

FY 2010 Beef Safety Research Priorities

Pre-harvest Research

- Interventions- must be easily adoptable as well as validated through all seasons
- Must take into account animal handling challenges associated with new technologies
- Need better understanding of dairy animals' contribution to pathogens at plant

Validation

- (with additional funding) Need measurement tools, indicator organisms, models to be used throughout industry. Must have economic data to fully evaluate systems and trade-offs of technology applications
- Total system effects- How can we measure integrated system and total lethality from gate to plate

Processing Tools-

- Need to ensure technologies in place are updated and optimized
- Must take into account water usage
- Final carcass rinse improvements- Can we tweak that system via temperature or "flooding" vs. sprays? Is there an opportunity for tandem treatments of heat and then a chemical applied as a cold treatment? What is the true impact of denaturation on the business?

Sampling and Testing

- Sample preparation before testing is an area of needed focus.
- Need to continually improve detection methodologies- rapid, cost-effective

Foundational Science

- Virulence research needed to fully understand human health impact of different serotypes and use that information to educate appropriate audiences
- Must address Salmonella top 30 and focus on those serotypes by USDA
- Need data on concentration of O157 and Salmonella in positive lots

Emerging Threats

- C. difficile, MAP and others need to be monitored

