



**FIRST PROGRESS REPORT ON STRATEGY FOR THE CONTROL OF  
*MYCOBACTERIUM AVIUM* SUBSPECIES *PARATUBERCULOSIS* (MAP)  
IN COWS' MILK**

**Issue**

1. A first progress report on the implementation of the strategy for the control of MAP in cows' milk.

**Background**

2. A draft strategy for the control of MAP in cows' milk was presented to the Board in December 2001 and then submitted for public consultation. It was amended in the light of the comments received and a revised strategy was presented to Members for information in May 2002 (Paper 02/05/02).
3. In broad terms, the strategy proposes action from farm to dairy, including measures to:
  - reduce or eliminate the carriage and shedding of MAP by dairy cattle
  - reduce contamination of milk with MAP during the milking process
  - make sure that pasteurisation is carried out effectively
  - try to discover more effective ways of treating milk in order to eliminate MAP.

**Progress to date**

4. The strategy includes an action plan, divided into short term (within 1 year), medium term (1-5 years) and longer term (more than 5 years) actions. Progress against each of the points is summarised in the Annex.

**Board Action Required**

5. The paper is for **information** only. **No action** is required.

## STRATEGY FOR THE CONTROL OF *MYCOBACTERIUM AVIUM* SUBSPECIES *PARATUBERCULOSIS* (MAP) IN COWS' MILK

### ACTION PLAN

<ul style="list-style-type: none"> <li>• <b>SHORT TERM:</b> within 12 months from May 2002</li> </ul>	<b>PROGRESS TO DATE</b>
<ul style="list-style-type: none"> <li>• assess and validate current methods for detecting MAP infection in cattle.</li> <li>• produce guidance for farmers on the control of MAP infection, which could be included in farm assurance or herd health schemes.</li> <li>• conduct research into teat cleaning practices and publish advice.</li> <li>• recommend that dairies maintain their current pasteurisation procedures until the outcome of research on the pasteurisation conditions required to eliminate MAP is known.</li> </ul>	<p>An expert Sub-Group of the Surveillance Group on Diseases and Infections of Animals (SGDIA) has been convened to produce a surveillance strategy for Johne's Disease; evaluation of available laboratory tests will be a priority of the strategy.</p> <p>Final adjustments to be made to draft guidance, subject to further discussions with key stakeholders. Publication is planned for the end of June 2003.</p> <p>A two year research project (start date Oct. 2002) has been commissioned at the University of Wolverhampton and Harper Adam Institute. The work will examine current teat cleaning practices. Several methods will then be assessed under farm conditions, taking account of variables such as parlour type and seasonality. Best practice guidelines for farmers will then be produced.</p> <p>This has been incorporated into the strategy and is widely known in the milk industry.</p>

<ul style="list-style-type: none"><li>• conduct research to find effective ways of treating milk to eliminate MAP.</li> <li>• set up a consultative group to bring together those responsible for DEFRA's Johne's disease control strategy, the industry and other major stakeholders.</li></ul>	<p>A Defra LINK project to investigate the pasteurisation conditions and technologies required to eliminate MAP from milk began in January 2000. Using a pilot plant pasteuriser, combinations of different processing parameters, mycobacterial strain and initial bacterial loading in the raw milk have been examined to identify factors that affect MAP survival during heat treatment. The efficient operation of the pilot plant and absence of post-pasteurisation contamination was confirmed by monitoring of microbiological and biochemical indicators. The project was due to end in January 2003 but an extension has been granted for a further year's work to confirm the initial observations and results will be available in January 2004.</p> <p>We plan to consult with a wide range of stakeholders at appropriate points as the strategy develops. Reflecting on the strategy, we think that a formal Consultative Group may not be the best way of approaching this and that ad hoc meetings on specific issues would be more productive and a better use of resources.</p>
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<b>MEDIUM TERM: 1 – 5 years</b>	
<ul style="list-style-type: none"> <li>• conduct a survey of MAP infection in the UK dairy herd.</li> <li>• review current advice on hygiene practices during milking with a view to issuing consolidated guidance</li> <li>• review ways of disseminating advice on hygiene practices during milking so as to optimise future delivery.</li> <li>• produce pasteurisation guidance for dairies (to be aimed particularly at small dairies and on-farm pasteurisers).</li> <li>• implement measures to improve inspection and enforcement (particularly in relation to on-farm pasteurisers).</li> </ul>	<p>Recommendations for a surveillance programme will be part of the SGDIA surveillance strategy referred to above.</p> <p>A draft guidance leaflet for farmers is currently being produced in collaboration with the Dairy Hygiene Inspectorate.</p> <p>No progress to date but will be considered in parallel with the issue of the consolidated guidance mentioned above.</p> <p>The Dairy Industry Association Ltd (DIAL) and the National Farmers Union have each published pasteurisation guidelines during 2002. Such guidance will be considered in this light, taking into account the Foodborne Disease Strategy work on on-farm pasteurisation, when that is available.</p> <p>Review of current arrangements underway.</p>

<b>LONG TERM: 5 years plus</b>	
<ul style="list-style-type: none"> <li>• repeat of 1999/2000 FSA survey of MAP in raw and pasteurised cows' milk.</li> <li>• development of a better vaccine against MAP for use in cattle.</li> </ul>	<p>This will be incorporated into the Agency's microbiological surveillance strategy.</p> <p>No progress to date.</p>