulase Negative Staphylococcus
532	Bedside Table - around edges (non vanity side)	497	n/a	n/a	143	n/a	265	42	1. 4 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 2 Colonies (CFUs) Coagulase Negative Staphylococcus #2
532	Bathroom Lightswitch (in or out)	32	n/a	n/a	4	n/a	19	20	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 1 Colonies (CFUs) Coagulase Negative Staphylococcus #2
532	Bathroom Door Handle (outside)	81	n/a	n/a	17	n/a	39	12	1. 11 Colonies (CFUs) Coagulase Negative Staphylococcus
532	Handicap Rail (BR)	34	n/a	n/a	13	n/a	1	14	1. 40 Colonies (CFUs) Coagulase Negative Staphylococcus
624	Left-outside Bedrail Controls (patient perspective)	286	30	14	55	20	n/a	n/a	1. No Growth Day 4
624	Left Sink Handle (hot)	34	26	163	9	209	44	101	1. No Growth Day 4
624	Exterior Door Handle	2	0	46	44	53	32	40	1. No Growth Day 4
624	Visitor Chair (tagged) Right Armrest	985	n/a	n/a	74	6	183	n/a	n/a
624	Bedside Table - around edges (non vanity side)	19	101	150	4	65	56	n/a	1. 1 Colonies (CFUs) Pseudomonas-related gram Negative Rods
624	Bathroom Lightswitch (in or out)	34	7	3	1	0	9	18	1. 1 Colonies (CFU's) Micrococcus Species
624	Bathroom Door Handle (outside)	40	114	3	11	2	2	12	1. 3 Colonies (CFUs) Coagulase Negative Staphylococcus
624	Handicap Rail (BR)	9	83	73	1	39	3	27	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 4 Colonies (CFU's) Micrococcus Species 3. 1 Colonies (CFU's) Bacillus Species (Not anthracis)
625	Left-outside Bedrail Controls (patient perspective)	37	44	23	11	1	99	11	1. No Growth Day 4
625	Left Sink Handle (hot)	364	148	11	30	2	15	36	n/a
625	Exterior Door Handle	36	75	17	4	15	61	25	1. 4 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 1 Colonies (CFUs) Micrococcus Species
625	Visitor Chair (tagged) Right Armrest	85	324	215	139	49	458	18	1. 15 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 15 Colonies (CFUs) Coagulase Negative Staphylococcus #2 3. 10 Colonies (CFUs) Coagulase Negative Staphylococcus #3
625	Bedside Table - around edges (non vanity side)	115	71	15	11	20	86	20	1. 3 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 2 Colonies (CFUs) Coagulase Negative Staphylococcus #2 3. 1 Colonies (CFUs) Pseudomonas-related Gram Negative Rods
625	Bathroom Lightswitch (in or out)	28	3	127	86	87	111	20	1. 1 Colonies (CFUs) Pseudomonas-related Gram Negative Rods
625	Bathroom Door Handle (outside)	8	35	42	321	14	245	32	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 3 Colonies (CFU's) Micrococcus Species
625	Handicap Rail (BR)	17	23	50	4	1	23	7	1. 30 Colonies (CFUs) Coagulase Negative Staphylococcus
416	Left-outside Bedrail Controls (patient perspective)	40	n/a	4	2	1	n/a	16	1. No Growth Day 4
416	Left Sink Handle (hot)	87	n/a	183	4	132	76	1703	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
416	Exterior Door Handle	105	n/a	11	24	1	224	10	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus
416	Visitor Chair (tagged) Right Armrest	366	n/a	200	2088	164	629	35	1. 13 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 8 Colonies (CFUs) Micrococcus Species
416	Bedside Table - around edges (non vanity side)	52	n/a	28	16	6	n/a	357	1. 82 Colonies (CFUs) Coagulase Negative Staphylococcus
416	Bathroom Lightswitch (in or out)	20	n/a	40	4	33	19	38	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
416	Bathroom Door Handle (outside)	37	n/a	12	27	97	22	80	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
416	Handicap Rail (BR)	1	n/a	9	0	9	3	47	1. 3 Colonies (CFUs) Coagulase Negative Staphylococcus

## CONCLUSION

**Study A started with the lowest initial bacterial loading and only managed a marginal reduction of just 4% in overall microbial loading for the term of the study.**

Overall Average - Category A							Reduction/Increase from baseline:		
Baseline	Day 1	Day 2	Day 4	1 Week	2 Weeks	3 Weeks	1 Week	2 Weeks	3 Weeks
98.9	70.2	77.2	76.1	49.4	84.9	95.2	-50%	-14%	-4%

**Category B: one single application of My-shield® Sanitizing/Disinfection treatment applied by Electrostatic applicator & wipes.  
(no routine cleaning for 26 days)**

Room #	Object Being Tested	Baseline	Day 1	Day 2	Day 4	1 Week	2 Weeks	3 Weeks	Baseline Culture
		1/6/10 & 1/7/10	1/8/10	1/9/10	1/11/10	1/13/10	1/20/10	1/27/10	1/6/10
202	Chair	132	18	13	10	29	44	76	1. 2 Colonies (CFU's) Micrococcus Species 2. 3 Colonies (CFUs) Coagulase Negative Staphylococcus 3. 3 Colonies (CFUs) Coagulase Negative Staphylococcus #2
202	Bathroom Wall	74	0	1	1	1	3	1	1. 3 Colonies (CFUs) Coagulase Negative Staphylococcus (Two Species)
203	Chair	91	10	13	5	5	18	4	1. 5 Colonies (CFU's) Micrococcus Species 2. 12 Colonies (CFUs) Diphtheroids (Gram Pos Rod)
203	Bathroom Wall	81	1	0	3	2	10	13	1. No Growth Day 2
204	Chair	263	73	52	30	18	45	157	1. 4 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 1 Colonies (CFUs) Diphtheroids (GRAM POS ROD)
204	Bathroom Wall	49	4	6	3	1	6	0	1. 3 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 1 Colonies (CFUs) Diphtheroids (GRAM POS ROD)
205	Chair	131	15	24	13	n/a	34	n/a	1. 2 Colonies (CFU's) Coagulase Staphylococcus
205	Bathroom Wall	36	0	0	3	1	0	0	1. No Growth Day 2
207	Chair	260	6	14	15	26	28	n/a	1. 8 Colonies (CFU's) Gram Negative Rods 2. 5 Colonies (CFU's) Bacillus Species (FAT GRAM POS ROD, SPORES) 3. 20 Colonies Coagulase Negative Staphylococcus 4. 10 Colonies (CFU's) Enterococcus Species 5. 20 Colonies (CFU's) Diphtheroids
207	Bathroom Wall	87	n/a	183	4	132	76	1703	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus

## CONCLUSION

**Study B started with a modest initial bacterial loading and achieved a 92% reduction in week one, an 83% reduction in week two and a 70% reduction in week three with one single application of My-shield® and no follow up cleaning.**

Overall Average - Category B							Reduction/Increase from baseline:		
Baseline	Day 1	Day 2	Day 4	1 Week	2 Weeks	3 Weeks	1 Week	2 Weeks	3 Weeks
114.5	12.7	12.3	8.6	9.4	19.2	34.0	-92%	-83%	-70%

**Category C: one single application of My-shield® Sanitizer/Disinfectant with combination steam & electrostatic applicator followed up with 26 days of routine cleaning.**

Room #	Object Being Tested	Baseline	Day 1	Day 2	Day 4	1 Week	2 Weeks	3 Weeks	Baseline Culture
		1/6/10 & 1/7/10	1/8/10	1/9/10	1/11/10	1/13/10	1/20/10	1/27/10	1/6/10
341	Left-outside Bedrail Controls (patient perspective)	75	24	4	3	3	9	n/a	1. No Growth Day 2
341	Left Sink Handle (hot)	43	0	8	8	1	2	8	1. 10 Colonies (CFUs) Yeast
341	Exterior Door Handle	44	8	4	3	1	12	16	1. No Growth Day 2
341	Visitor Chair (tagged) Right Armrest	5900	1	31	0	5	10	22	1. 5 Colonies (CFU's) Coagulase Staphylococcus 2. 5 Colonies (CFUs) Gram Negative Rods
341	Bedside Table - around edges (non vanity side)	25	0	30	20	13	17	21	1. 1 Colonies (CFU's) Coagulase Staphylococcus 2. 1 Colonies (CFU's) Micrococcus Species
342	Left-outside Bedrail Controls (patient perspective)	4	0	6	18	7	5	n/a	1. No Growth Day 2
342	Left Sink Handle (hot)	25	8	5	2	8	9	11	1. 1 Colonies (CFU's) Coagulase Staphylococcus
342	Exterior Door Handle	0	24	1	3	13	3	12	1. 2 Colonies (CFUs) Yeast
342	Visitor Chair (tagged) Right Armrest	77	2	13	7	12	19	26	1. No Growth Day 2
342	Bedside Table - around edges (non vanity side)	6	0	4	1	6	6	n/a	1. No Growth Day 2
302	Left-outside Bedrail Controls (patient perspective)	540	7	20	2	40	46	17	1. No Growth Day 2
302	Left Sink Handle (hot)	2	3	18	13	6	16	12	1. 9 Colonies (CFUs) Coagulase Negative Staphylococcus
302	Exterior Door Handle	0	9	2	0	23	29	8	1. 100 Colonies (CFUs) Gram Positive Rods (resembling LACTOBACILLUS) 2. 4 Colonies (CFUs) Enterococcus Species 3. 21 Colonies (CFUs) Coagulase Negative Staphylococcus
302	Visitor Chair (tagged) Right Armrest	123	3	4	3	24	31	6	1. No Growth Day 2
302	Bedside Table - around edges (non vanity side)	148	14	53	7	36	40	n/a	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 3 Colonies (CFU's) Micrococcus Species
302	Bathroom Lightswitch (in or out)	2	0	2	2	9	1	0	1. No Growth Day 2
302	Bathroom Door Handle (outside)	1	1	1	0	14	6	0	1. 1 Colonies (CFU's) Coagulase Staphylococcus
302	Handicap Rail (BR)	21	3	5	0	20	25	15	1. No Growth Day 2
303	Left-outside Bedrail Controls (patient perspective)	85	n/a	9	11	18	19	23	1. No Growth Day 2
303	Left Sink Handle (hot)	208	n/a	64	7	8	14	14	1. No Growth Day 2
303	Exterior Door Handle	0	n/a	26	3	16	26	28	1. No Growth Day 2
303	Visitor Chair (tagged) Right Armrest	260	n/a	23	0	37	41	53	1. No Growth Day 2
303	Bedside Table - around edges (non vanity side)	201	n/a	74	15	31	30	12	1. No Growth Day 2
303	Bathroom Lightswitch (in or out)	7	n/a	6	16	16	4	9	1. No Growth Day 2
303	Bathroom Door Handle (outside)	0	n/a	19	0	4	12	7	1. 3 Colonies (CFU's) Coagulase Staphylococcus
303	Handicap Rail (BR)	96	n/a	22	0	5	13	20	1. No Growth Day 2
417	Left-outside Bedrail Controls (patient perspective)	26	n/a	4	5	1	3	21	1. 5 Colonies (CFUs) Coagulase Negative Staphylococcus
417	Left Sink Handle (hot)	28	n/a	18	1	2	8	18	1. No Growth Day 2
417	Exterior Door Handle	18	n/a	2	3	3	6	1	n/a
417	Visitor Chair (tagged) Right Armrest	48	n/a	9	12	11	24	20	1. 6 Colonies (CFUs) Gram Negative Rods
417	Bedside Table - around edges (non vanity side)	26	n/a	3	10	9	11	60	1. 3 Colonies (CFUs) Coagulase Negative Staphylococcus
417	Bathroom Lightswitch (in or out)	7	n/a	1	2	2	5	2	1. 1 Colonies (CFUs) Pseudomonas-related Gram Negative Rods
417	Bathroom Door Handle (outside)	14	n/a	3	3	4	10	0	1. No Growth Day 2
417	Handicap Rail (BR)	7	n/a	5	2	4	0	23	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
516 (A)	Left-outside Bedrail Controls (patient perspective)	38	0	n/a	n/a	n/a	n/a	23	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus
516 (A)	Left Sink Handle (hot)	68	25	24	0	7	11	5	1. 1 Colonies (CFU's) Micrococcus Species
516 (A)	Exterior Door Handle	65	17	2	0	5	1	14	1. No Growth Day 4
516 (A)	Visitor Chair (tagged) Right Armrest	51	13	5	1	3	13	15	1. 1 Colonies (CFU's) Micrococcus Species
516 (A)	Bedside Table - around edges (non vanity side)	119	12	0	3	3	16	33	1. No Growth Day 4
516 (A)	Bathroom Lightswitch (in or out)	19	4	0	0	0	2	4	n/a
516 (A)	Bathroom Door Handle (outside)	57	22	2	7	2	8	3	1. No Growth Day 4
516 (A)	Handicap Rail (BR)	21	157	65	5	19	12	7	1. No Growth Day 4
602 (B)	Bedside Table - around edges (non vanity side)	37	0	1	0	6	3	n/a	n/a
602 (B)	Bathroom Lightswitch (in or out)	34	4	5	1	9	9	1	n/a
602 (B)	Bathroom Door Handle (outside)	48	37	7	2	3	9	0	n/a
602 (B)	Handicap Rail (BR)	24	5	1	0	1	2	0	1. 30 Colonies (CFUs) Coagulase Negative Staphylococcus
634	Left-outside Bedrail Controls (patient perspective)	167	13	4	2	10	n/a	1	n/a
634	Left Sink Handle (hot)	61	5	46	1	2	0	1	1. 9 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 29 Colonies (CFU's) Micrococcus Species
634	Exterior Door Handle	11	2	5	8	1	8	18	1. No Growth Day 4
634	Visitor Chair (tagged) Right Armrest	294	157	11	17	8	16	n/a	1. 5 Colonies (CFUs) Coagulase Negative Staphylococcus #1 2. 1 Colonies (CFUs) Coagulase Negative Staphylococcus #2
634	Bedside Table - around edges (non vanity side)	52	7	492	34	18	26	n/a	1. 3 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 3 Colonies (CFU's) Micrococcus Species
634	Bathroom Lightswitch (in or out)	3	3	4	2	3	0	8	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 1 Colonies (CFUs) Pseudomonas-related Gram Negative Rods
634	Bathroom Door Handle (outside)	14	4	5	0	1	8	7	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus
634	Handicap Rail (BR)	3	7	3	5	3	6	11	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 1 Colonies (CFUs) Gram Negative Rods

**Category C: one single application of My-shield® Sanitizer/Disinfectant with combination steam & electrostatic applicator followed up with 26 days of routine cleaning (continued)**

Room #	Object Being Tested	Baseline	Day 1	Day 2	Day 4	1 Week	2 Weeks	3 Weeks	Baseline Culture
		1/6/10 & 1/7/10	1/8/10	1/9/10	1/11/10	1/13/10	1/20/10	1/27/10	1/6/10
635	Left-outside Bedrail Controls (patient perspective)	14	0	3	23	14	6	31	1. 1 Colonies (CFUs) Diphtheroids
635	Left Sink Handle (hot)	7	11	12	6	2	3	5	1. No Growth Day 4
635	Exterior Door Handle	0	0	1	1	1	4	7	1. 5 Colonies (CFUs) Coagulase Negative Staphylococcus
635	Visitor Chair (tagged) Right Armrest	179	10	4	2	2	7	5	1. 40 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 1 Colonies (CFU's) Micrococcus Species
635	Bedside Table - around edges (non vanity side)	58	13	15	0	n/a	32	77	1. 5 Colonies (CFUs) Filamentous Fungus 2. 10 Colonies (CFUs) Coagulase Negative Staphylococcus
635	Bathroom Lightswitch (in or out)	0	2	8	11	0	21	16	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
635	Bathroom Door Handle (outside)	2	0	1	3	0	1	38	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 12 Colonies (CFUs) Coagulase Negative Staphylococcus #2
635	Handicap Rail (BR)	11	0	1	4	0	2	0	1. 3 Colonies (CFUs) Coagulase Negative Staphylococcus

## CONCLUSION

**Study C started with the third highest initial bacterial loading & achieved a 96% reduction in week one, an 94% reduction in week two and a 93% reduction in week three, with one single application of My-shield® and continued daily routine cleaning.**

Overall Average - Category C							Reduction/Increase from baseline:		
Baseline	Day 1	Day 2	Day 4	1 Week	2 Weeks	3 Weeks	1 Week	2 Weeks	3 Weeks
207.7	24.8	20.2	6.0	9.2	12.9	14.1	-96%	-94%	-93%

**Category D: one single application of My-shield® Sanitizer/Disinfectant treatment applied with a combination of electrostatic applicator and wipes followed up with 26 days of routine cleaning**

Room #	Object Being Tested	Baseline	Day 1	Day 2	Day 4	1 Week	2 Weeks	3 Weeks	Baseline Culture
		1/6/10 & 1/7/10	1/8/10	1/9/10	1/11/10	1/13/10	1/20/10	1/27/10	1/6/10
432	Left-outside Bedrail Controls (patient perspective)	129	n/a	33	22	n/a	24	n/a	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 3 Colonies (CFUs) Coagulase Negative Staphylococcus #2
432	Left Sink Handle (hot)	27	n/a	51	4	1	3	6	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
432	Exterior Door Handle	0	n/a	7	1	2	0	12	1. 3 Colonies (CFUs) Coagulase Negative Staphylococcus
432	Visitor Chair (tagged) Right Armrest	337	n/a	20	38	28	42	35	1. 12 Colonies (CFUs) Coagulase Negative Staphylococcus #1 2. 3 Colonies (CFUs) Coagulase Negative Staphylococcus #2
432	Bedside Table - around edges (non vanity side)	454	n/a	111	14	n/a	23	n/a	1. 6 Colonies (CFUs) Coagulase Negative Staphylococcus #1 2. 5 Colonies (CFUs) Coagulase Negative Staphylococcus #2 3. 15 Colonies (CFUs) Filamentous Fungus
432	Bathroom Lightswitch (in or out)	10	n/a	21	17	0	9	12	1. No Growth Day 2
432	Bathroom Door Handle (outside)	57	n/a	218	2	1	1	22	1. 3 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 2 Colonies (CFUs) Coagulase Negative Staphylococcus #2
432	Handicap Rail (BR)	1	n/a	22	4	2	3	8	1. No Growth Day 2
529	Left-outside Bedrail Controls (patient perspective) (A)	46	n/a	25	12	2	10	n/a	1. No Growth Day 4
529	Left Sink Handle (hot)	38	n/a	37	3	2	0	6	1. No Growth Day 4
529	Exterior Door Handle	40	n/a	6	3	10	11	0	n/a
529	Visitor Chair (tagged) Right Armrest	44	n/a	2	4	38	9	15	1. 30 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 1 Colonies (CFUs) Coagulase Negative Staphylococcus #2
529	Bedside Table - around edges (non vanity side)	209	n/a	3	2	11	4	50	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus
529	Bathroom Lightswitch (in or out)	31	n/a	0	2	1	4	21	1. 2 Colonies (CFUs) Pseudomonas-related gram Negative Rods 2. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
529	Bathroom Door Handle (outside)	26	n/a	2	0	20	1	0	1. 5 Colonies (CFUs) Coagulase Negative Staphylococcus
529	Handicap Rail (BR)	47	n/a	13	9	6	16	16	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
530	Left-outside Bedrail Controls (patient perspective)	83	n/a	126	23	6	33	n/a	1. No Growth Day 4
530	Left Sink Handle (hot)	1172	n/a	28	6	0	12	7	1. 1 Colonies (CFU's) Micrococcus Species
530	Exterior Door Handle	79	n/a	2	2	0	8	23	1. No Growth Day 4
530	Visitor Chair (tagged) Right Armrest	223	n/a	10	3	11	31	28	1. 47 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 3 Colonies (CFU's) Micrococcus Species
530	Bedside Table - around edges (non vanity side)	192	n/a	45	4	15	16	n/a	1. 10 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 3 Colonies (CFUs) Coagulase Negative Staphylococcus #2
530	Bathroom Lightswitch (in or out)	360	n/a	10	2	2	5	29	1. 2 Colonies (CFU's) Micrococcus Species 2. 3 Colonies (CFUs) Coagulase Negative Staphylococcus 3. 7 Colonies (CFUs) Enterococcus Species
530	Bathroom Door Handle (outside)	71	n/a	10	3	0	7	11	1. No Growth Day 4
530	Handicap Rail (BR)	49	n/a	20	0	0	6	5	1. No Growth Day 4
612	Left-outside Bedrail Controls (patient perspective)	80	4	0	1	1	12	5	1. 4 Colonies (CFUs) Coagulase Negative Staphylococcus
612	Left Sink Handle (hot)	6300	107	55	1	4	0	19	1. 1 Colonies (CFU's) Bacillus Species (Not anthracis)
612	Exterior Door Handle	65	49	4	10	2	19	19	1. No Growth Day 4
612	Visitor Chair (tagged) Right Armrest	506	301	0	2	2	5	n/a	1. 21 Colonies (CFUs) Coagulase Negative Staphylococcus
612	Bedside Table - around edges (non vanity side)	545	37	10	8	0	16	34	1. 10 Colonies (CFUs) Coagulase Negative Staphylococcus
612	Bathroom Lightswitch (in or out)	14	8	5	4	5	0	0	1. 7 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 2 Colonies (CFUs) Coagulase Negative Staphylococcus #2
612	Bathroom Door Handle (outside)	12	11	0	3	3	6	25	1. No Growth Day 4
612	Handicap Rail (BR)	55	2	0	6	8	9	3	1. 6 Colonies (CFUs) Coagulase Negative Staphylococcus
344	Left-outside Bedrail Controls (patient perspective)	65	2	12	19	5	24	n/a	1. No Growth Day 2
344	Left Sink Handle (hot)	5	2	4	1	2	6	5	1. 1 Colonies (CFU's) Coagulase Staphylococcus
344	Exterior Door Handle	24	5	26	2	1	18	8	1. 1 Colonies (CFU's) Coagulase Staphylococcus
344	Visitor Chair (tagged) Right Armrest	70	0	4	18	4	20	31	1. 1 Colonies (CFU's) Coagulase Staphylococcus
344	Bedside Table - around edges (non vanity side)	2	108	54	14	5	21	n/a	1. 1 Colonies (CFU's) Bacillus Species (FAT GRAM POS ROD, SPORES) 2. 1 Colonies (CFU's) Coagulase Negative Staphylococcus
345	Left-outside Bedrail Controls (patient perspective)	139	8	8	40	3	7	n/a	1. 1 Colonies (CFU's) Coagulase Staphylococcus
345	Left Sink Handle (hot)	13	19	15	1	0	4	3	1. No Growth Day 2
345	Exterior Door Handle	9	6	38	5	4	5	2	1. No Growth Day 2
345	Visitor Chair (tagged) Right Armrest	160	2	17	39	9	27	n/a	1. 4 Colonies (CFU's) Coagulase Staphylococcus
345	Bedside Table - around edges (non vanity side)	33	0	2	4	32	11	16	1. 3 Colonies (CFU's) Coagulase Staphylococcus
431	Left-outside Bedrail Controls (patient perspective)	0	n/a	11	1	21	3	15	1. No Growth Day 2
431	Left Sink Handle (hot)	12	n/a	29	1	17	2	3	n/a
431	Exterior Door Handle	0	n/a	7	0	9	1	2	1. No Growth Day 2
431	Visitor Chair (tagged) Right Armrest	92	n/a	6	2	6	2	23	1. 4 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 2 Colonies (CFUs) Coagulase Negative Staphylococcus #2 3. 1 Colonies (CFUs) Coagulase Negative Staphylococcus #3
431	Bedside Table - around edges (non vanity side)	0	n/a	10	17	34	39	41	1. 18 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 1 Colonies (CFUs) Gram Variable Rods (with spores)
431	Bathroom Lightswitch (in or out)	5	n/a	19	0	4	6	7	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
431	Bathroom Door Handle (outside)	31	n/a	52	0	1	11	19	1. No Growth Day 2
431	Handicap Rail (BR)	7	n/a	54	5	0	2	3	1. 2 Colonies (CFUs) Gram Negative Rods 2. 6 Colonies (CFUs) Coagulase Negative Staphylococcus 3. 35 Colonies (CFUs) Diphtheroids

**Category D: one single application of My-shield® Sanitizer/Disinfectant treatment applied with a combination of electrostatic applicator and wipes followed up with 26 days of routine cleaning (continued)**

Room #	Object Being Tested	Baseline	Day 2	Day 2	Day 4	1 Week	2 Weeks	3 Weeks	Baseline Culture
		1/6/10 & 1/7/10	1/8/10	1/9/10	1/11/10	1/13/10	1/20/10	1/27/10	1/6/10
614	Left-outside Bedrail Controls (patient perspective)	23	9	n/a	n/a	n/a	n/a	31	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
614	Left Sink Handle (hot)	23	0	1	3	2	1	14	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 12 Colonies (CFUs) Streptococci, Alpha Hemolytic
614	Exterior Door Handle	30	54	0	14	19	21	29	1. 3 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 1 Colonies (CFUs) Gram Negative Rods
614	Visitor Chair (tagged) Right Armrest	461	99	22	23	29	36	214	n/a
614	Bedside Table - around edges (non vanity side)	196	30	13	7	8	23	25	1. No Growth Day 4
614	Bathroom Lightswitch (in or out)	23	27	0	3	5	9	3	1. 1 Colonies (CFU's) Micrococcus Species 2. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
614	Bathroom Door Handle (outside)	36	3	9	2	1	16	4	1. 14 Colonies (CFUs) Streptococci, Alpha Hemolytic 2. 2 Colonies (CFU's) Micrococcus Species
614	Handicap Rail (BR)	6	5	12	2	0	0	0	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
<b>OVERALL AVERAGE FOR THIS CATEGORY</b>		<b>220.1</b>	<b>34.5</b>	<b>23.2</b>	<b>7.7</b>	<b>7.3</b>	<b>11.6</b>	<b>18.9</b>	

## CONCLUSION

Study D started the second highest initial bacterial loading and achieved a 97% reduction in week one, an 95% reduction in week two and a 91% reduction in week three, with one single application of My-shield® and no continued routine cleaning.

Overall Average - Category D							Reduction/Increase from baseline:		
Baseline	Day 1	Day 2	Day 4	1 Week	2 Weeks	3 Weeks	1 Week	2 Weeks	3 Weeks
220.1	34.5	23.2	7.7	7.3	11.6	18.9	-97%	-95%	-91%



**Category E: continued application of My-shield® Sanitizer/Disinfectant treatment applied with a combination of electrostatic applicator & wipes forming part of the routine cleaning & disinfection with My-shield® for 26 days**

Room #	Object Being Tested	Baseline	Day 2	Day 2	Day 4	1 Week	2 Weeks	3 Weeks	Baseline Culture
		1/6/10 & 1/7/10	1/8/10	1/9/10	1/11/10	1/13/10	1/20/10	1/27/10	1/6/10
502	Left-outside Bedrail Controls (patient perspective)	39	6	3	1	4	2	6	1. No Growth Day 4
502	Left Sink Handle (hot)	3	0	0	1	8	5	10	1. No Growth Day 4
502	Exterior Door Handle	0	16	7	0	0	2	5	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus
502	Visitor Chair (tagged) Right Armrest	156	18	19	18	23	26	35	1. 200 Colonies (CFUs) Staphylococcus Aureus
502	Bedside Table - around edges (non vanity side)	28	1	1	2	3	0	1	1. 15 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 2 Colonies (CFUs) Pseudomonas-related Gram Negative Rods 3. 4 Colonies (CFUs) Micrococcus Species
502	Bathroom Lightswitch (in or out)	26	3	0	1	1	2	1	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
502	Bathroom Door Handle (outside)	69	6	4	1	5	3	9	1. No Growth Day 4
502	Handicap Rail (BR)	18	1	4	0	4	3	1	1. 6 Colonies (CFU's) Micrococcus Species
503(A)	Left-outside Bedrail Controls (patient perspective)	52	2	64	5	9	7	21	1. No Growth Day 4
503(A)	Left Sink Handle (hot)	161	47	23	2	12	9	13	1. No Growth Day 4
503(A)	Exterior Door Handle	36	4	17	12	11	3	8	n/a
503(A)	Visitor Chair (tagged) Right Armrest	380	47	69	11	9	22	32	1. 1 Colonies (CFUs) Enterococcus Species 2. 1 Colonies (CFU's) Micrococcus Species
503(A)	Bedside Table - around edges (non vanity side)	6360	1	3	5	7	31	29	1. 7 Colonies (CFUs) Enterococcus Species 2. Colonies (CFUs) Staphylococcus Aureus 3. 1 Colonies (CFU's) Micrococcus Species
503(A)	Bathroom Lightswitch (in or out)	28	59	94	6	7	14	18	1. No Growth Day 4
503(A)	Bathroom Door Handle (outside)	71	121	21	15	19	20	24	1. No Growth Day 4
503(A)	Handicap Rail (BR)	48	0	8	14	21	9	15	1. No Growth Day 4
618	Left-outside Bedrail Controls (patient perspective)	10	0	0	0	14	1	6	1. No Growth Day 4
618	Left Sink Handle (hot)	9	1	10	0	6	1	2	1. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
618	Exterior Door Handle	4	30	39	2	3	14	19	1. No Growth Day 4
618	Visitor Chair (tagged) Right Armrest	6	1	1	0	n/a	n/a	n/a	1. 15 Colonies (CFUs) Staphylococcus Aureus 2. 3 Colonies (CFUs) Coagulase Negative Staphylococcus
618	Bedside Table - around edges (non vanity side)	64	9	11	1	2	0	n/a	1. 1 Colonies (CFU's) Micrococcus Species 2. 9 Colonies (CFUs) Coagulase Negative Staphylococcus
618	Bathroom Lightswitch (in or out)	4	0	0	2	0	5	2	1. 2 Colonies (CFUs) Enterococcus Species 2. 1 Colonies (CFUs) Coagulase Negative Staphylococcus
618	Bathroom Door Handle (outside)	23	6	9	0	0	17	20	1. No Growth Day 4
618	Handicap Rail (BR)	2	1	0	0	16	2	8	1. 20 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 20 Colonies (CFUs) Coagulase Negative Staphylococcus #2 3. 2 Colonies (CFU's) Micrococcus Species
620	Left-outside Bedrail Controls (patient perspective)	346	13	10	2	5	13	9	1. No Growth Day 4
620	Left Sink Handle (hot)	36	4	13	9	3	11	10	1. No Growth Day 4
620	Exterior Door Handle	49	3	5	0	8	8	6	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus
620	Visitor Chair (tagged) Right Armrest	436	n/a	n/a	n/a	5	n/a	n/a	1. 9 Colonies (CFU's) Micrococcus Species 2. 3 Colonies (CFUs) Coagulase Negative Staphylococcus
620	Bedside Table - around edges (non vanity side)	2699	7	25	3	6	19	n/a	1. 10 Colonies (CFUs) Coagulase Negative Staphylococcus
620	Bathroom Lightswitch (in or out)	38	2	7	0	6	3	7	1. 2 Colonies (CFUs) Coagulase Negative Staphylococcus
620	Bathroom Door Handle (outside)	48	3	19	2	0	9	1	1. 7 Colonies (CFUs) Coagulase Negative Staphylococcus 2. 1 Colonies (CFU's) Micrococcus Species
620	Handicap Rail (BR)	33	15	56	0	2	4	5	1. No Growth Day 4

## CONCLUSION

**Study E started with a highest initial bacterial loading & achieved a 98% to 97% reduction in total bacterial loading with continued daily routine cleaning & disinfection with My-shield®.**

Overall Average - Category E							Reduction/Increase from baseline:		
Baseline	Day 1	Day 2	Day 4	1 Week	2 Weeks	3 Weeks	1 Week	2 Weeks	3 Weeks
352.6	13.8	17.5	3.7	7.1	8.8	11.5	-98%	-97%	-97%