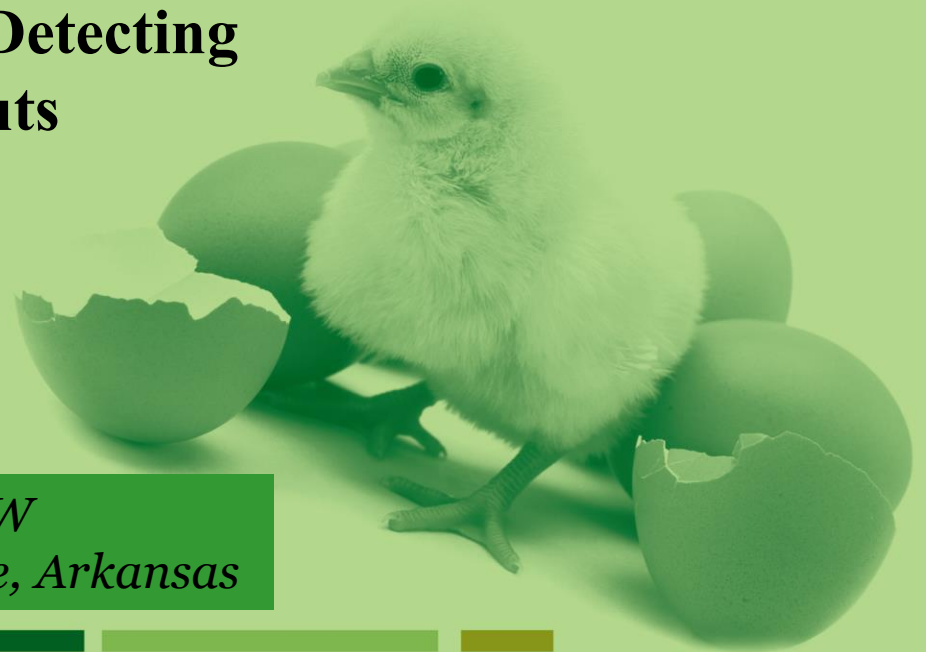


Bottom-line Financial Outcome May Not Be a Sensitive Test for Detecting Effective Management Inputs

*James T. Barton DVM, ACPV, ACAW
Pacific Vet Group, USA, Fayetteville, Arkansas*



POULTRY COMPANIES CONSUME INFORMATION

- *High Quality*
- *Repeatable*
- *Standardized*

WHAT KIND OF INFORMATION?

- *Rate of lay*
- *Fertility*
- *Hatchability*
- *Mortality*
- *Cocci Lesion Scores*
- *Live Weight*
- *Feed/Calorie Conversion*
- *Condemnation*



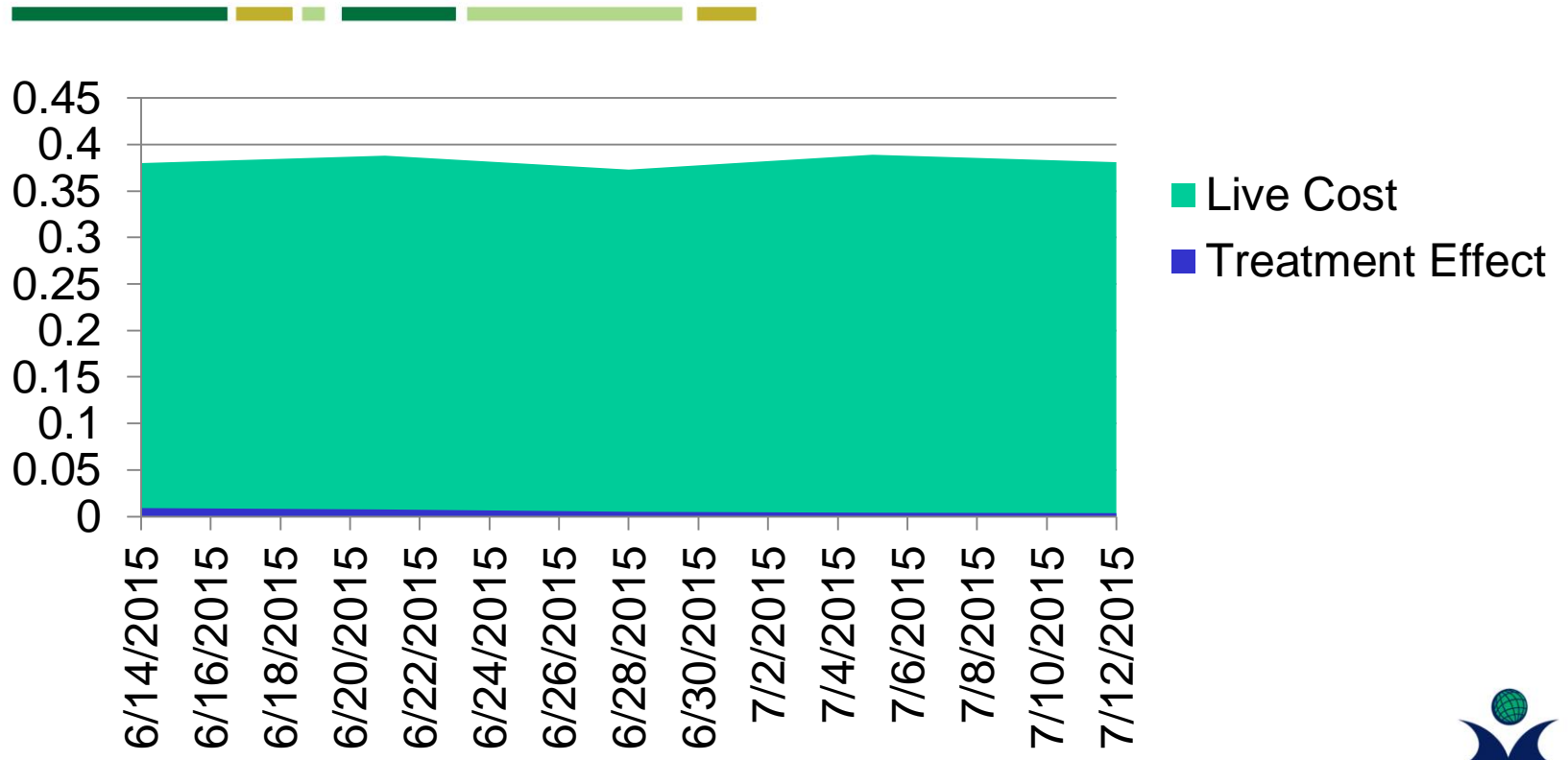
VETERINARY JUDGEMENT?



HOW CAN INFORMATION BE INACCURATE?

- *Rate of lay – Head Count*
- *Fertility – Observation Error, Sample Size*
- *Hatchability – Counting Errors, Culling*
- *Mortality – Counting Errors*
- *Posting Sessions – Observation Error, Sample Size, Bias*
- *Live Weight – Shrink, Trailer Tare, Head Count, Cumulative Error*
- *Feed/Calorie Conversion – Cumulative Error, Wastage, Calorie Estimation*
- *Condemnation – Observation Error, Weighing Error, Bias*

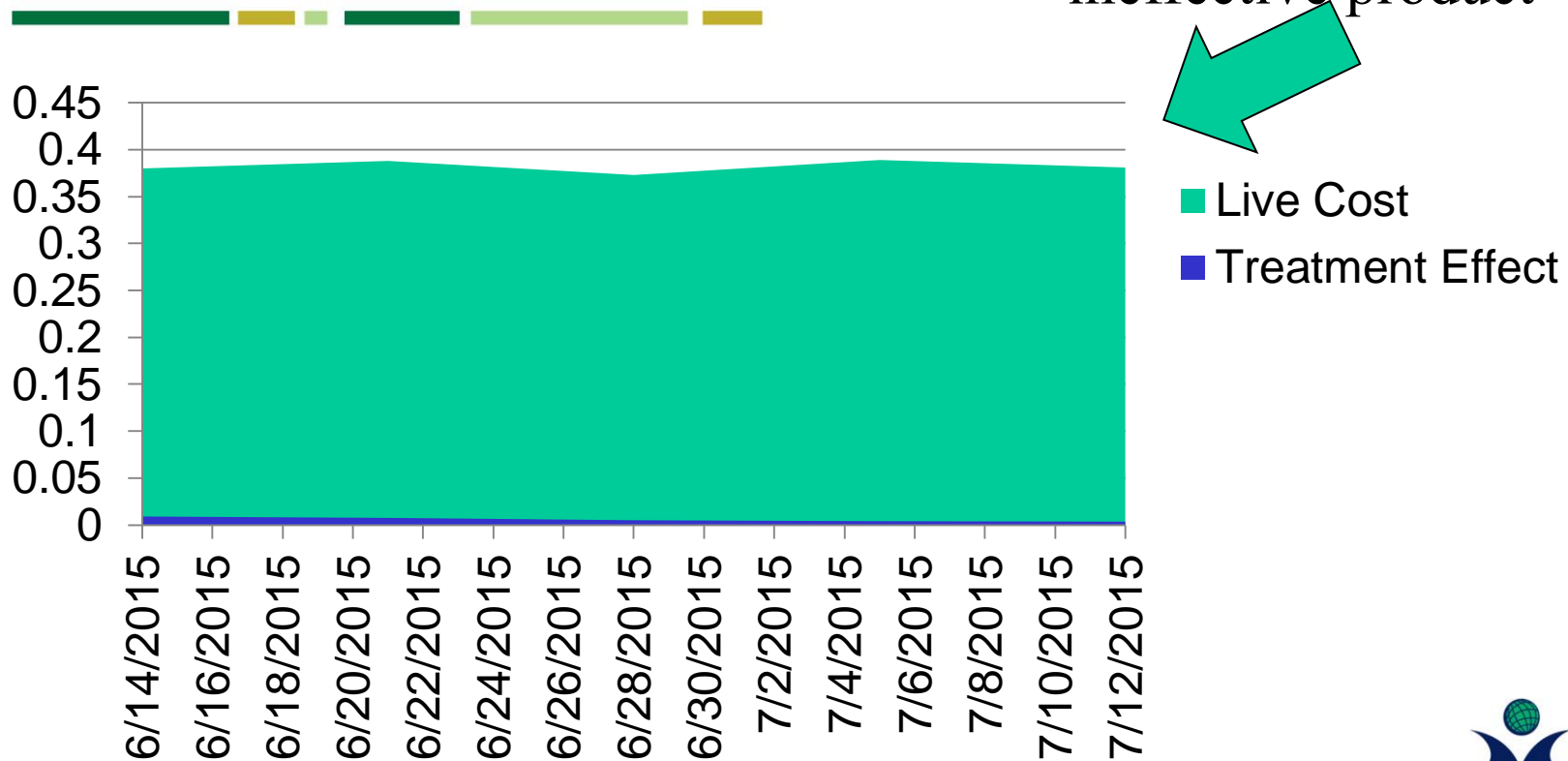
SMALL EFFECTS SHADOWED BY VARIATION



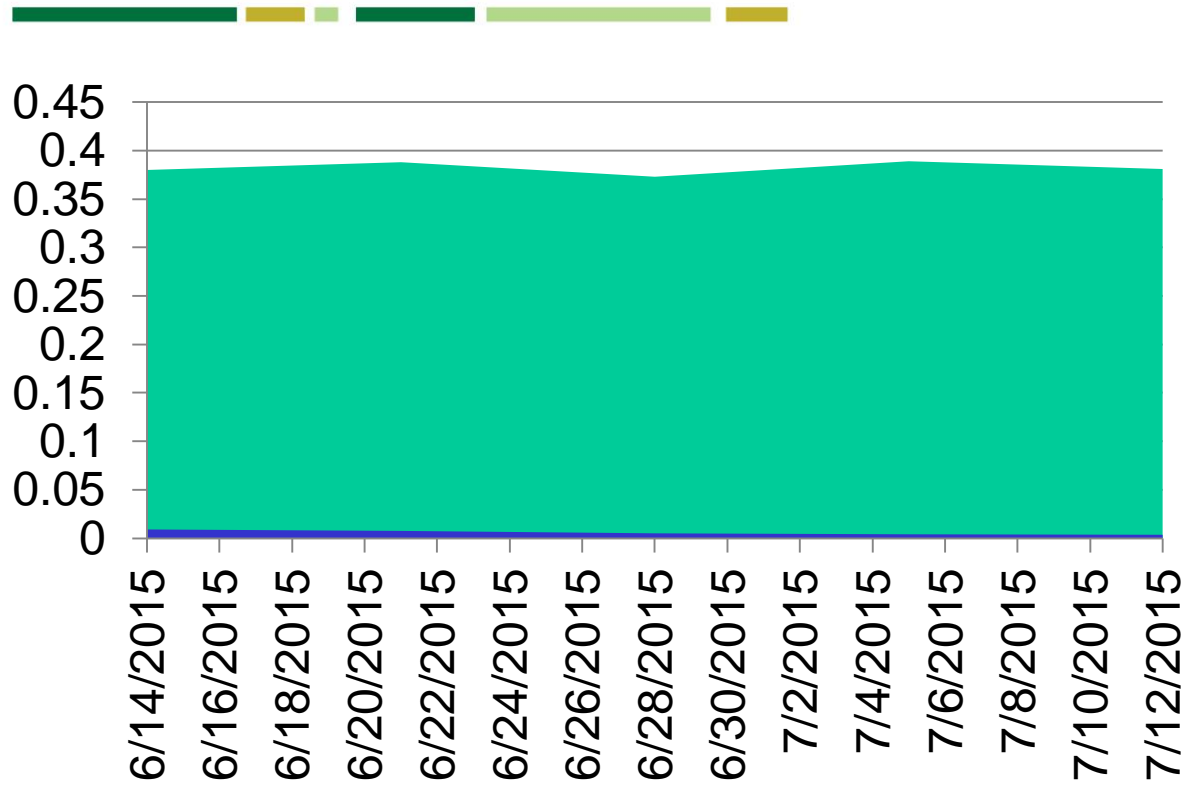
SMALL EFFECTS SHADOWED BY VARIATION



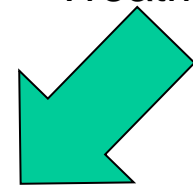
Able to prevent using ineffective product



SMALL EFFECTS SHADOWED BY VARIATION



■ Live Cost
■ Treatment Effect



Not able to identify an effective product

MEASUREMENTS



- It is difficult to make precise measurements when the baseline is moving.

<http://www.metoffice.gov.uk/public/weather/marine/>

FEED CONVERSION



- One point of FCR – “We see that type of variation every week. It’s probably not due to the treatment.”

FEED CONVERSION



-
- Four points of FCR – “That’s an unreasonable improvement. It’s probably not due to the treatment.”

FEED CONVERSION



- “Take credit for the successes. You’ll get blamed for the failures.”
 - Better employee management
 - New focus on litter management
 - Improved grower relations
 - Feed change you recommended
 - LED lights
 - Chlorination program

ICONOCLASTIC FARMING IS INCREASING



- **Antibiotic Free**
- **Free Range**
- **Enriched**
- **Organic**

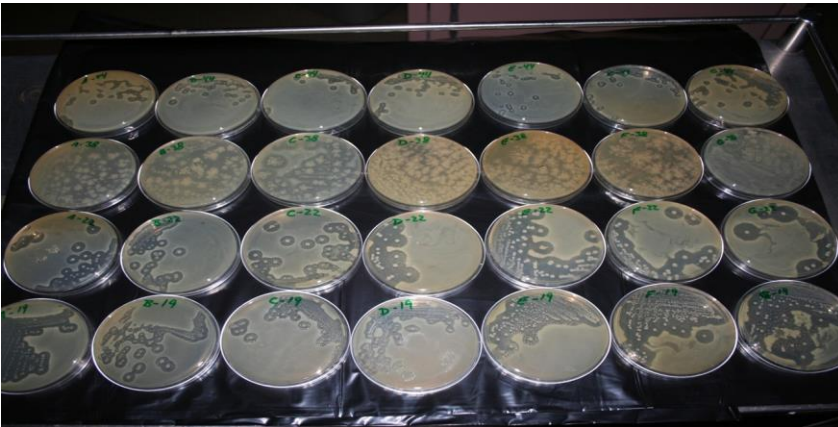
THIS CHANGE CAUSES INSTABILITY

- **Can not compare to other/previous flocks**
 - **Feed more expensive**
 - Non-GMO
 - Organic
 - Veg Fed
 - Locally sourced?
 - **Diseases can't be controlled without antibiotics**
 - Necrotic enteritis
 - Omphalitis
 - Vertically transmitted Mycoplasmosis



HOW CAN THE VETERINARIAN ASSESS?

- **Controlled tests**
- **Validated results**
- **Veterinary Judgement**



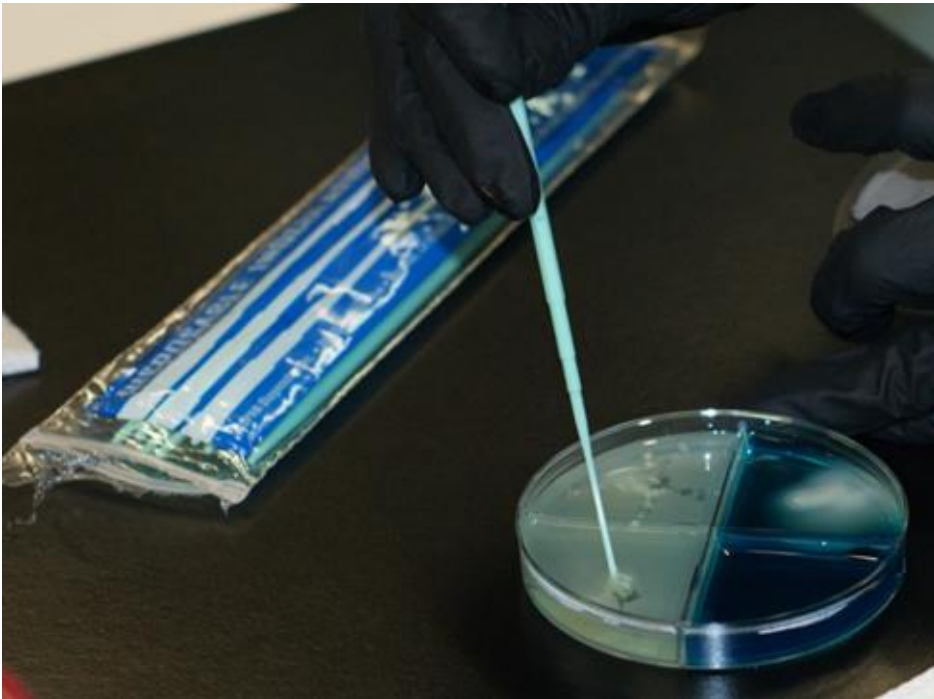
USEFUL & ACCEPTED TESTS



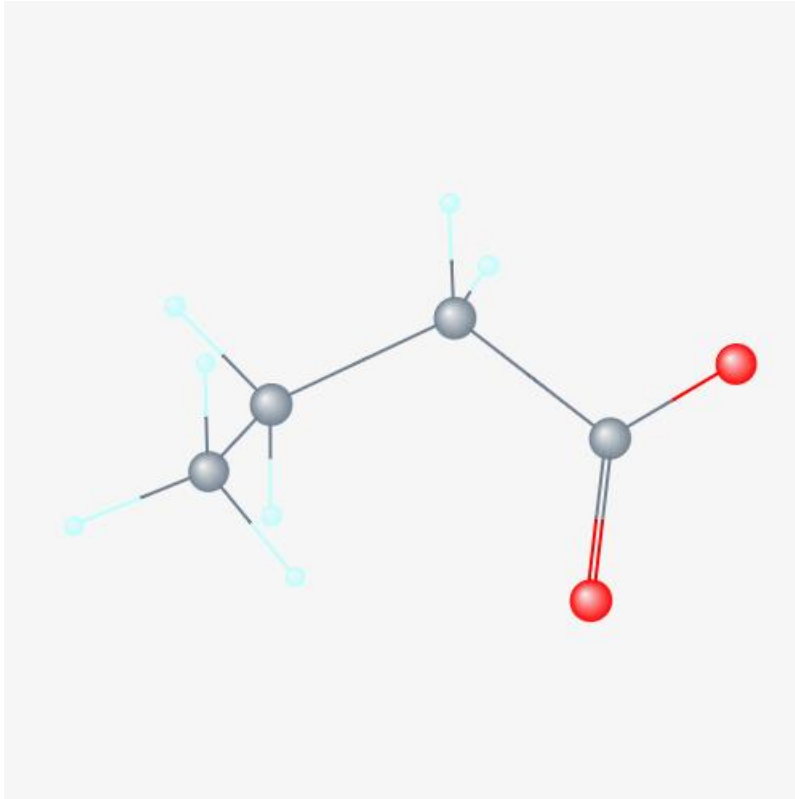
- Antibiotic sensitivity
- Pen trials
- Serology

VETERINARY JUDGEMENT

- **Fecal bacterial analysis**
Salmonella testing



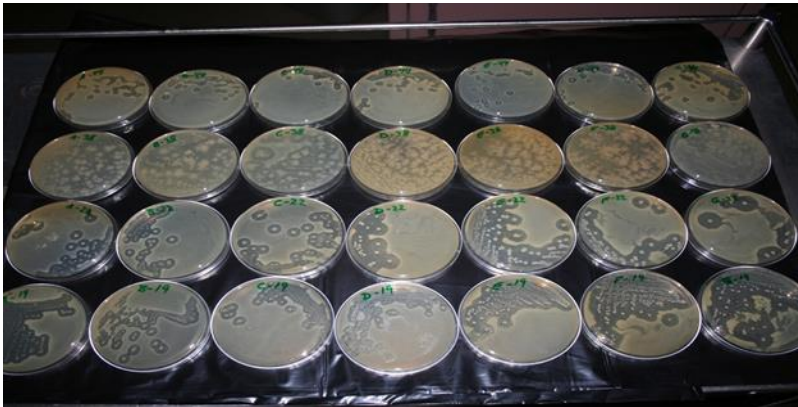
SUSPECT PROCEDURES



- **Artificial Fecal Inoculum**
- **Reporting % Salmonella reduction (instead of log)**
- **Short chain fatty acid analysis**
- **Microflora shift**

SUSPECT PROCEDURES

Microflora Shift \neq Performance Improvement



Don't Rely On In Vitro Testing
Without In Vivo Validation!

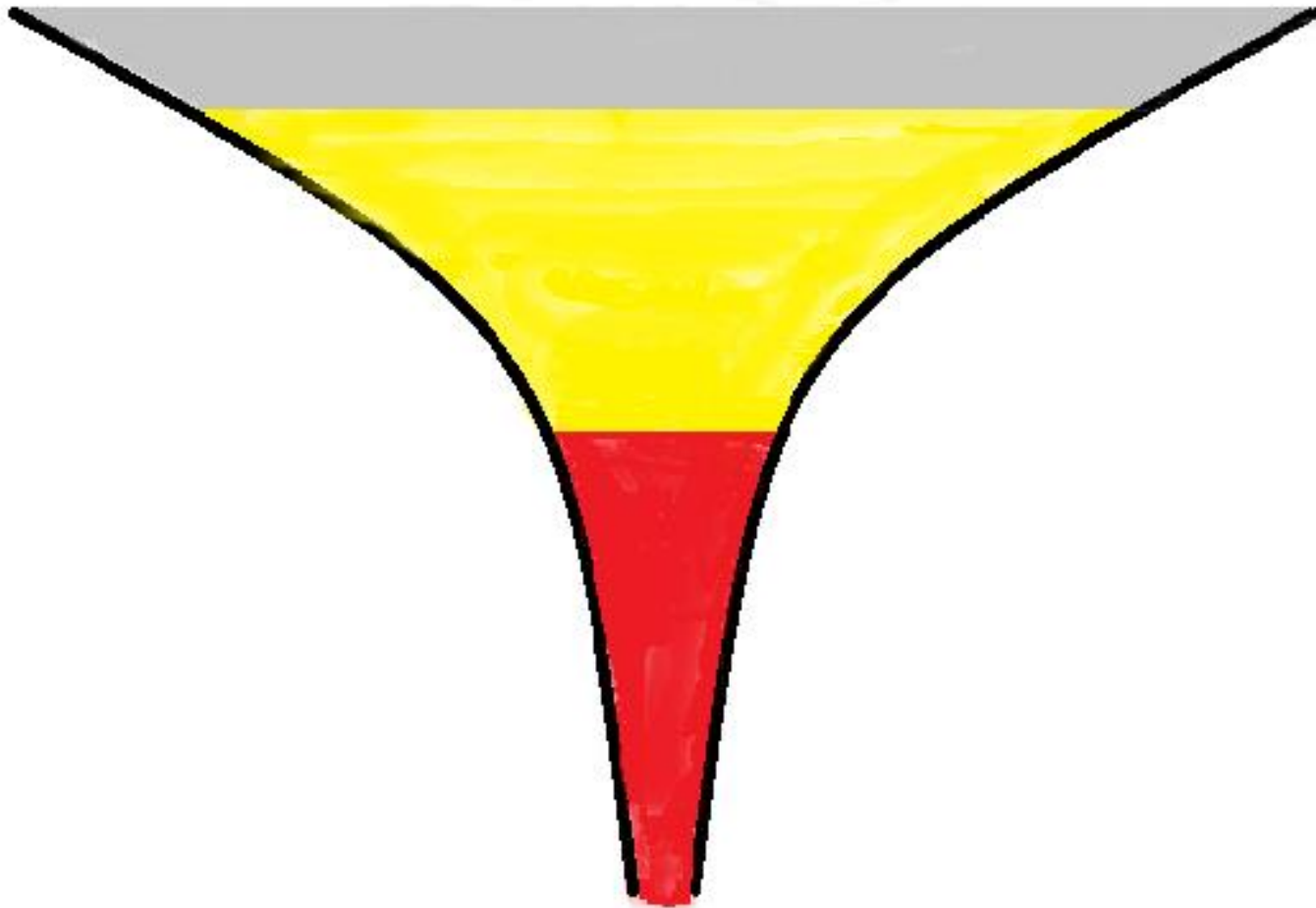
UNCERTAINTY DOCTRINE



- Make a decision when you have 60% certainty
 - Microbiological Evidence
 - Physiologic science
 - Pen trials
 - Professional judgement

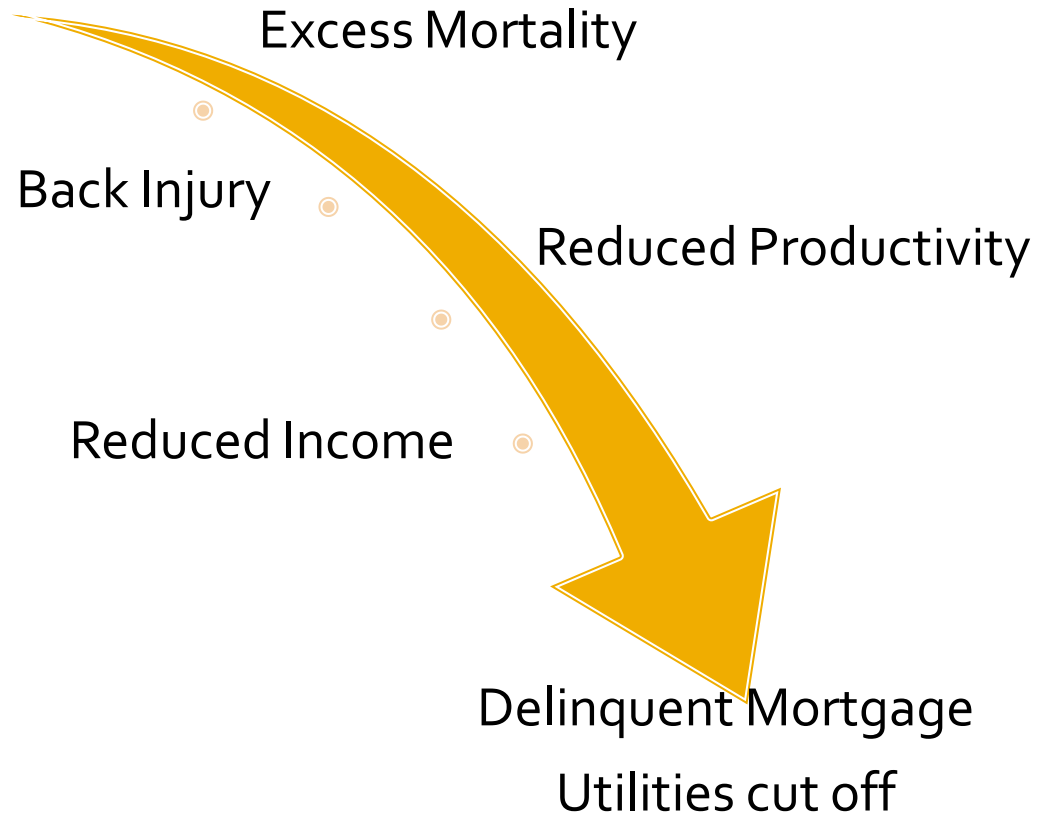


INCIDENT PIT



Farm Bankruptcy Incident Pit

Biosecurity Breach



HIDDEN COSTS



COST OF OBTAINING NEW FARMS

- **Financial Evaluation & Legal**
- **Environmental Assessment / Regulatory**
- **Training & Indoctrination**
- **Feed Delivery & Live Haul Learning Curve**
- **Unanticipated Grower Costs**
- **Neighbor Complaints & Interference**

LOSS OF SOCIAL LICENSE TO FARM

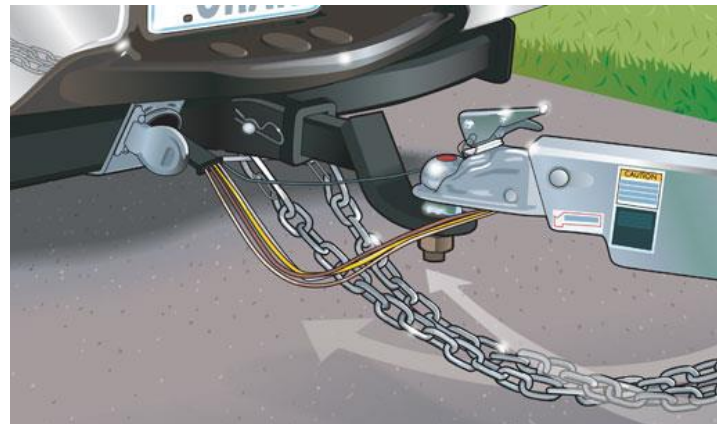


COST OF LOSS OF STATUS

- **Missed orders**
- **Reduced price for product**
- **Time (with lower price) to regain status**
- **Cost to reacquire customer**



- **Least Cost = Bare Minimum**
 - No margin for error
 - Single problem means out of compliance



If you're going through hell, keep going.

Winston Churchill

http://www.brainyquote.com/quotes/authors/w/winston_churchill.html



THANK YOU



Questions?