

## Sterile Shield: A Microbiostatic Antimicrobial Coating

### Product Testing Report

Over 30 years of research and development went in to the creation of *Sterile Shield*, our Microbiostatic Antimicrobial Coating. This technology has undergone extensive independent laboratory testing and has a long history of safe use. It is registered with the EPA.

#### Independent Lab Testing

Two US hospitals were used to test and verify the performance of our product. The hospitals were located across the country, and selected by Hospital Environmental Services. Two separate, independent laboratories conducted the testing at each Hospital. Two to three areas in each hospital including the emergency room waiting area and inpatient rooms were evaluated. Swab tests were performed every 15 days over a three-month period. Each test was monitored by the environmental supervisor of the facility being tested. The swabs were categorized, put on ice and taken to the independent labs to determine the results.

#### Summary

Test results showed a significant decrease in microbes in all areas treated. The average decrease in harmful bacteria and microbes during the three-month testing in Hospital 1 was 97.85%, and an astounding 99.84% in Hospital 2! Charts 1 and 2 (below) summarize the number of microbes found in each hospital before treatment (baseline) and results of the final test sample. Detailed results of the tests are also included in this report.

CHART 1	HOSPITAL 1 - SUMMARY		
ROOM TESTED	BASELINE	FINAL TEST SAMPLE	TOTAL % DECREASE
Emergency Room Waiting Area	3,770	108	97.13%
Floor 5, Room 4	3,290	116	96.47%
Floor 9, Room 9	167,730	76	99.95%

CHART 2	HOSPITAL 2 - SUMMARY		
ROOM TESTED	BASELINE	FINAL TEST SAMPLE	TOTAL % DECREASE
Room 272	205,830	277	99.87%
Room 273	103,940	193	99.81%

# Hospital 1

## Detailed Results

Charts 3, 4, and 5 (below) show detailed results for the rooms treated and specific areas tested in Hospital 1. Swab tests were conducted every 15 days (appx.) after the baseline sample was taken and rooms were treated with the Microbiostatic Antimicrobial Coating.

CHART 3		HOSPITAL 1, TREATED ROOM: EMERGENCY ROOM WAITING AREA					
SAMPLE LOCATION	BASELINE 1/26/2010	2/10/2010	3/1/2010	3/15/2010	4/5/2010	4/22/2010	5/12/2010
ER chair 1, arms/seat	980	30	70	<10	<10	80	<10
ER chair 2, fabric only	2500	10	380 (1)	47,000 (2)	41,600(2)	50	90
Soda machine keypad	290	<10	30	36,000 (2)	50	10	<10
<p>(1) Upon arrival, patient was sitting in chair.                      (2) ER waiting area was very active.</p> <p>Results: The decrease in microbes from the baseline test to the last follow-up test was 97.13%.</p>							

CHART 4		HOSPITAL 1, TREATED ROOM: FLOOR 5, ROOM 4					
SAMPLE LOCATION	BASELINE 1/26/2010	2/10/2010	3/1/2010	3/15/2010	4/5/2010	4/22/2010	5/12/2010
TV remote	990	10	10	10	380	340	10
Middle wall panel	1,600	10	<10	<10	<10	10	10
Arm rest of chair	270	10	<10	<10	<10	40	(1)
Blood pressure bulb	130	20	<10	30	<10	40	<10
Night light switch	100	<10	10	<10	<10	20	<10
Underside of counter lip	70	<10	30	<10	<10	<10	<10
Drawer handles	70	<10	<10	<10	<10	20	<10
Thermometer blue tip	60	<10	<10	<10	<10	20	(2)
<p>(1) Chair not present in room                      (2) Thermometer not present in room</p> <p>Results: The decrease in microbes from the baseline test to the last follow-up test was 99.95%.</p>							

CHART 5		HOSPITAL 1, TREATED ROOM: FLOOR 9, ROOM 9					
SAMPLE LOCATION	BASELINE 1/26/2010	2/10/2010	3/1/2010	3/15/2010	4/5/2010	4/22/2010	5/12/2010
Chair fabric	160,000	260	2,100(1)	1,000	NA	(2)	NA
Bed handrail	2,900	450	20	650	NA		<10
TV remote	1,400	250	30	900	120		10
Bed tray	980	240	NA	NA	NA		NA
IV pole standing	690	20	<10	770	NA		NA
IV pole ceiling mount	490	<10	<10	560	<10		<10
Bed controls	410	<10	<10	<10	NA		<10
Door handle outside	140	<10	<10	<10	10		10
Monitor control frame	50	<10	<10	80	<10		10
Drawer handles	570	10	<10	80	<10		<10
Door frame	90	10	<10	<10	<10	√	10

(1) Chair occupied upon arrival  
(2) Room not available due to hospital emergency

Results: The decrease in microbes from the baseline test to the last follow-up test was 96.47%.

## Hospital 2

### Detailed Results

Charts 6 and 7 (below) show detailed results for the rooms treated and specific areas tested in Hospital 2. Swab tests were conducted every 15 days (appx.) after the baseline sample was taken and rooms were treated with the Microbiostatic Antimicrobial Coating.

CHART 6		HOSPITAL 2, TREATED AREA: ROOM 272					
SAMPLE LOCATION	BASELINE 2/25/2010	3/12/2010	3/30/2010	4/14/2010	5/1/2010	5/15/2010	6/2/2010
Bed rail controls, right side	490	<10	<10	<10	NA (3)	10	NA (3)
Bed rail controls, left side	380	<10	10	<10	NA (3)	<10	NA (3)
TV control	120	<10	<10	<10	<10	<10	30
Monitor controls	30	<10	<10	<10	<10	20	<10
Sink counter area	190,000	<10	<10	<10	<10	<10	<10
Cart handle, left side	150	<10	<10	<10	10	<10	<10
Main light switch	30	<10	<10	10	<10	<10	<10
Closet door handle	230	<10	<10	<10	<10	<10	<10
Privacy curtain, inside	3,100	<10	10	<10	<10	<10	<10
Toilet surround	1,700	<10	<10	<10	<10	<10	<10
Bed tray	2,900	<10	<10	<10	<10	<10	10
Chair fabric, arm rest	900	NA(2)	10	20	<10	110	NA (2)
Monitor cable cord	340	NA (1)	NA (1)	NA (1)	NA (1)	NA (1)	NA (1)
Sliding door handles	120	<10	<10	<10	<10	<10	<10
Chart holder	340	<10	<10	<10	<10	<10	<10
Sanitizer housing	210	<10	<10	<10	<10	<10	<10
Countertop surface	4,500	<10	<10	<10	10	<10	<10
Windowsill	260	<10	<10	<10	<10	<10	<10
Toilet Control button	30	<10	<10	<10	<10	<10	<10
<p>(1) Cables not in room  (2) Chair not in room  (3) Different bed in room</p> <p>Results: The decrease in microbes from the baseline test to the last follow-up test was 99.87%.</p>							

CHART 7		HOSPITAL 2, TREATED AREA: ROOM 273					
SAMPLE LOCATION	BASELINE 2/25/2010	3/12/2010	3/30/2010	4/14/2010	5/1/2010	5/15/2010	6/2/2010
Bed rail controls, right side	340	20	<10	<10	NA (3)	NA (3)	NA (3)
Bed rail controls, left side	780	<10	<10	<10	NA (3)	NA (3)	NA (3)
TV control	110	60	<10	<10	10	<10	NA (4)
Monitor controls	20	10	<10	<10	<10	<10	<10
Sink counter area	96,000	<10	10	<10	10	<10	<10
Cart handle, left side	30	<10	<10	<10	<10	<10	<10
Main light switch	170	<10	<10	<10	<10	<10	<10
Closet door handle	84	<10	<10	<10	<10	<10	<10
Privacy curtain, inside	180	<10	<10	<10	<10	<10	<10
Toilet surround	1,408	<10	<10	<10	<10	<10	<10
Bed tray	720	10	<10	<10	<10	<10	<10
Chair fabric, arm rest	820	<10	<10	<10	<10	NA (2)	<10
Monitor cable cord	610	NA (1)	10	NA (1)	NA (1)	NA (1)	NA (1)
Sliding door handles	120	<10	<10	<10	20	<10	30
Chart holder	390	10	<10	<10	<10	<10	<10
Sanitizer housing	190	<10	<10	<10	<10	10	<10
Countertop surface	1,398	<10	<10	<10	10	<10	<10
Windowsill	460	<10	<10	<10	<10	10	<10
Toilet Control button	110	<10	<10	<10	<10	<10	<10
<p>(1) Cables in use  (2) Chair not in room  (3) Different bed in room  (4) Different TV control in room</p> <p>Results: The decrease in microbes from the baseline test to the last follow-up test was 99.81%</p>							

## Conclusion

Independent laboratory tests from two hospitals in two states show Sterile Shield to be extremely effective at decreasing the amount of bacteria and other microbes on both porous and non-porous surfaces. For more information regarding Sterile Shield and GermAway, please visit our website at [www.germaway.com](http://www.germaway.com).