

# National Johne's Disease Prevention and Control Program

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# Outline

- Brief history of JD control programs
- Importance of Management
- Summary of Proposed Program

# Australia JD Program

- In 1996, formalized as the National Market Assurance Program for Cattle
- 3 levels – Monitored Negative (NM) 1 to 3
- Move through levels by testing
  - Non testing herds classified as Non-Assessed Herds (NA)
  - Suspect Herd (SU) - herds that violate the annual audit
  - Infected Herds (IN) - confirmed infected animals
  - Restricted Herds (RD) - Previously IN herds progressing to SU
- Maintain level by maintenance testing every animal (up to 100) every 2 years

# Downfalls

- Numerous confusing categories of herds
- Negative connotation in names

# Dutch JD Program

- 1997, pilot program based on fecal culture of 125 herds tested bi-annually
  - After 5 rounds of pooled fecal testing, only 58 herds remained (46%) (Kalis et al., 2005)
- 1998
  - Extensive program - management assessment
  - Intensive program – management assessment and testing by pooled fecal culture
    - 10 levels of herd classification (unsuspected to “free”)
    - Annual testing of adults - pooled fecal culture (PFC)
    - Maintenance by ELISA
- Drawbacks
  - Too many levels?
  - Frustration with “falling back” too far in program after a positive

# US National Voluntary JD Program

- 2002, USDA – Uniform Program Standards
- 3 main components to the program
  - Part 1 – education of producers
  - Part 2 – assessment of on farm risk and herd management plans
  - Part 3 – Herd testing and classification into 4 levels

- Four levels of testing
- Additions for 2005
  - Use of environmental samples as screening test
    - 4 pools of 5 samples each
- Concerns
  - Loss of funding for testing
  - Drop to positive herd status with one animal testing positive

# Currently....

- All of these countries have realized that they have not made the progress they expected
- Refocusing on
  - Risk management
  - User friendliness
  - Moving towards being less “costly” to the producers

- The progression of other National Programs has indicated that prevention is crucial

# The potential answer..

- Best Management Practices..
  - Avoid the infection of the next generation
    - Assuming the calf is the critical control point
- Attempting to identify the “high shedding COWS”

# Proposed Program

- Primary focus is to decrease the rate of infection through education
  - Increase awareness
  - Provide **knowledge transfer** of the prevention and control to Canadian veterinarians and cattle farmers
  - Aid in developing risk assessments and management protocols that are user friendly and scientifically defensible

- This will be accomplished through the building of farm specific risk management protocols
  - Should lead to decreased incidence of disease within the herd
  - Minimize the use of diagnostic tests, but use it to identify herds in greater need of assistance and monitor progress

# Herd Enrollment to Program

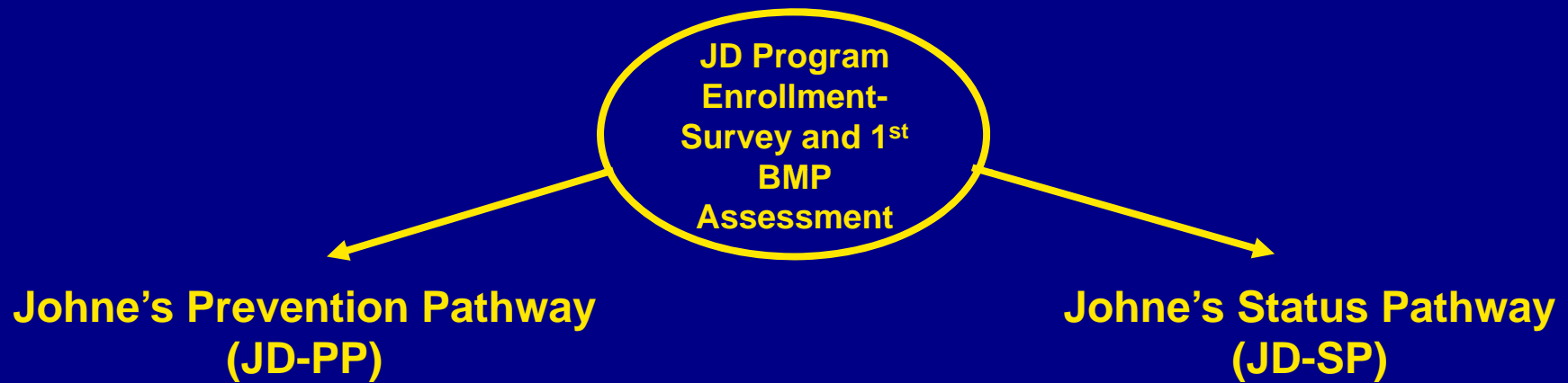
- All herds entering the program
- Pre-assessment survey
  - Aid in streamlining the risk assessment
- Full Best Management Practices (BMP) Assessment
  - Performed by trained veterinary personnel
  - No self assessments
- Based upon this initial BMP, recommendation made on which path to follow

# JD Prevention Pathway

- This is the preferred path
- This pathway has minimal/no testing requirements
- Focus is on prevention
  - For herds known to be infected
  - For herds that are not ready or interested in testing
  - For most Canadian herds

- It should be encouraged that most herds should enter this pathway
- Herds would be “credited” with the designation of – “X” many years on the Preventative Pathway
  - Measuring tool for the potential risk of herds within the program
- Moving to a testing program will undoubtedly identify positive cows
  - May lead to drop outs
  - Difficult and financially burdensome

# Voluntary Johne's Disease Prevention and Control Program

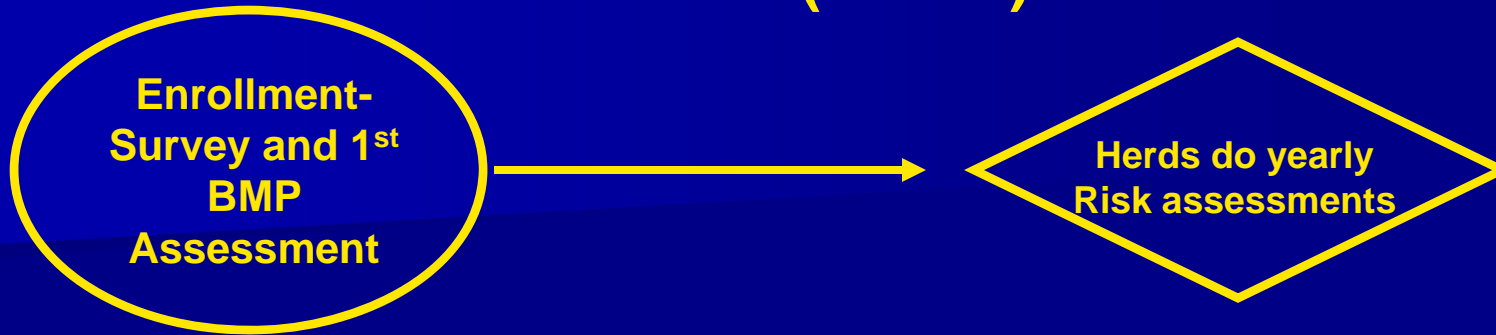


# **Johne's Prevention Pathway (JD-PP)**

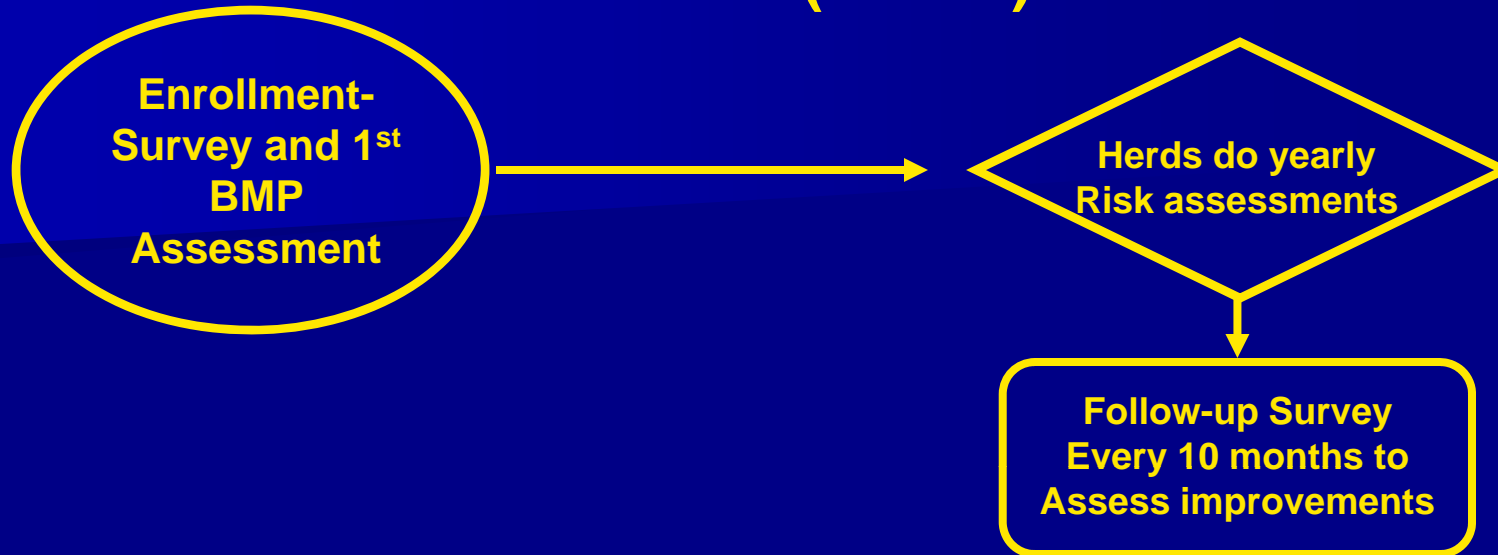


**Enrollment-  
Survey and 1<sup>st</sup>  
BMP  
Assessment**

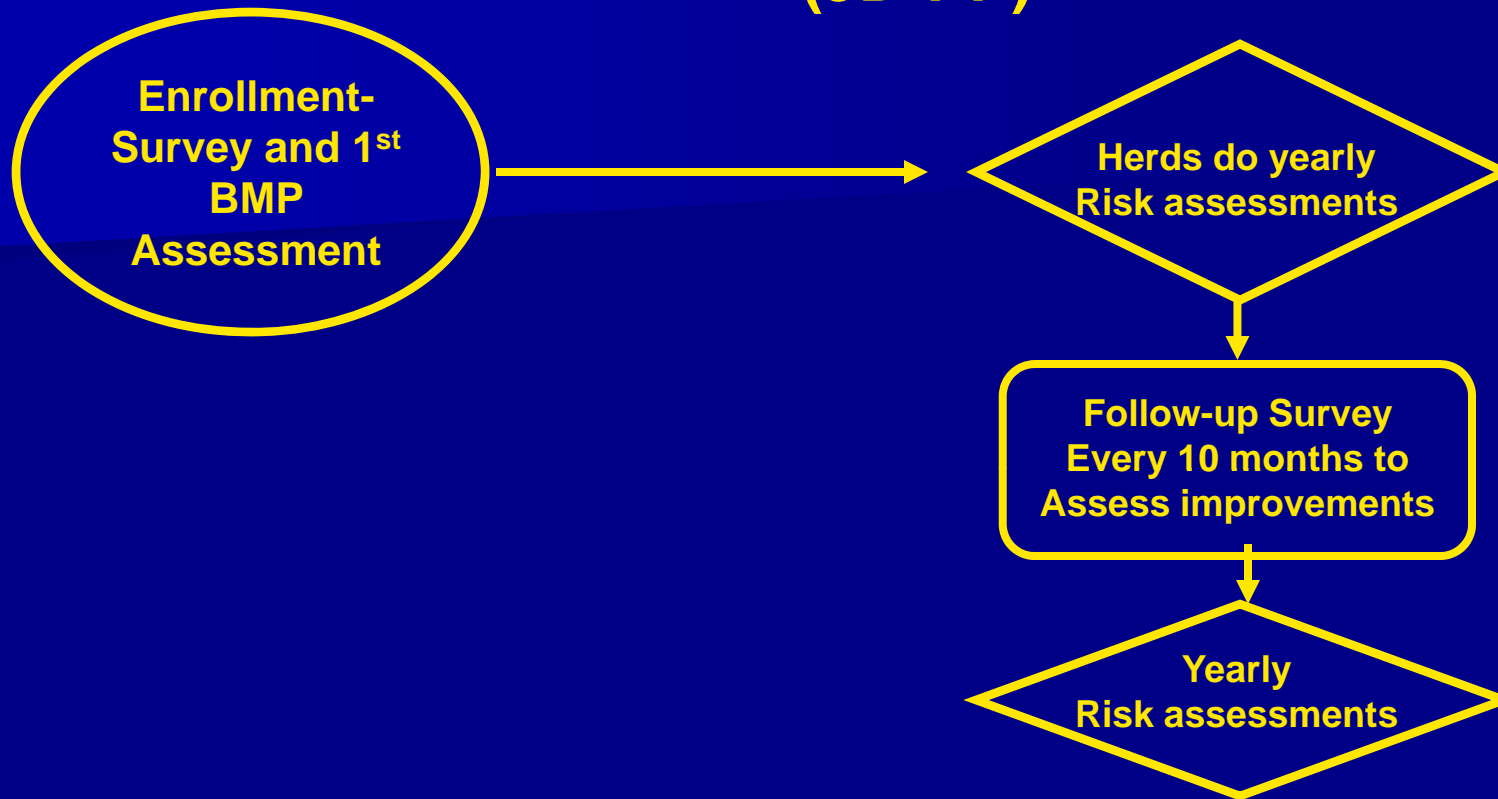
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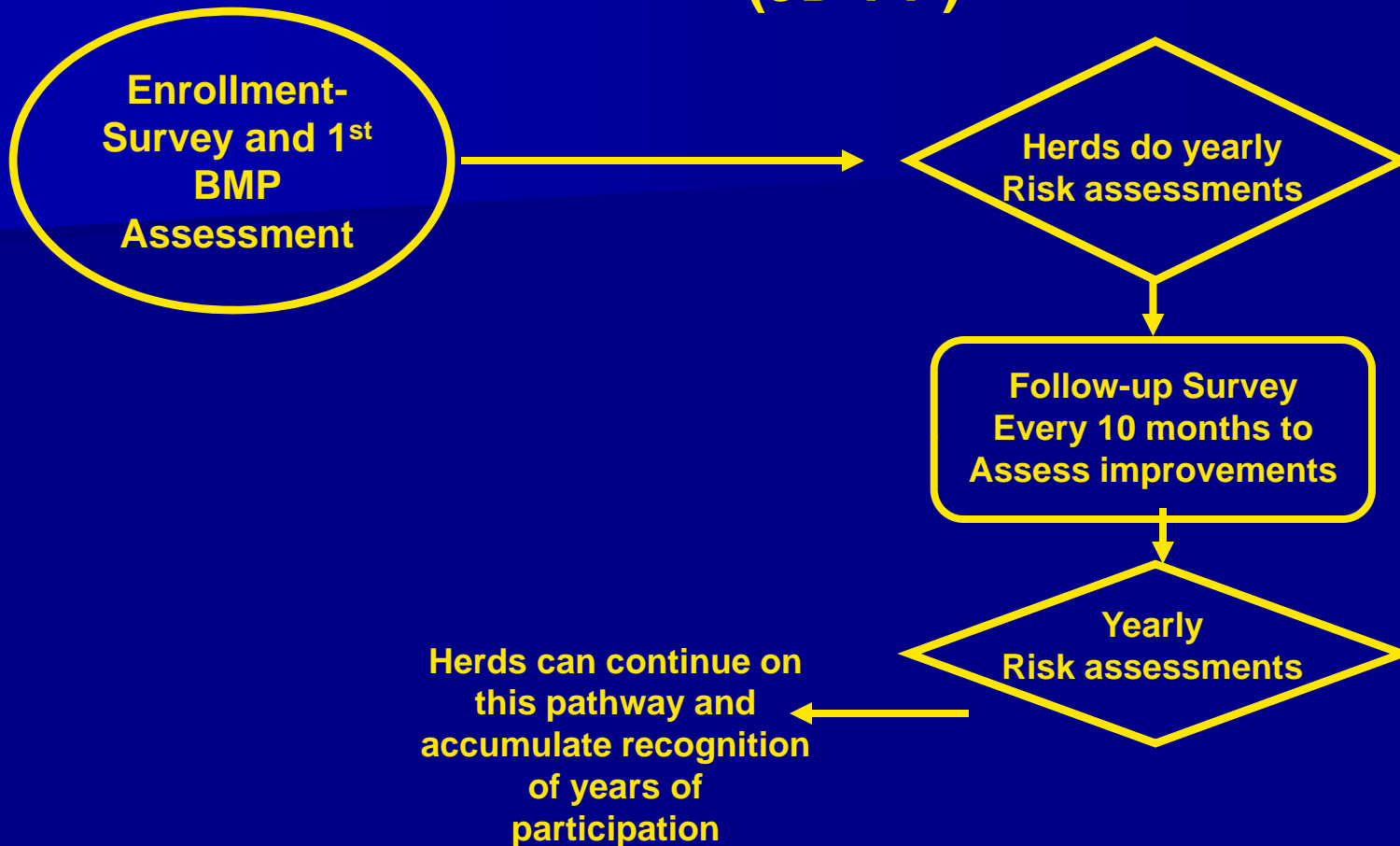
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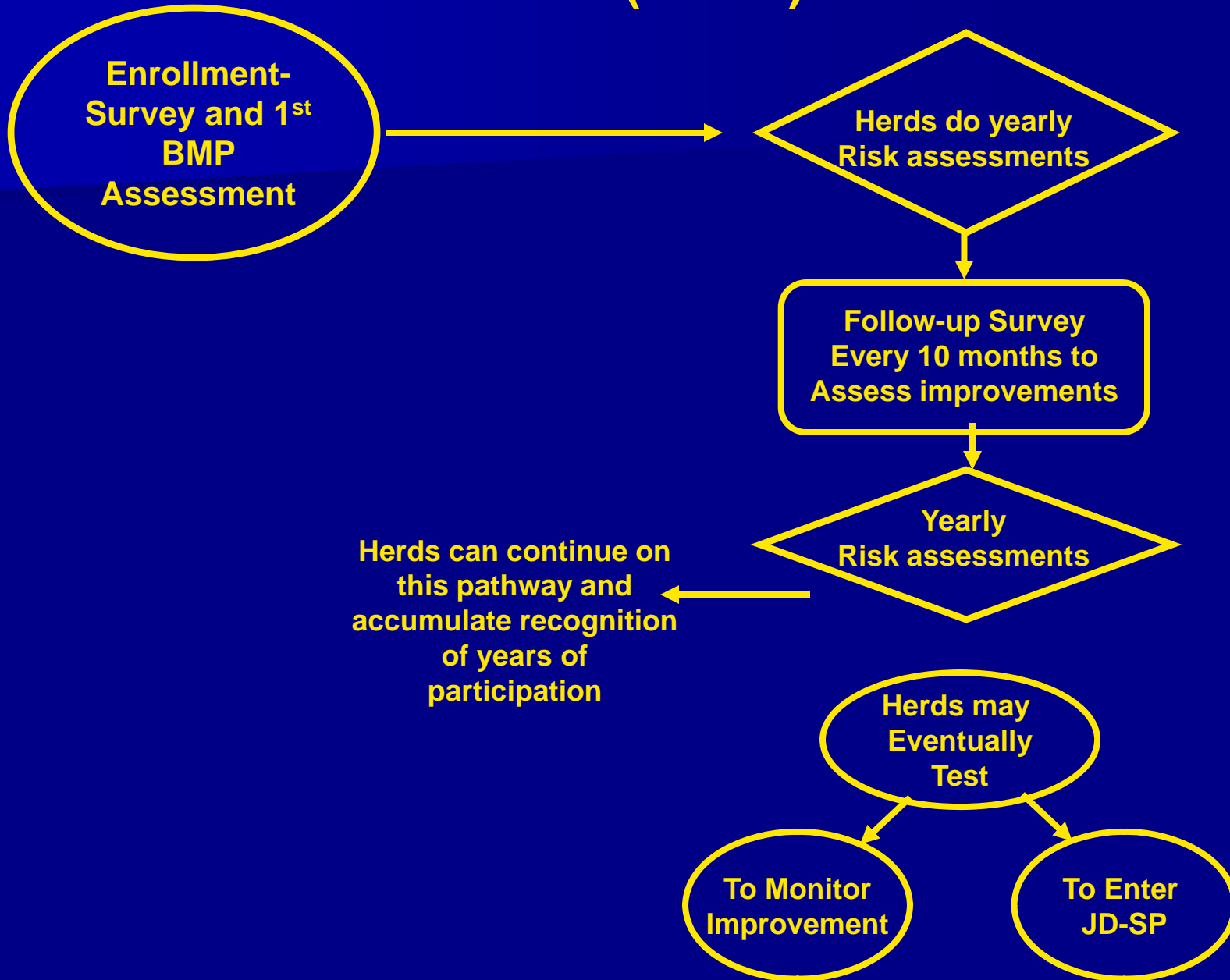
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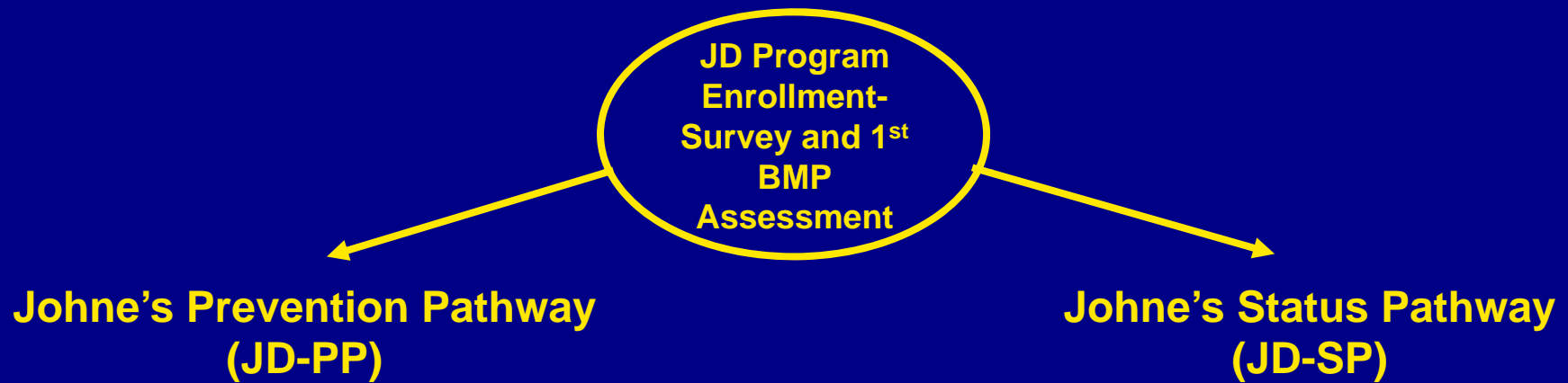
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# Voluntary Johne's Disease Prevention and Control Program



# Johne's Status Pathway (JD-SP)

Enrollment-  
Survey and 1<sup>st</sup>  
BMP  
Assessment

# Johne's Status Pathway (JD-SP)

**Enrollment-  
Survey and 1<sup>st</sup>  
BMP  
Assessment**

**Advancement  
Steps  
- 10 months**

**Maintenance  
Steps  
- 2 yrs**

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Survey and 1<sup>st</sup>  
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Milk ELISA or  
Environmental testing

# Johne's Status Pathway (JD-SP)

Enrollment-Survey and 1<sup>st</sup> BMP Assessment

Advancement Steps  
- 10 months

Maintenance Steps  
- 2 yrs

Milk ELISA or Environmental testing

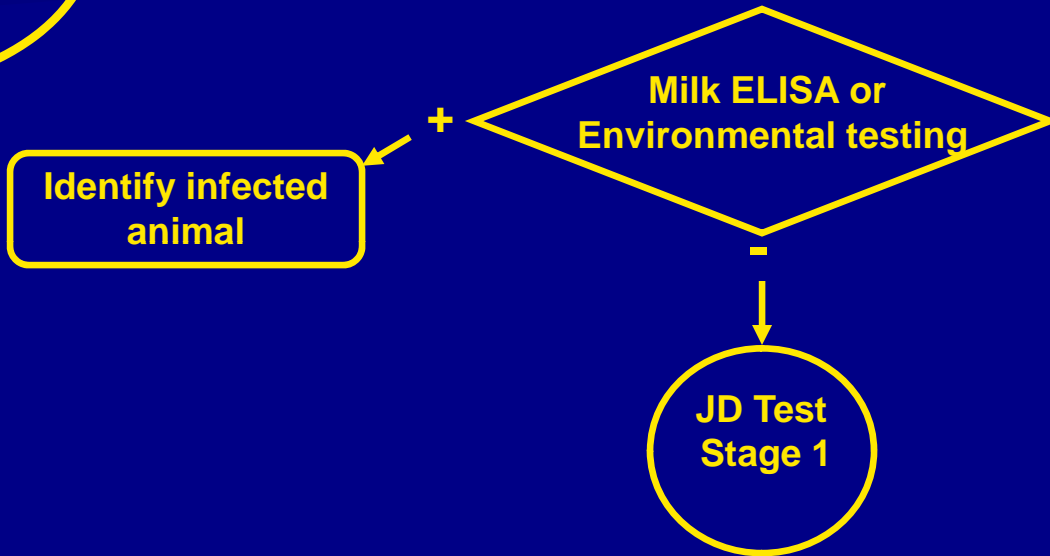
JD Test Stage 1

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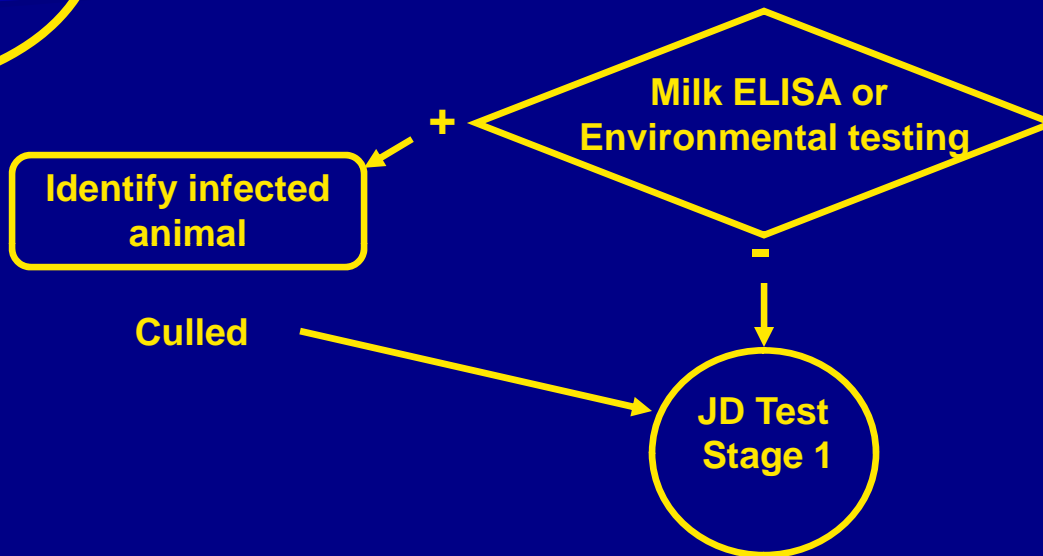


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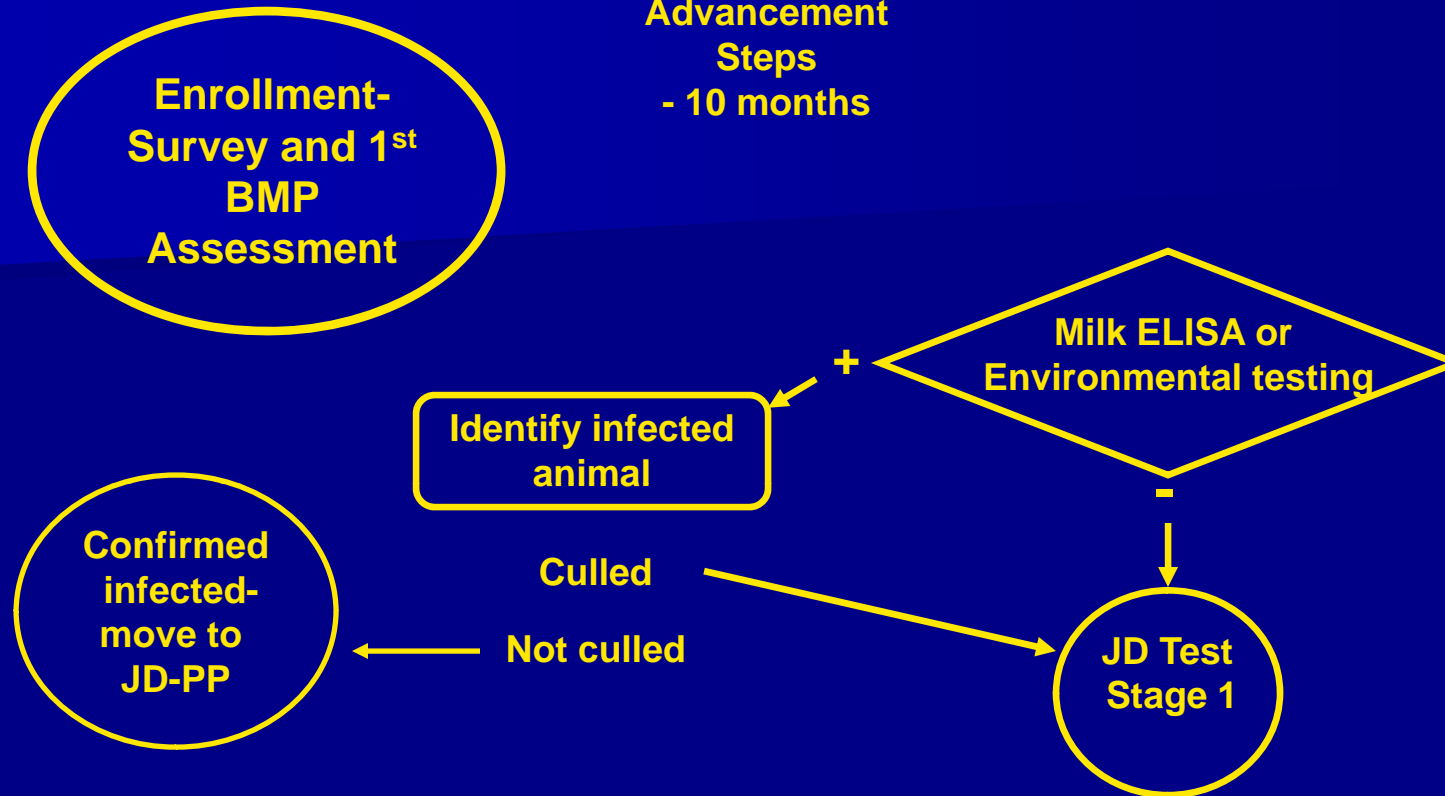
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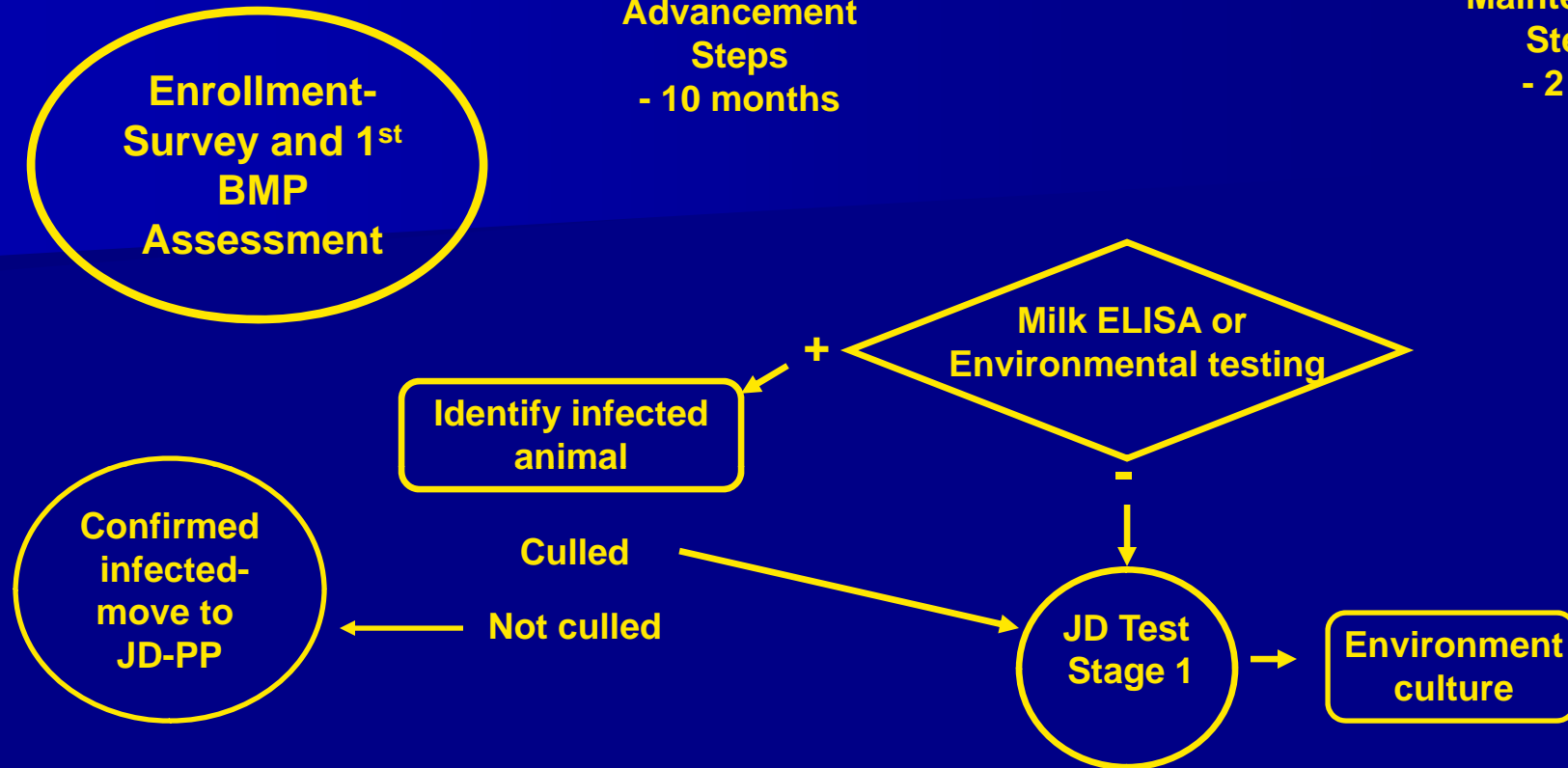
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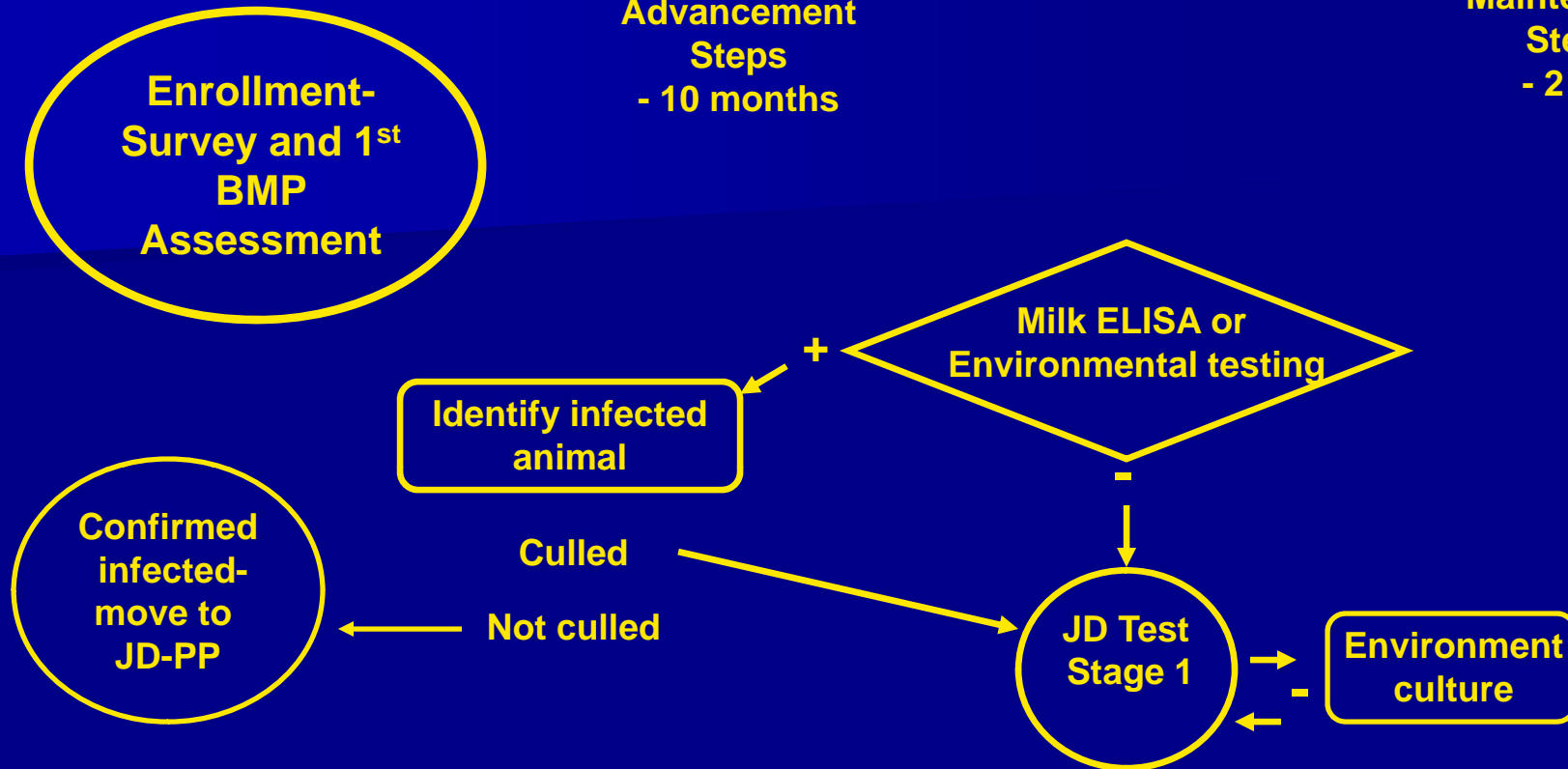
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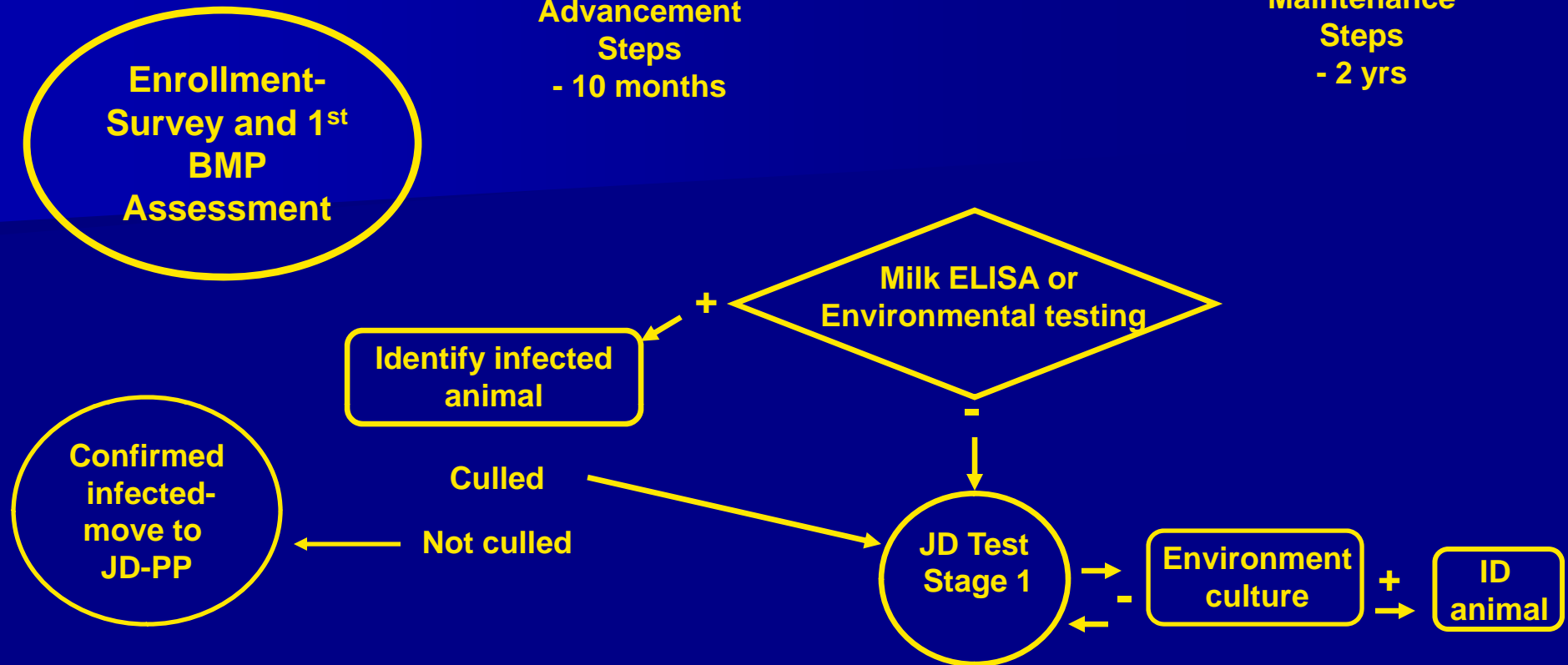
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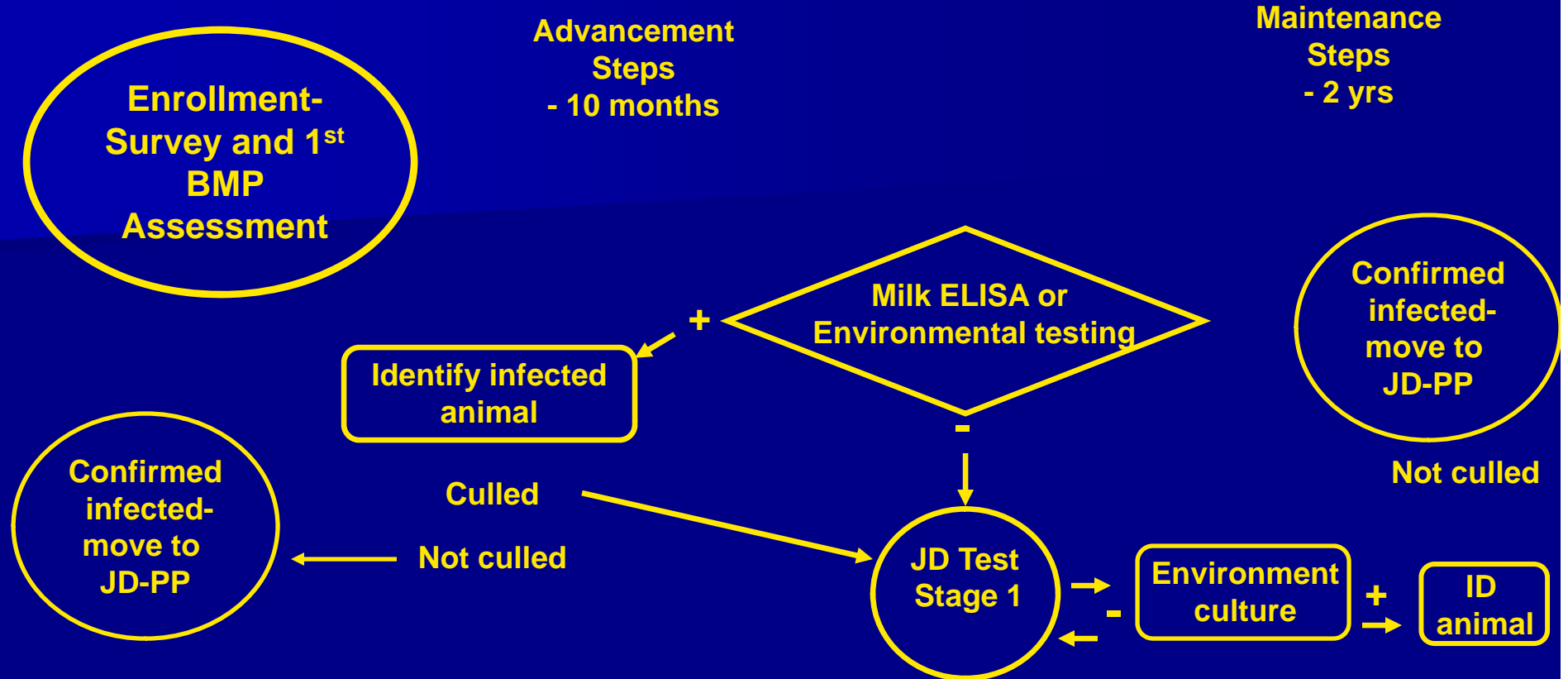
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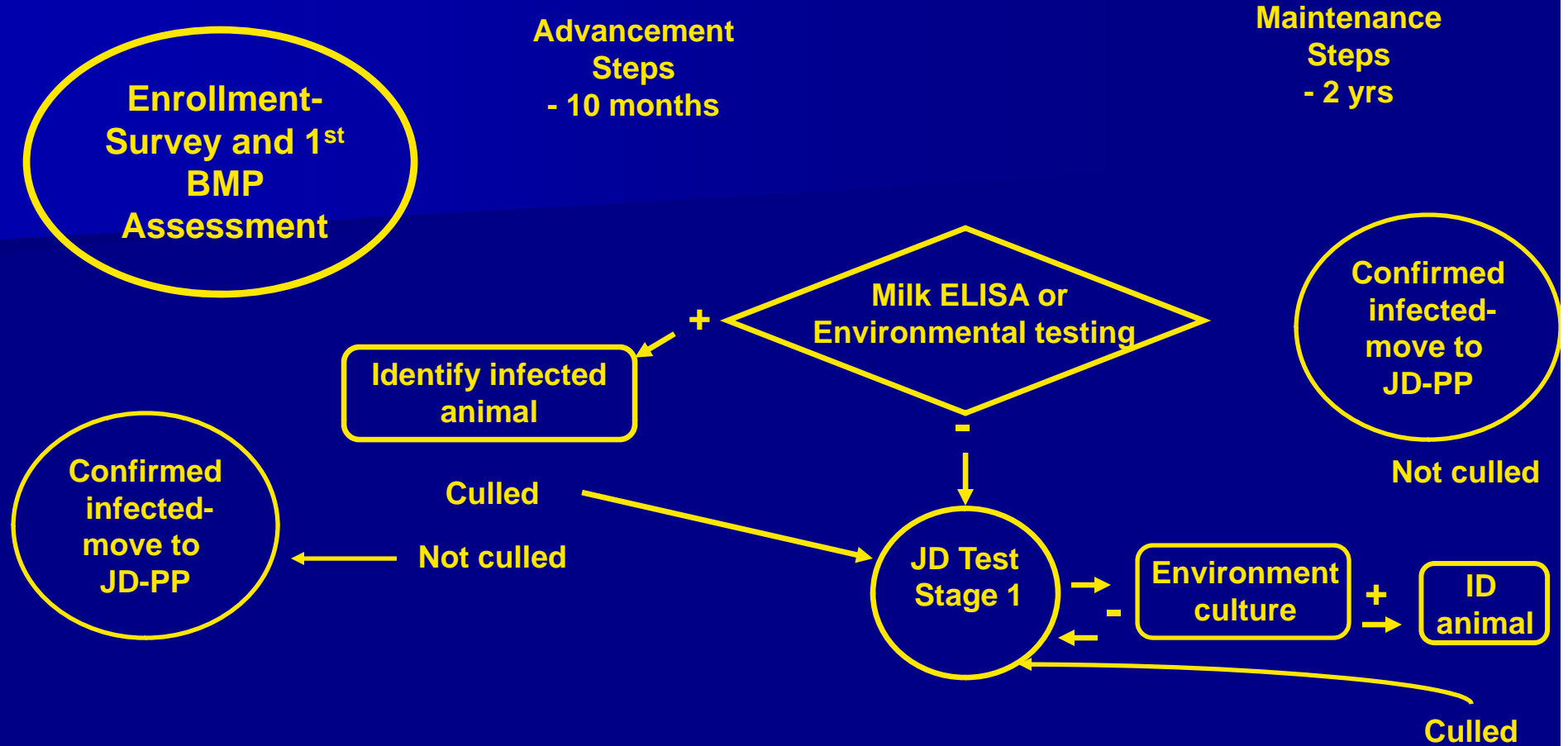
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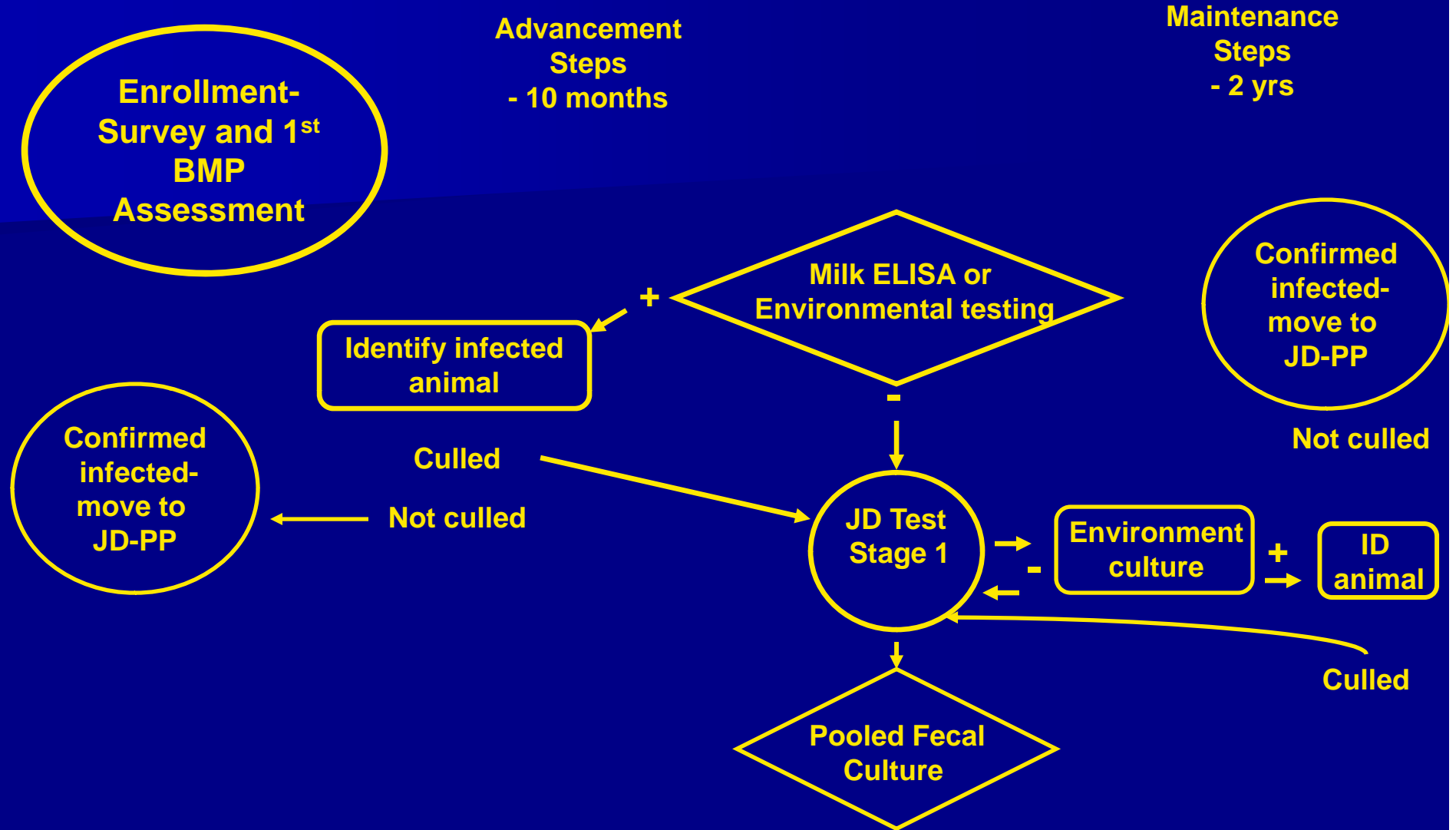
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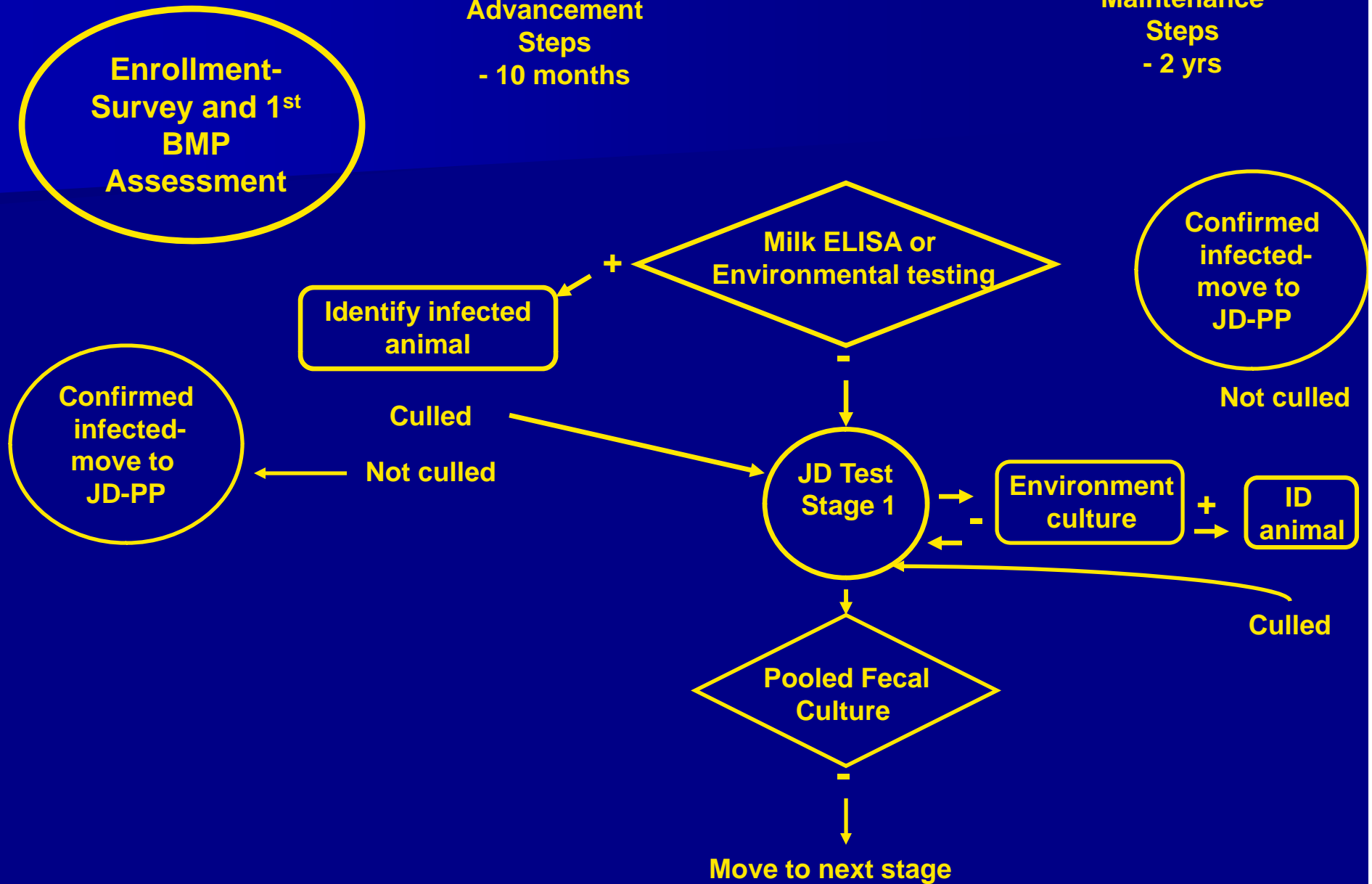
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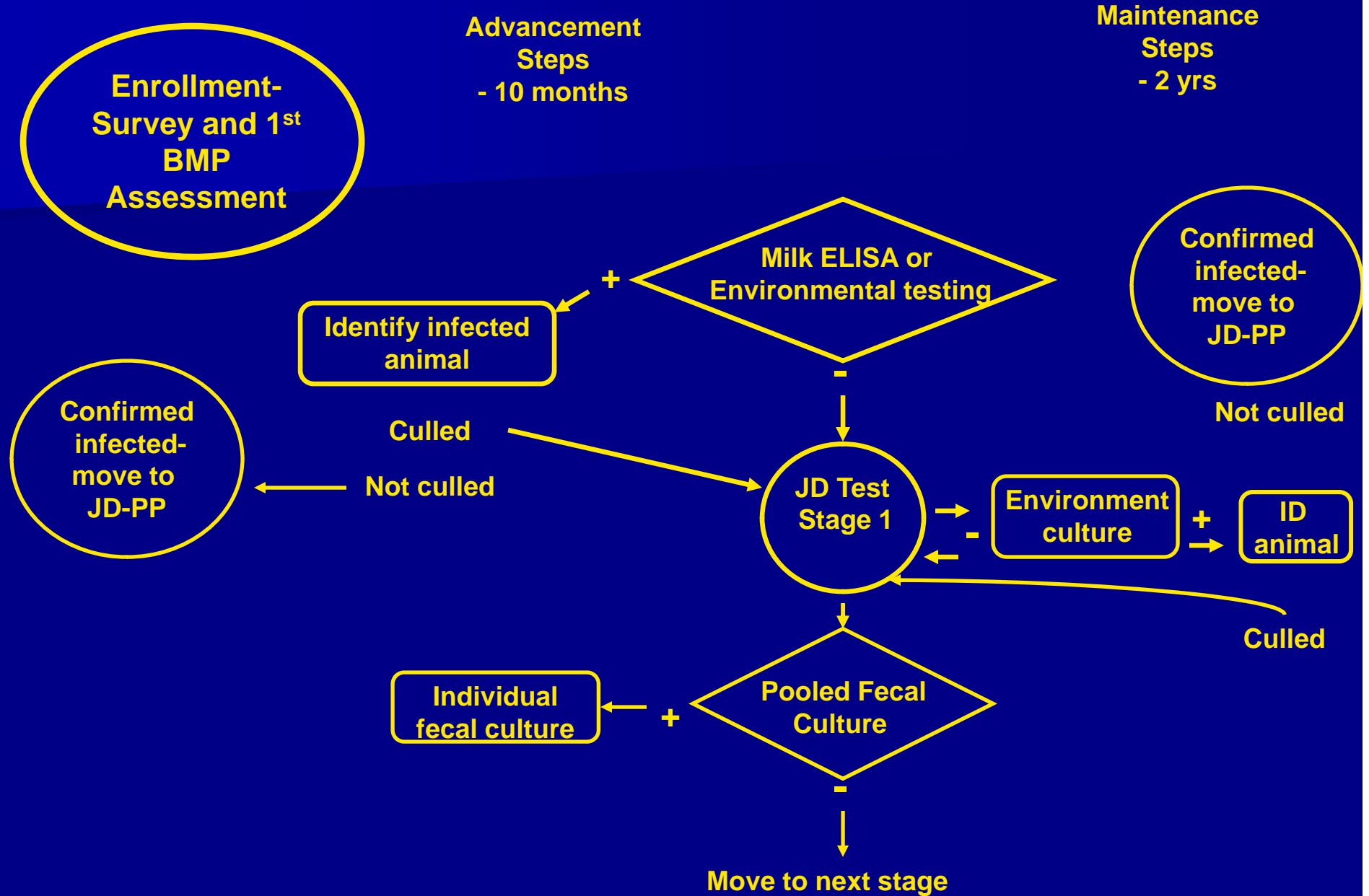
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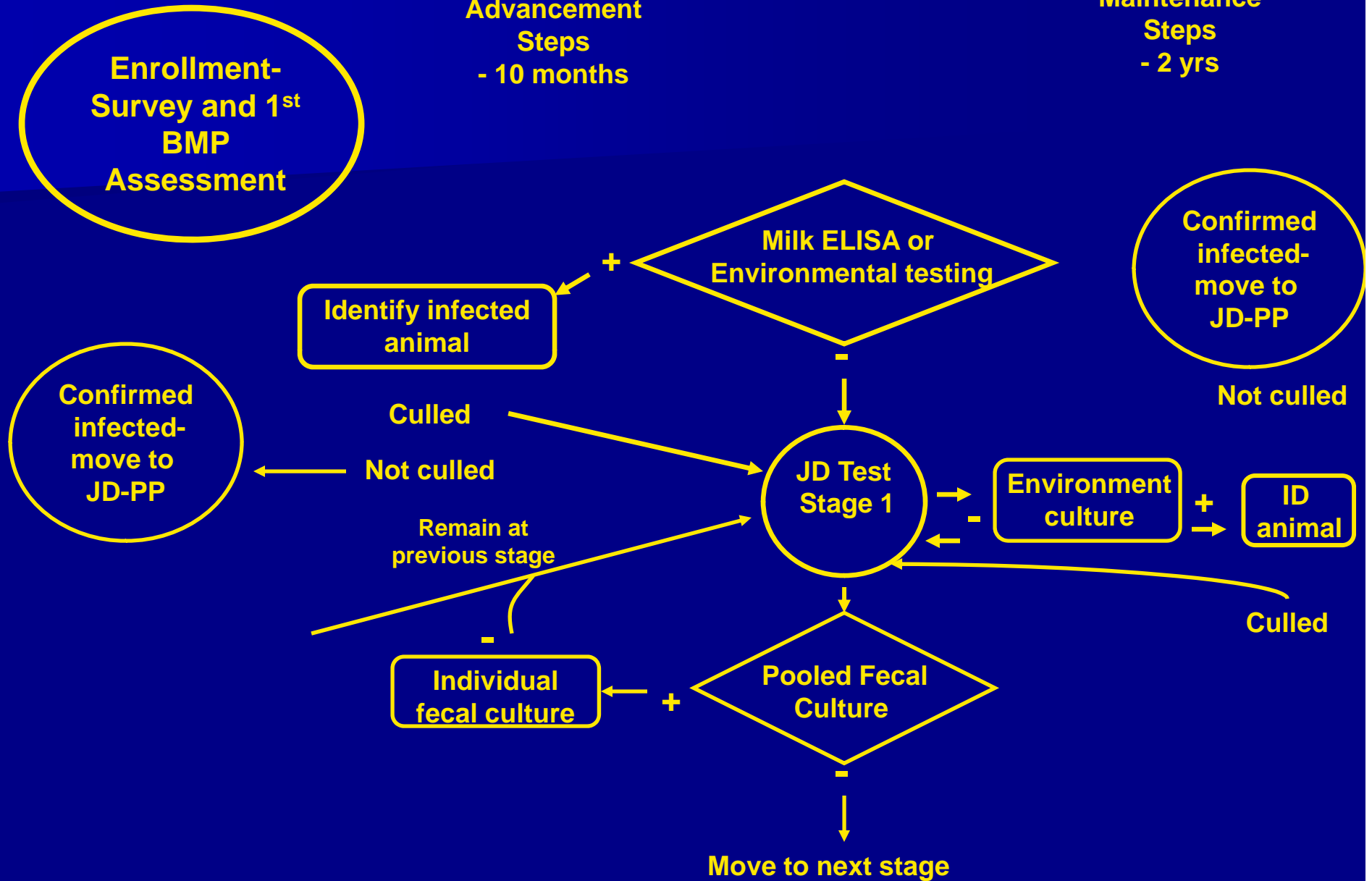
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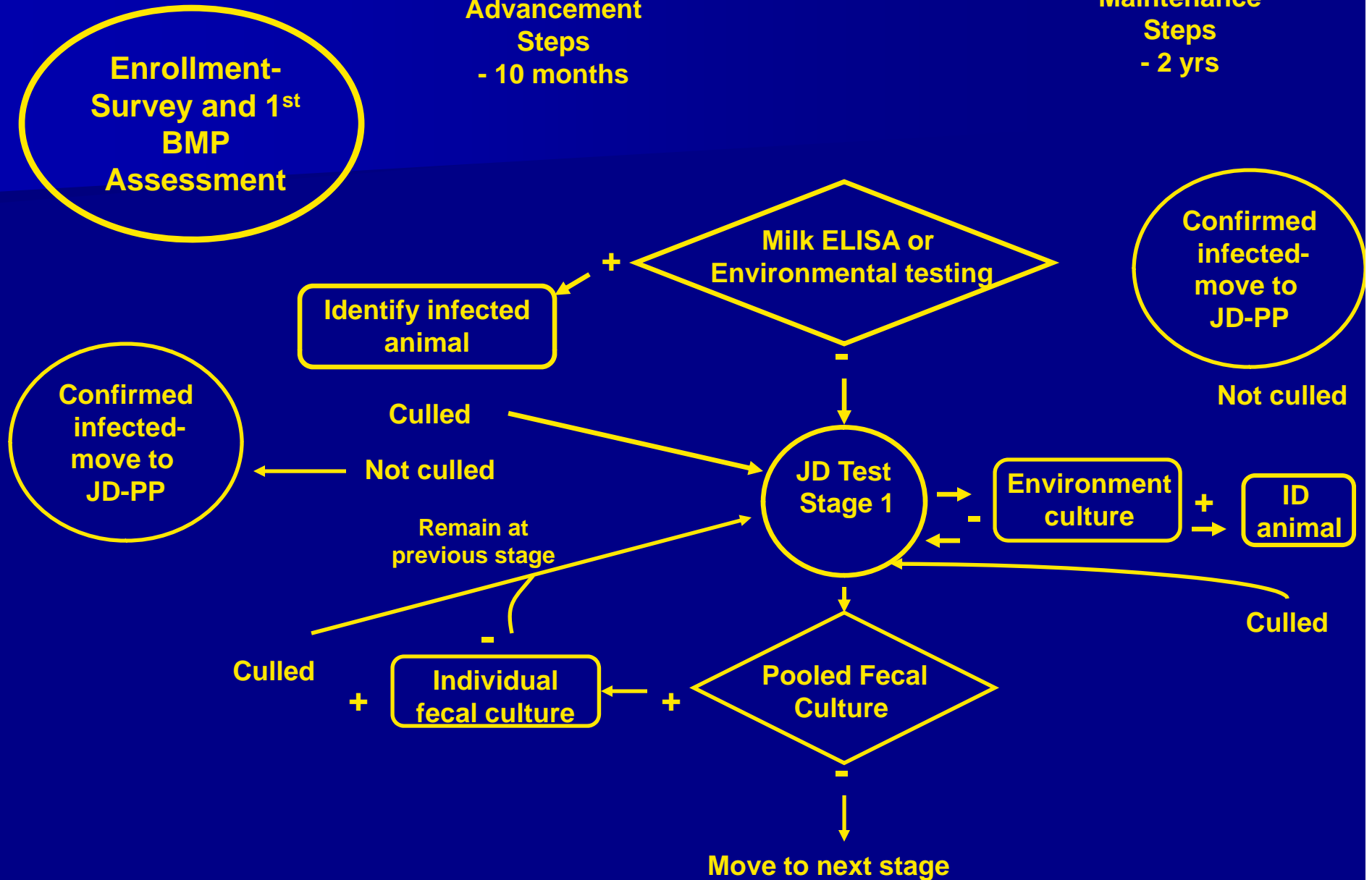
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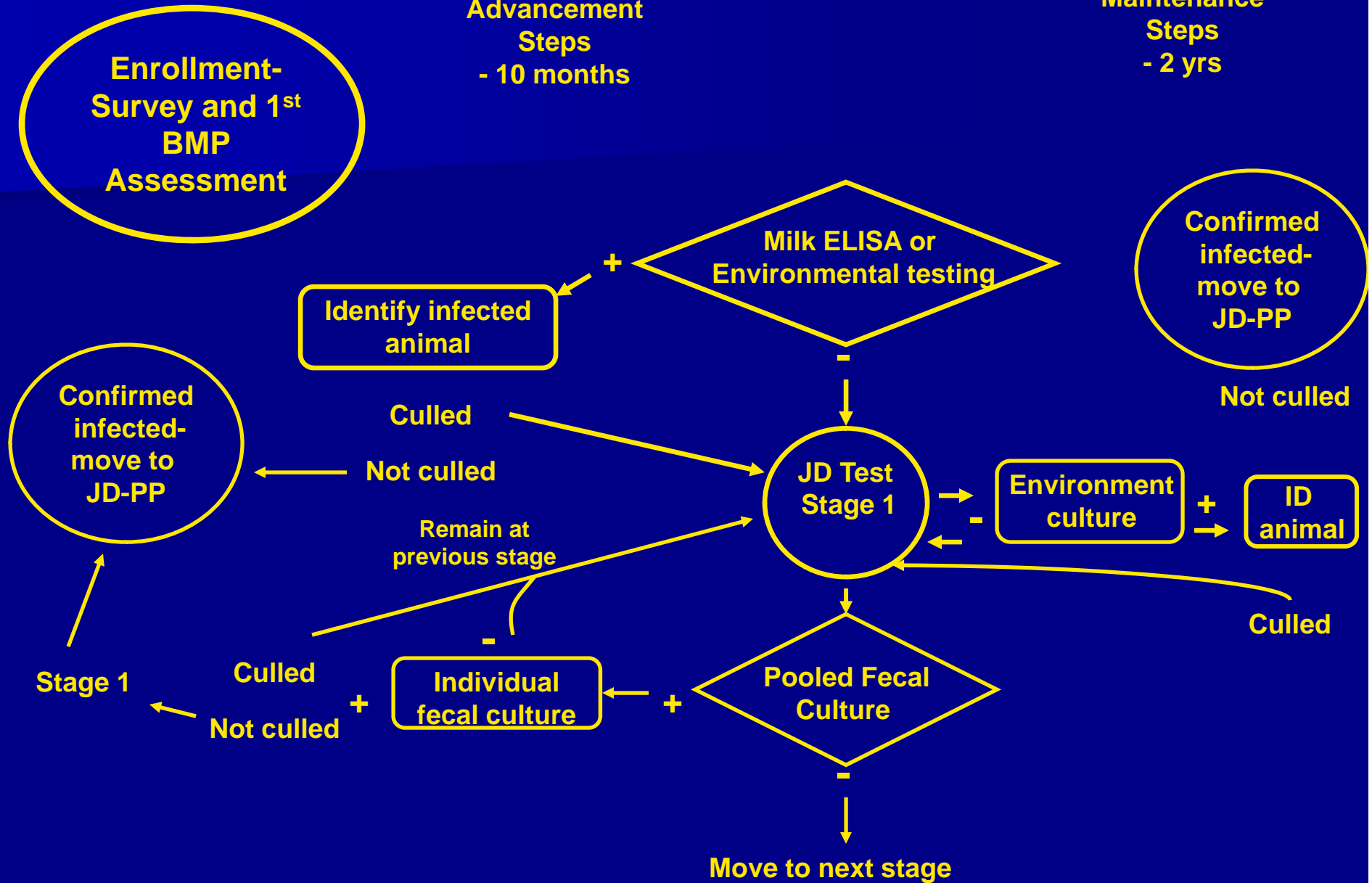
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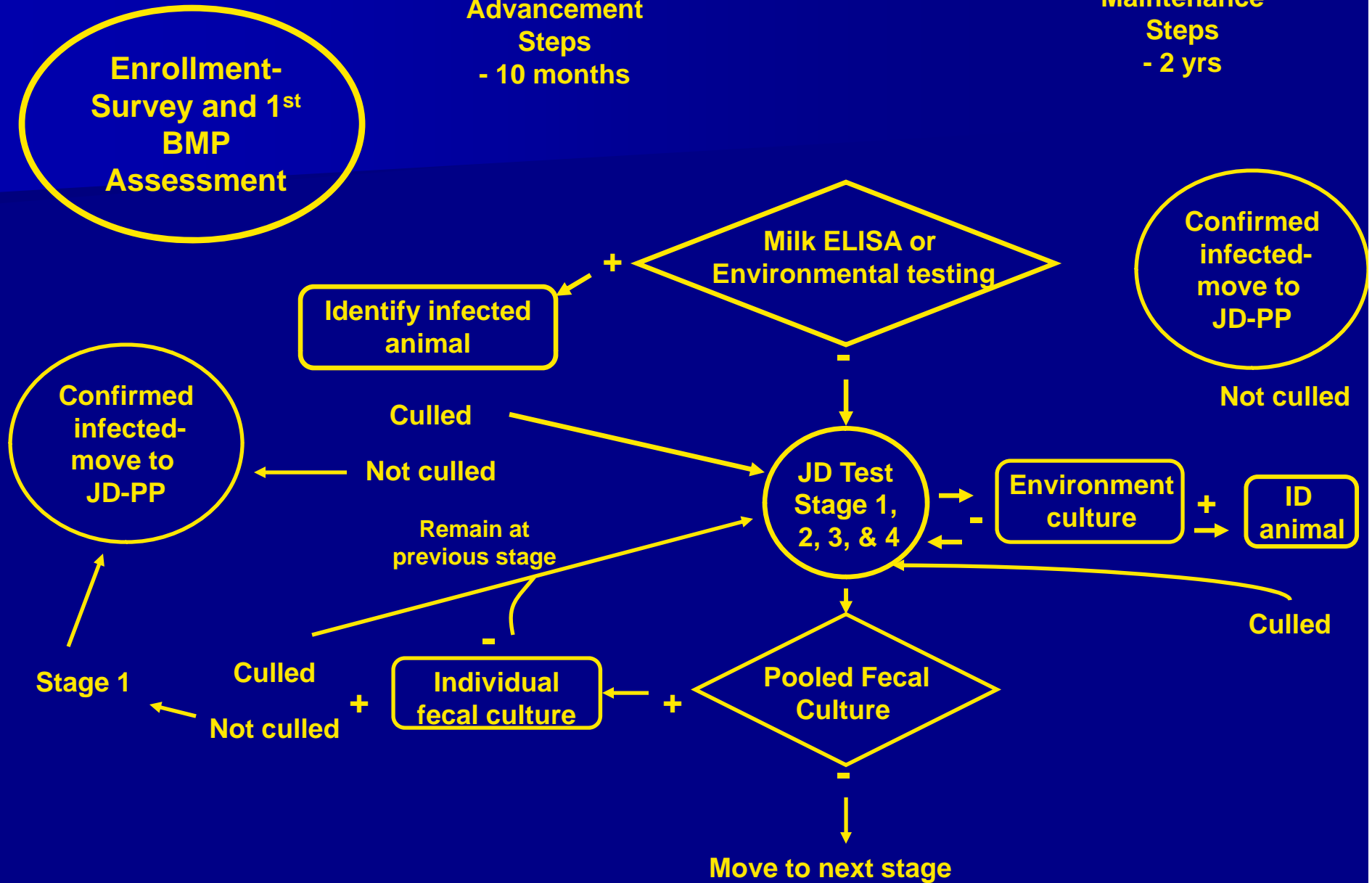
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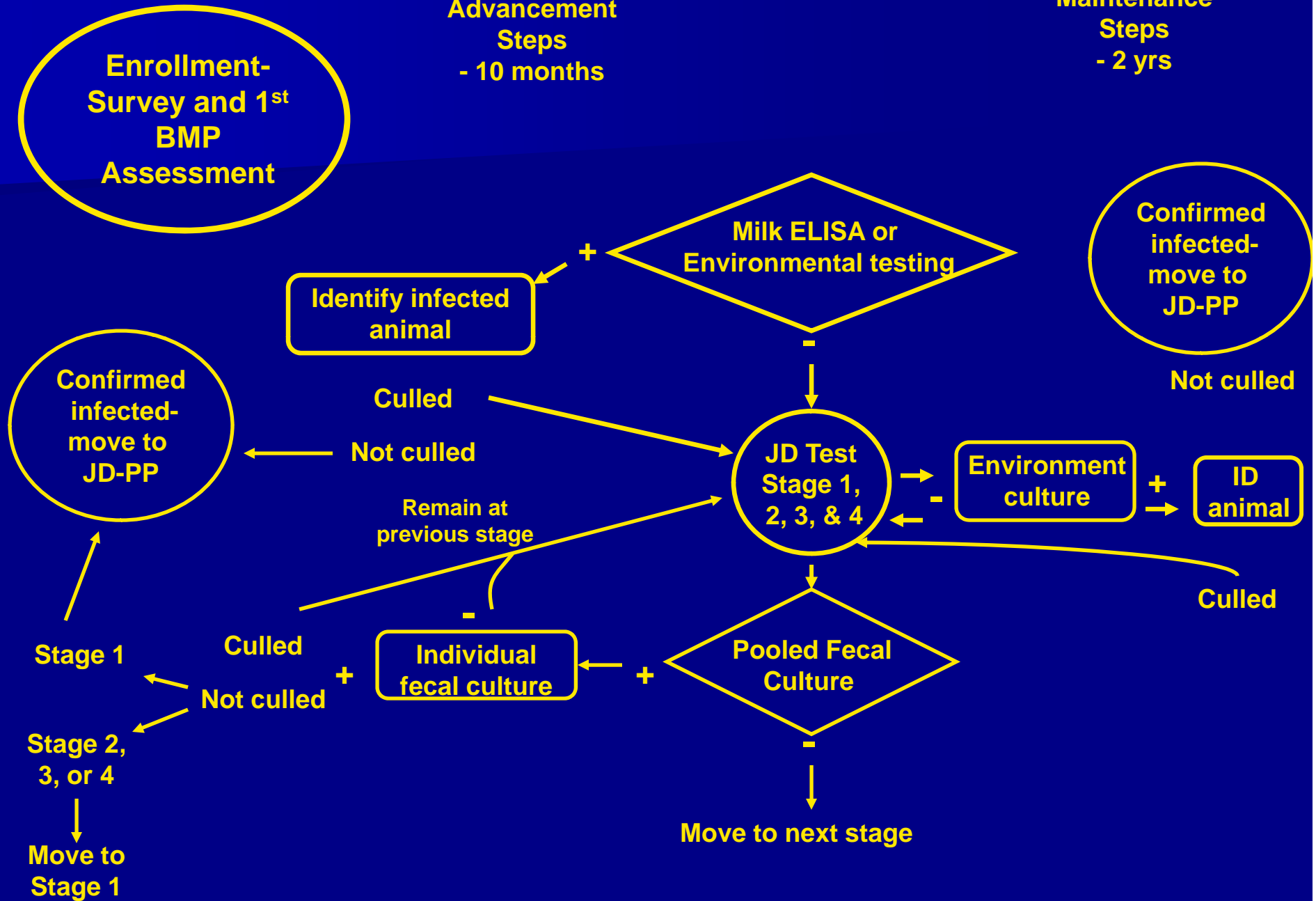
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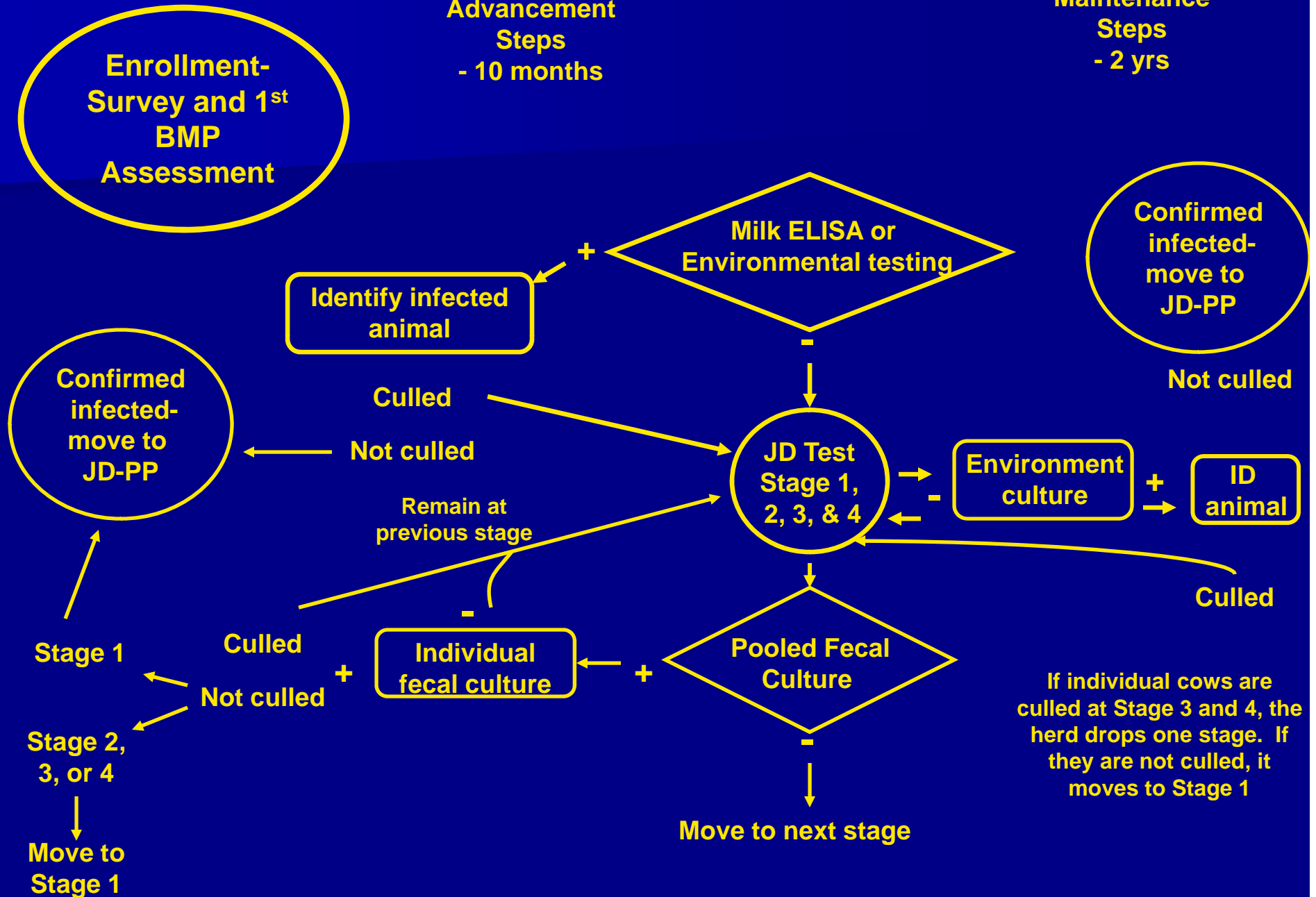
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# Why test at all?

- Monitor improvement
- Demonstrate what the prevalence really is
  - Is it a weaker program if there is no testing?
- Herds want it?
  
- Is there any proof that BMP alone will work?

# JD Status Pathway

- This path is for herds with high likelihood of having a low prevalence
- Focus is still on BMP's and prevention of disease

## Johne's Disease Status Pathway (JD-SP)

