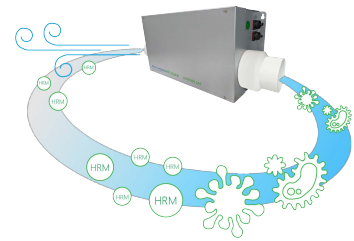


# Food Retail

## Air Disinfection Biosecurity



A series of air samples and contact swabs were taken pre-treatment, on 11/14/06, and in-treatment, on 11/24/06, 12/1/06, 12/7/06 and 12/15/06.

Types of organisms found during initial 11/14/06 pre-treatment sampling.

Species	Raw Count	Species	Raw Count
Bacillus spp	223	Penicillium purpurogenum	71
Pseudomonas spp	197	Fusarium poae	65
Penicillium/aspergillus types	112	Cladosporium sphaerospermum	49
Verticillium lecanii	98	Ulocladium chartarum	33
Lactobacillus spp	83	Aureobasidium pullulans	19

### Air Samples

Air Sample Location	# of Samples	11/14 Avg cfu/m <sup>3</sup> pre-treatment	11/24 Avg cfu/m <sup>3</sup> in-treatment	12/1 Avg cfu/m <sup>3</sup> in-treatment	12/7 Avg cfu/m <sup>3</sup> in-treatment	12/15 Avg cfu/m <sup>3</sup> in-treatment
Produce Cooler	4	290	130	80	20	8
Dept. 17 Cooler	6	513	40	16	13	< 5
Deli Cooler	4	140	140	13	8	< 5
Meat Cooler	5	464	104	58	26	19
Food Court	4	450	80	70	20	16
Food Court Cooler	2	260	100	80	40	< 5
Flower Cooler	1	160	160	80	60	20
Deli Case 30'	3	973	67	53	41	17
Deli Case 20'	2	790	170	70	12	< 5

The initial bioburden, 11/14, from the various locations ranged from 80 cfu/m<sup>3</sup> to 1,560 cfu/m<sup>3</sup> which is considerably greater than 300 cfu/m<sup>3</sup> and is considered **not acceptable**, needs corrective action.

The final in-treatment samples, 12/15, from those same locations ranged from <5 cfu/m<sup>3</sup> to 40 cfu/m<sup>3</sup> and is now considered **clean and acceptable**.

### Target Air Quality

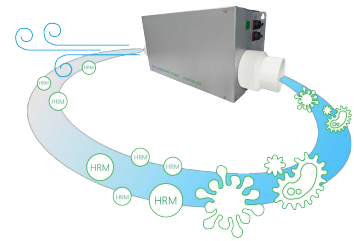
Air quality scale for workplaces, public buildings, schools, and homes are as follows:

- < 100 cfu/m<sup>3</sup> is considered clean and acceptable.
- 100 to 300 cfu/m<sup>3</sup> is marginal.
- > 300 cfu/m<sup>3</sup> is not acceptable and needs corrective action.



# Food Retail

## Air Disinfection Biosecurity



### Swab Samples

(L -) Listeria negative, (S -) Salmonella negative

Sample Area	Swab Location	11/14 Avg cfu/m <sup>2</sup> pre-treatment	12/1 Avg cfu/m <sup>2</sup> in-treatment	12/5 Avg cfu/m <sup>2</sup> in-treatment	12/15 Avg cfu/m <sup>2</sup> in-treatment
Produce Cooler	Back Wall	320	195	75	55
	Floor	S -	S -	S -	40
Dept. 17 Cooler	Under Rack	S -	S -	S -	20
	Package	S -	S -	S -	25
	Drip Pan	L -	L -	L -	34
	Cart	1,203	320	198	43
Deli Cooler	Cart Wheel	667	120	105	29
	Drip Pan	L -	L -	L -	15
	Fan Coil	L -	L -	L -	10
	Floor	S -	S -	S -	67
	Wall	425	175	286	120
Meat Cooler	Drip Pan	L -	L -	L -	25
	Floor	S -	S -	S -	36
	Wall	686	218	189	43
	Coil	L -	L -	L -	56
Food Court	Cutting Board	S -	S -	S -	65
	Floor-sink	890	376	289	75
	Drain	L -	L -	L -	55
Food Court Cooler	Coil	L -	L -	L -	45
	Prep Area	690	265	189	39
	Green Rack	S -	S -	S -	78
Flower Cooler	Drain	S -	S -	S -	86
	Wall	780	305	220	80
Deli Case 30'	Rack	S -	S -	S -	79
	Drip Pan	L -	L -	L -	76
	Coil	L -	L -	L -	61
	General	660	238	100	48
	Package	380	143	111	56
	Pizza Box	695	302	165	41
	Package	380	176	87	32
	Drip Pan	L -	L -	L -	30
	Coil	L -	L -	L -	45
Deli Case 20'	General	515	298	102	42
	Drip Pan	L -	L -	L -	56
	Grate	S -	S -	S -	69
	Package	548	389	222	75

The initial bioburden determined by contact swabs taken 11/14 from the various areas ranged from **320 to 1,203 cfu/cm<sup>2</sup>**.

Each set of swabs showed an overall decrease in bioburden over time for the areas examined, with the final set of swabs, taken 12/15, ranging from **10 to 120 cfu/cm<sup>2</sup>**.

