





# AEGIS Antimicrobial Evaluation January/February 2019

**Background:** Cleaning and disinfecting surfaces can remove/kill pathogens on surfaces but studies have shown that more than half of the time surfaces are not adequately cleaned or are recontaminated within minutes. A durable or persistent antimicrobial has the potential to reduce microbial load and facilitate better cleaning and sanitizing. A lower bacterial load can reduce patient and employee risk of cross-contamination and hospital acquired infections.

**Closing the Gap Healthcare:** The vision of Closing the Gap Healthcare began when Connie Clerici saw a need for increased accountability and transparency for those providing healthcare services in the community.

As a practicing nurse, Connie left the hospital setting in search for a new career path. She was surprised by the lack of skills and training that private nurses had at that time, and knew that there was an opportunity to provide better care in Ontario's healthcare community. Soon after, Closing the Gap Healthcare was born.

Closing the Gap have agreed to test AEGIS Microbe Shield wipes in their clinics in the hope that reduced risk of cross contamination can be achieved.

**Objective:** Evaluate the ability of the AEGIS Durable antimicrobial, in an out-patient setting, to reduce the growth of microorganisms on treated surfaces as an adjunct to existing cleaning and disinfecting protocols

**Method:** The study was done at Closing the Gap Healthcare at 103-2085 Hurontario St, Mississauga. Testing was done at 7 am prior to patient appointments. All testing was conducted while existing cleaning and disinfection protocols were being deployed. There was no change to existing cleaning and disinfection protocols during this study.

The Aegis Microbe Shield was applied as an adjunct to these existing protocols.





Application was by "Wipe" format. Multiple high touch surfaces in the nursing clinic, physio clinic, waiting areas and bathroom underwent an application of the Aegis Microbe Shield. These surfaces were tested for presence of microbial growth after the application, and again two more times to evaluate durability of effect. See results table for findings.

Consistent Test sites were identified and tested using a Hygiena ATP meter. **Measure:** SystemSURE Plus ATP hygiene monitoring system was used to measure cleanliness of surfaces. Hygiena systems come preset with Pass and Fail limits of 10 and 30 respectively. Any score of 10 RLU or less is a Pass. Scores from 11 to 30 RLU are a Caution. Any score greater than 30 RLU is a Fail.





Baseline ATP measures were taken on site (recorded below), the site had been cleaned the night prior following existing cleaning and disinfection protocols. Following baseline measure, the site was treated with AEGIS wipes. In the case of the curtain and two textile chairs AEGIS spray was used. Post AEGIS application ATP measure taken immediately following baseline test, **FOLLOW-UP Jan 25, 2019 and Feb 8, 2019** 





### **Raw Data**

Surface	Application baseline January 15, 2019	Post Aegis Application Jan 15, 2019	Post Aegis Application Jan 25, 2019	Post Aegis Application Feb 8, 2019
Physio Clinic				
Cold Sink Tap	48	0	1	3
Computer office chair right arm	49	4	4	13
Keyboard	128	9	11	16
Right Exercise bike handle	155	4	9	26
Treatment area 1 curtain	172	7	7	12
Ultrasound wand	127	0	24	18
Waiting room Pt chair (vinyl) Nursing Clinic	160	0	30	25
Fridge Handle	335	0	1	17
Syringe cart handle	212	3	1	22
IV pole handle	73	4	13	24
Clinic Phone	57	0	22	19
Patient chair	129	9	4	18
IV Control	27	0	1	8
Waiting room chair (fabric)	173	15	16	14
Bathroom				
Toilet support arm	236	6	16	18
Right sink tap	115	0	8	20





#### **Data Summary:**

	Baseline	Post Aegis Application Jan 15, 2019	Post Aegis Application Jan 25, 2019	Post Aegis Application Feb 8, 2019
# Sites Pass	0	15	9	2
% Sites Pass	0	94	56	12
# Sites Caution		1	7	14
% Sites Caution		6	44	88
# Sites Fail	100	0	0	0
% Sites Fail	100	0	0	0

#### **Discussion:**

Baseline measure on all surfaces was above the Hygiena limits for "pass". These results were seen despite full facility cleaning the evening before. This reinforces that "clean" is not necessarily disinfected. For disinfection it is recognized that the right product, right concentration, right dwell time and correct application are all required for optimal effect. It is this relatively long list of variables which conspire to challenge the effectiveness of existing cleaning and disinfection protocols everywhere.

The simple addition of the Aegis Microbe Shield applied via a wipe system was shown to have a dramatic impact on the measurable growth of microbes on treated surfaces. It was demonstrated that 100% of sites exhibited either a pass or caution result weeks after the initial application.

#### **Conclusion:**

The addition of the Aegis Microbe Shield, applied via a wipes system, can be seen as a valuable addition to the existing cleaning and disinfection efforts in a private clinic setting as measured by the ability to reduce the growth of microbes on treated vs untreated surfaces.





## **Clinic Images**













