Plant Interventions: The Challenge of Determining Best Practices for Microbiological Process Control

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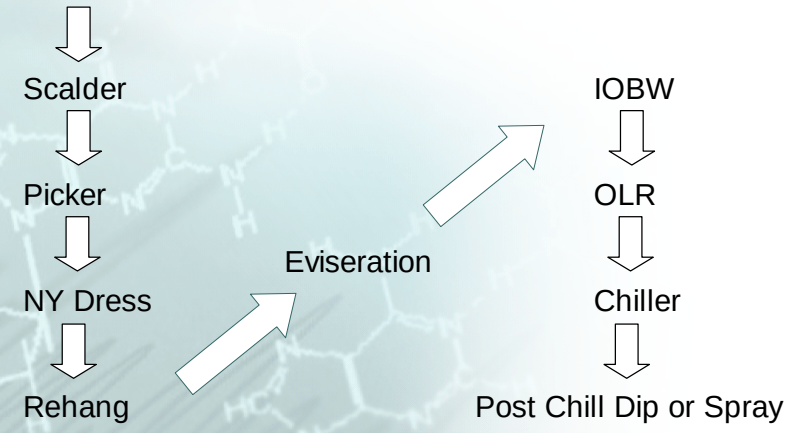
Bird Flow



Those Areas designed (and with well established process control) for Salmonella reduction

OLR

Post Chill Dip or Spray

Why is that?

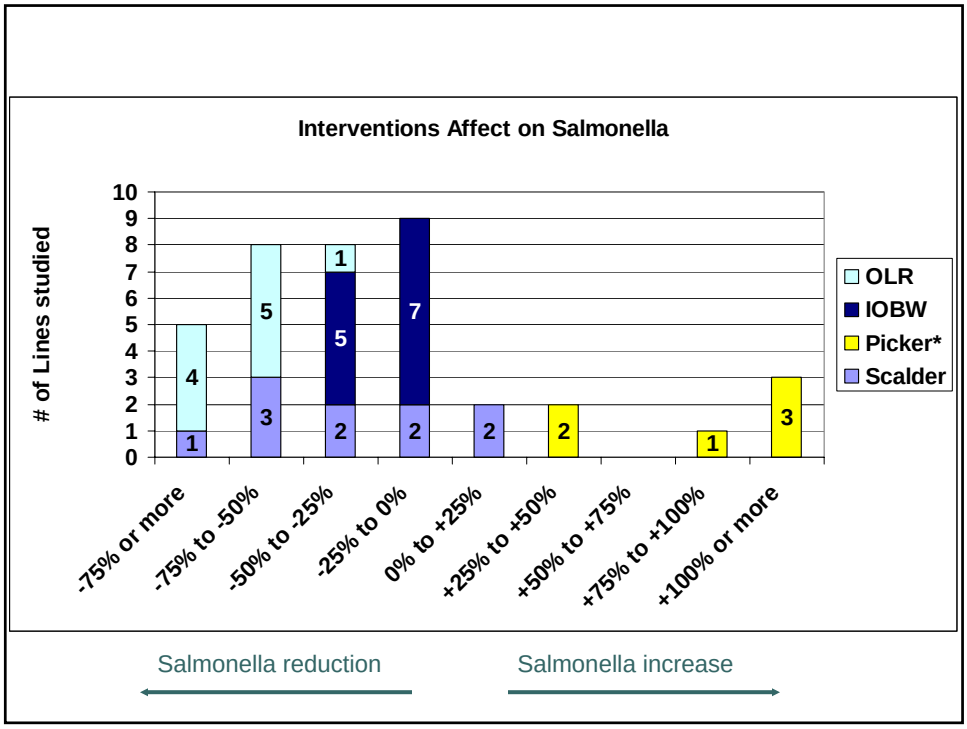
- It is microbiology,
- data has a lot of variation
- Every plant is different
- Process controls in place are aimed at temperature, fecal/ingesta, etc

What Needs to be Done!

- ID the potential variables
- Develop a dependable way to measure them
- Are they all important, which are most important?
- Implement it

How variable is it?

- 10 Scalders
- 6 Pickers
- 12 IOBWs
- 10 OLRs
- 60 birds a line, before and after, spread over 5 days



For instance: if you think IOBW is an opportunity for reduction

- Current Process Control
  - Zero Fecal success
  - Maybe Chlorine
- Process Control for Salmonella?
  - Chlorine level – what level, checked how, checked how often
  - How much water?
  - What pressure?
  - What spray pattern?
  - Capture rate?
  - Coverage?

If you had the best of ……

Plant	Area	Reduction…	Results in..
Plant 1	Scalder	down 82%	18%
Plant 2	Picker	up 30%	23%
Plant 3	NY Dress	down 33%	15%
Plant 3	IOBW	down 37%	9%
Plant 4	OLR	down 82%	2%
Plant 2	Chiller	down 78%	.4%
Plant 5	Post chill	down 94%	0%

"Best of" Action Plan….

- Define the "Best"
- Move it around
- Put process control in place to assure it stays in control
- Check it/Verify it
- Adjust process control through continuous learning