



## **UPDATE: LOGISTICAL CONSIDERATIONS FOR TESTING BULK TANK MILK SAMPLES (BTMS) DURING AN ANIMAL HEALTH OR FOOD SAFETY EMERGENCY IN CALIFORNIA**

**2011 USAHA Conference  
Committee on Animal Emergency Management  
Buffalo, NY; October 1, 2011**



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# BTMS TESTING DURING AN EMERGENCY – KEY ELEMENTS FOR SUCCESS

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- **Rapidly** and **efficiently obtain** a bulk tank milk sample (**BTMS**) from **each farm** in the area of concern during a response to an animal health or food safety threat,
- **identify the sample,**
- **securely transport** the sample to the lab,
- **link sample ID in both lab & response databases,**
- **test** and **report out** results in a **timely manner.**



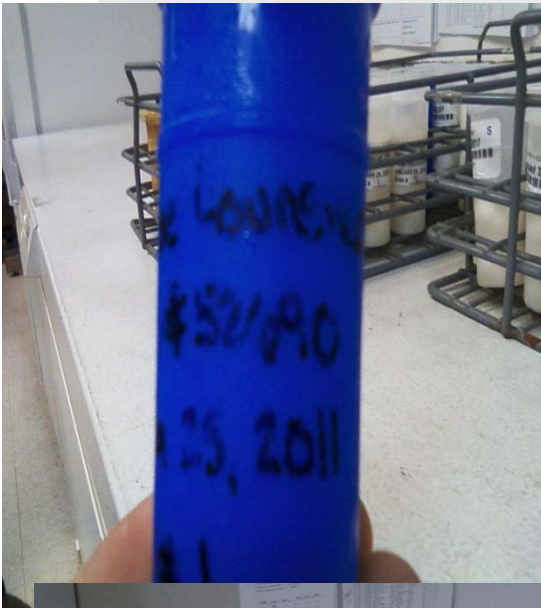
# Logistical Elements of BTMS Collection -- Authority; What, Where, Whom, and How

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- **Regulatory Authority – CA FAC #32731**
- **What:** collection of Bulk Tank Milk Samples
- **Where:** 3 options for obtaining samples
  - 1. On-farm bulk tanks – 3-6 samples routinely collected per pick-up
  - 2. At the milk processing facility if requested by CDFA.
  - 3. From commercial milk quality/ chemistry labs
- **By Whom:**
  - 1. State and County Milk Inspectors, and
  - 2. 2700 California Licensed Milk Samplers and Weighers
    - Work as milk truck drivers, processing plant samplers
- **How:** Defined sampling protocols; chain of custody



# Challenge: Multiple Label Systems and Farm Premise ID Codes



Pre-printed; barcode; hand-written?

Diagnostic Lab requirements:

1. sample ID, premise, date
2. rapid = scan-able => bar code IDs

CDFA Emerging Threats Program:

ET software can interface w/ field and lab  
Information: Farm Premise, Sample ID, Date  
Mobile handheld + GPS for sampling  
=> Barcode reader + Label printers





# CDFA Emerging Threats (ET) System Sample Barcoding System (SBS)

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**2011: Milk and Dairy Food Safety (MDFS) Sampling Project funded as part of Emerging Threats system**

=> CDFA inspectors will input premise ID # and date.

- Hand-held mobile unit w/ GPS, camera, printer
- Windows-7 compatible, synchronized with ET database
- Inspector can scan in pre-printed barcode ID#s; or
  - Print bar-code ID# labels for samples in the field.
- CDFA emails list of sample ID#s to CAHFS laboratory.
  - Rapid accession of samples at CAHFS
  - Lab will scan in barcodes and verify sample ID#s
- Lab will email results to CDFA for near real-time reporting



# BULK TANK SAMPLING AND TESTING DURING AN ANIMAL HEALTH OR FOOD SAFETY EMERGENCY

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## To summarize:

1. Utilization of routinely-collected bulk tank milk samples can provide a low-cost, timely, and resource-sparing opportunity during an emergency response.

2. Use of “smart” hardware/ software + barcode sample ID in the field will support rapid and accurate sample accession, processing, and reporting of results by the diagnostic laboratory.