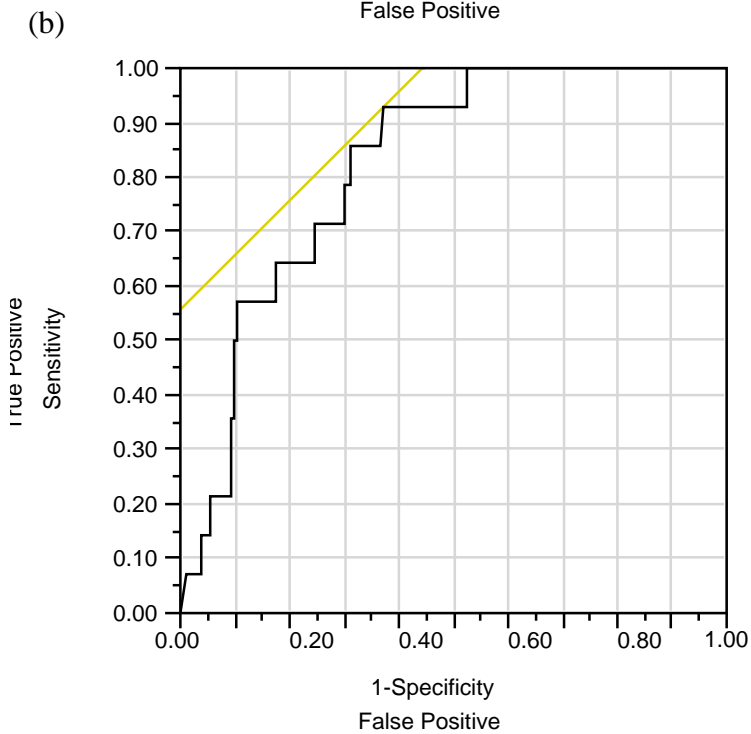
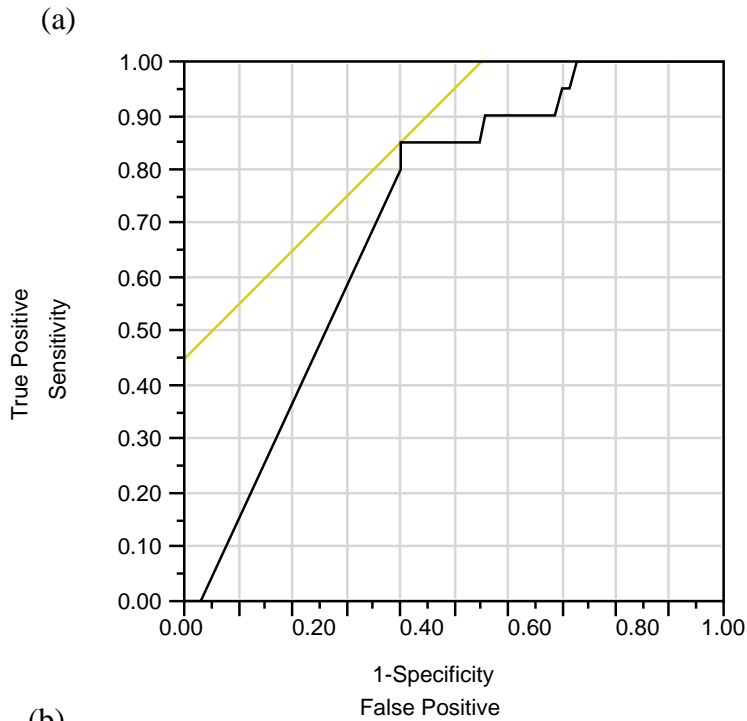


Supplemental Figure 1. Receiver Operating Characteristics (ROC) curve for logistic regression modeling probability of detecting (a) *L. monocytogenes* from APC bacterial load ($\text{Log}_{10}(\text{cfu/sponge})$); area under the curve (concordance index) = 0.7; and (b) ATP level to predict probability of *L. monocytogenes* detection; concordance index=0.82.



Supplemental Table 1. Phase I pre-operational ATP Sampling Instructions.

Site	Procedure
3-basin deli sink exterior	Swab 10 x 10 cm (4 x 4 in) on the front of the deli sink in the center of the last basin (sanitation sink) and include under the lip of the sink
3-basin deli sink interior	Swab 10 x 10 cm (4 x 4 in) around and including the drain cover
Cart wheel	Sample the entire tread of a single wheel of a cart used in the deli area. Approximate area <20 cm ² (8 in ²).
Cleaning drain	Swab 10 x 10 cm (4 x 4 in) of the drain cover in the utility sink or mop sink nearest to deli area.
Cutting board/counter top	Sample a 10 x 10 cm (4 x 4 in) surface of a heavily used counter/table top.
Deli area floor adjacent to the drain	Swab 10 x 10 cm (4 x 4 in) immediately adjacent to the drain cover; but do not worry about sampling around the drain as drains may vary in shape and size.
Deli case	Swab 10 x 10 cm (4 x 4 in) in lower front corner near glass and product interface in the deli case dedicated to RTE products
Deli case handle	Swab the entire deli case handle (total surface that can be accessed with ATP Surface Sample) included front and back of handle. Approximate area 130 cm ² (20 in ²)
Deli case near raw meat	If a store has either shared deli case or deli case immediately adjacent to raw meat area, swab 10 x 10 cm (4 x 4 in) in lower front corner near glass and product interface in the deli case
Deli case trays	Swab 10 x 10 cm (4 x 4 in) in corner of a deli case tray
Deli production sink exterior (single basin)	Swab 10 x 10 cm (4 x 4 in) on the front of the deli sink in the center of the sink and include under the lip of the sink
Deli production sink interior (single basin)	Swab 10 x 10 cm (4 x 4 in) around and including the drain cover
Door handle, deli cold storage room	Swab the entire cold room handle (total surface that can be accessed with ATP Surface Sample)
Drain, deli area	Swab 10 x 10 cm (4 x 4 in) of the drain cover
Drain, deli cold storage room	Swab 10 x 10 cm (4 x 4 in) of the drain cover
Drying Rack	Swab a composite of various drying rack surfaces; 10 x 10 cm (4 x 4 in) total. Include surface area next to a 90° angle (the goal being to sample a corner that may or may not be cleaned as efficiently)
Floor, deli area	Swab 10 x 10 cm (4 x 4 in) of the floor in a high traffic area.
Floor, deli cold storage room	Swab 10 x 10 cm (4 x 4 in) immediately inside and center of cold room door.
Floor/wall juncture under 3-basin deli sink	Sample 100 cm (40 in) length of the floor/wall juncture under the middle basin of the 3-basin deli sink.
Floor/wall juncture under production sink	Sample 100 cm (40 in) length of the floor/wall juncture under the single basin deli sink
Hoses (used for cleaning floors)	Swab an estimated 10 x 10 cm (4 x 4 in) area of hose immediately adjacent to the nozzle
Knife juncture	Swab both sides of a clean knife at the 90° angle where the blade joins the handle; knife may be taken from a magnet bar, block, or rack. Approximate area 10cm ² (4 in ²)
Knife rack/scabbard	Swab either (i) two knife slots if sampling a block or (ii) 10 x 10 cm (4 x 4 in) inside a scabbard
Pans	Swab 5 x 10 cm (2 x 4 in) on food contact surface (top of pan) and 5 x 10 cm (2 x 4 in) on lip and back of pan immediately opposite food contact surface.

Racks, deli cold storage room	Swab an estimated 10 x 10 cm (4 x 4 in) of cold storage rack product surface including at 90° angle (the goal being the sample a corner that may or may not be cleaned as efficiently)
Re-wrap table	Swab 10 x 10 cm (4 x4 in) surface in the middle of the re-wrap table.
Scale key pad	Swab 10 x 10 cm (4 x 4 in) surface of the key pads.
Scale top	Swab 10 x 10 cm (4 x 4 in) surface in the middle of the scale top.
Service case utensil	Sample front and back of a spoon used daily to serve foods displayed in the deli case.
Slicer blade	Swab 10 x 10 cm (4 x 4 in) surface on slicer blade close to blade edge.
Slicer case below the blade	With the blade removed, sample a 10 x 10 cm (4 x 4 in) area on the slicer case which is not easily cleaned.
Slicer handle/knob	Swab entire upper handle on slicer food carriage. Approximately 65 cm ² (10 in ²).
Squeegee or other floor cleaning equipment	Swab an estimated 10 x 10 cm (4 x 4 in) of the surface of a floor squeegee or other cleaning equipment
Standing water on floor	Sample standing water using the Water Sampler. If multiple pools of water exist, select the pool closest to the deli slicer
Trash cans in the deli area	Swab 5 x 10 cm (2 x 4 in) on the outside of the trashcan and 5 x 10 cm (2 x 4 in) on the inside of the trash can immediately adjacent to the area sampled on the outside.
Wall, deli cold storage room	Swab 10 x 10 cm (4 x 4 in) approximately 1 meter from the floor on the wall immediately inside the cold storage room door

Supplemental Table 2. Phase pre-operational and Phase II during operation sampling sites.

Phase I		
Site	Surface Type^A	Procedure^B
Pans	FCS	Sample composite of pan surfaces, handles, under lip, interior, and exterior.
Slicer casing	NFCS	Sample casing area below the blade.
Floor-wall juncture under 3-basin sink	NFCS	Sample the length of the floor/wall juncture underneath the 3-basin deli sink. Approximately 5 cm x 90 cm (2 in x 36 in); total area 450 cm ² (72 in ²).
Floor adjacent to drain	NFCS	Deli area floor immediately surrounding a floor drain in a high traffic area.
Trash can	NFCS	Collect a composite sample of the inside and outside of a trash container, particularly hard to clean areas around the handle. Do NOT sample the trash can liner.
Cart Composite	NFCS	Sample composite of a cart handles, shelf supports and junctures/welds.
Cold storage room rack and wall	NFCS	Sample composite of cold storage room racks and walls.
Phase II		
Slicer blade	FCS	Sponge will be used to collect sample approx. 5 cm (2 in) wide around circumference of the front and back of slicer blade. Where available, blade cover should be removed and sample collected from interior surface near center bearing. If more than one slicer is available give preference to: 1) a slicer currently in use for RTE deli meats; 2) slicer used on any RTE product; 3) slicer not in use, but regularly used for RTE products.
Slicer handle/knob	TP	Composite sample of handles/knobs used by operators on same equipment sampled for slicer blade. Approximate area 130cm ² (20in ²).
Deli case	FCS	Composite sample 25cm x 25cm (10in x 10in), collected from various areas in the deli case (e.g., areas close to sliced meats, door tracks, cooling vents).
Deli case near raw meat	FCS	If a deli case is shared or immediately adjacent to raw meat area, collect a composite sample 25cm x 25cm (10in x 10in) from various areas in the deli case (e.g., areas close to sliced meats, door tracks, cooling vents).
Deli case trays	FCS	Removable trays within the deli case; a composite sample 25cm x 25cm (10in x 10in) of top, bottom, side edges of a single tray. If no trays/tubs are in use, sample risers or areas in direct contact with meat chubs.
Deli case handle	TP	Handle on deli case used to open deli case for removal of products. Approximately 5cm x 50cm (2in x 20in); 250cm ² (40in ²) total.
3-basin deli sink interior	FCS	3-basin deli sink is defined as the sink in the deli area where dishes are washed and sanitized, etc.; Collect a composite sample from various areas (e.g. basin surface, corners, drain screen surface) in the interior of one basin.
3-basin deli sink exterior	NFCS	Exterior face of sink including under sink lip/edge.
Floor/wall juncture under 3-basin deli sink	NFCS	Sample the length of the floor/wall juncture underneath the 3-basin deli sink. Approximately 5cm x 90cm (2in x 36in); total area 450cm ² (72in ²).

Deli production sink interior (single basin)	FCS	Deli sink is defined as the sink in the deli area where products may be removed from packaging etc.; Collect a composite sample from various areas (basin surface, corners, drain screen surface) in the interior of one basin.
Deli production sink exterior (single basin)	NFCS	Exterior face of sink including under sink lip/edge.
Floor/wall juncture under production sink	NFCS	Sample the length of the floor/wall juncture underneath the single-basin production sink. Approximately 5cm x 90cm (2in x 36in); total area 450cm ² (72in ²).
Drain, deli area	NFCS	Sample cover on drain closest to deli area (sample drain surface, not in the drain). Total area <645cm ² (100in ²).
Deli area floor adjacent to the drain	NFCS	Deli area floor immediately around the floor drain previously sampled.
Floor, deli area	NFCS	Floor in deli area in a high traffic area. Approximately 25cm x 25cm (10in x 10in).
Floor, deli cold storage room	NFCS	Floor of deli cold storage room (if available) approximately 25cm x 25cm (10in x 10in).
Wall, deli cold storage room	NFCS	Wall of deli cold storage room (if available) near RTE meats; approximately 25cm x 25cm (10in x 10in).
Drain, deli cold storage room	NFCS	Sample cover on drain (if available) in deli cold storage room (sample drain surface, not in the drain). Total area <645cm ² (100in ²).
Racks, deli cold storage room	FCS	Composite sample of rack surface (top and bottom) from RTE meat shelf closest to floor. Approximately 25cm x 25cm (10in x 10in).
Standing water on floor	NFCS	Standing water in the deli area, preparation area, or cold storage room. If multiple areas of standing water exist (e.g. in deli area, cold storage, and produce prep room) sample all and denote different sample with lowercase letters (e.g. deli area standing water 20(a), cold storage area standing water 20(b))
Squeegee or other floor cleaning equipment	NFCS	Sample squeegee or other floor cleaning equipment used in deli area; focus on areas in direct contact with the floor, approximately 10cm x 64cm (4inx 25in).
Cart wheel	NFCS	Sample circumference of single cart wheel edge which contacts floor from cart. Approximately 2.5cm x 25cm (1in x 10in).
Hoses (used for cleaning floors)	NFCS	Sample circumference of hose for 25cm (10in) length closest to nozzle; additionally sample worn areas if present. Total area 194cm ² (30in ²).
Trash cans in the deli area	NFCS	Collect a composite sample of the inside and outside of a trash container, particularly hard to clean areas around the handle. Do NOT sample the trash can liner.
Scale composite	TP	Collect a composite sample of the scale top surface and the keypads.
Cutting board	FCS	Sample 25cm x 25cm (10in x 10in) of cutting board surface currently in use.
Re-wrap counter/table	FCS	Sample cool shelf portion, 25cm x 25cm (10in x 10in) of heated rewrap table.
Counter	FCS	Sample 25cm x 25cm (10in x 10in) of high traffic deli counter/table surface.

^AFCS = food contact surface; NFCS = non-food contact surface;

^BEach sample area approx 645 cm² (100 in²) except as noted.