

**SALMONELLAE spp  
& Pathogenic E COLI (eg VTEC O157, STEC)**

## Examples of PREVENTATIVE MEASURES

<p><b>ANIMALS, FEED &amp; HOUSING</b></p>	<ul style="list-style-type: none"> <li>-3 incidences known in industry where bird roosts esp starlings soil feed, bedding &amp; collection areas, have contaminated milk with <i>Salmonellae</i> or pathogenic <i>E coli</i>.</li> <li>-Some cows may harbour (carry) the organism.</li> <li>-Wet soiled bedding</li> <li>-Silage with bird soil contamination.</li> <li>-Muckspreading at least 10 days before grazing.</li> <li>-Controlled grazing outside to prevent milking animal soil.</li> <li>-Increased roughage feed with eg barley to scour guts.</li> <li>-Scraping of yards and housing gullies.</li> <li>-Some bedding eg paper mache has improved udder health on some farms.</li> <li>-clipping of hide near rear end &amp; tails</li> <li>-increase of roughage in diet to render slurry less viscous</li> <li>- udder and teat preparation before milking (various methods)</li> </ul> <p>* Do you have large flocks of migratory geese or birds at certain times of year on grazing land?</p> <p>*There are ‘hotspots’ of <i>E coli O157</i> around the country which increase risk</p>
<p><b>MILKING EQUIP &amp; TANK</b></p>	<ul style="list-style-type: none"> <li>- Reduction of brown emulsion in parlour</li> <li>- Floor splashes into low level outlet pipe.</li> <li>- Contaminated flexi hoses or pipework connections by touching milk surfaces</li> <li>- Clusters on floor: most are now of a retractable design</li> <li>- Inadequate CIP temperatures (&lt;70°C) chemicals, dilutions &amp; contact times</li> <li>- Tank lids open- bird droppings</li> <li>- Vacuum seals &amp; perished rubber joints</li> <li>- Cross-contamination from clusters: peracetic flushes</li> <li>- Clean dry udders &amp; teat dips</li> <li>- Minimal liquid slurry during milking</li> <li>- Standing time after milking</li> <li>- Leaks from cracks in jackets, vats or equipment with cavities.</li> </ul>
<p><b>Bottle filler or Vending machines</b></p> <p><b>ENVIRONMENTAL</b></p>          <p><b>PERSONNEL PRACTICES</b></p>	<ul style="list-style-type: none"> <li>-Faecal residue on floors and other equipment which cross-contaminate onto bottom of buckets &amp; cloths.</li> <li>-Hose ends dragged into tanks or across open tanks.</li> <li>-Sink waste emptying on floor.</li> <li>-Access to area by scavenging birds</li> <li>-collecting eggs from your chickens and then filling bottles or dispensers without washing hands.</li> </ul> <p>Return from abroad with intestinal illness</p> <p>Return to work with symptoms of intestinal illness persisting</p> <p>Human carriers with neglectful handwashing routines.</p> <p>Staff toilet or drain cleaning rota.</p> <p>Multi -purpose , multi -use gloves – cross-contam of hands inside gloves</p> <p>Using dairy equipment to wash cars at weekend.</p> <ul style="list-style-type: none"> <li>-Survival of pathogen as carry over from previous milkings because             <ul style="list-style-type: none"> <li>- cleaning and disinfection of vending machine inadequately done</li> <li>- Poor understanding and application of cleaning chemicals.</li> <li>- Cleaning utensils used for other non- milk contact surfaces or uses</li> </ul> </li> </ul>