

The Listeriosis Initiative

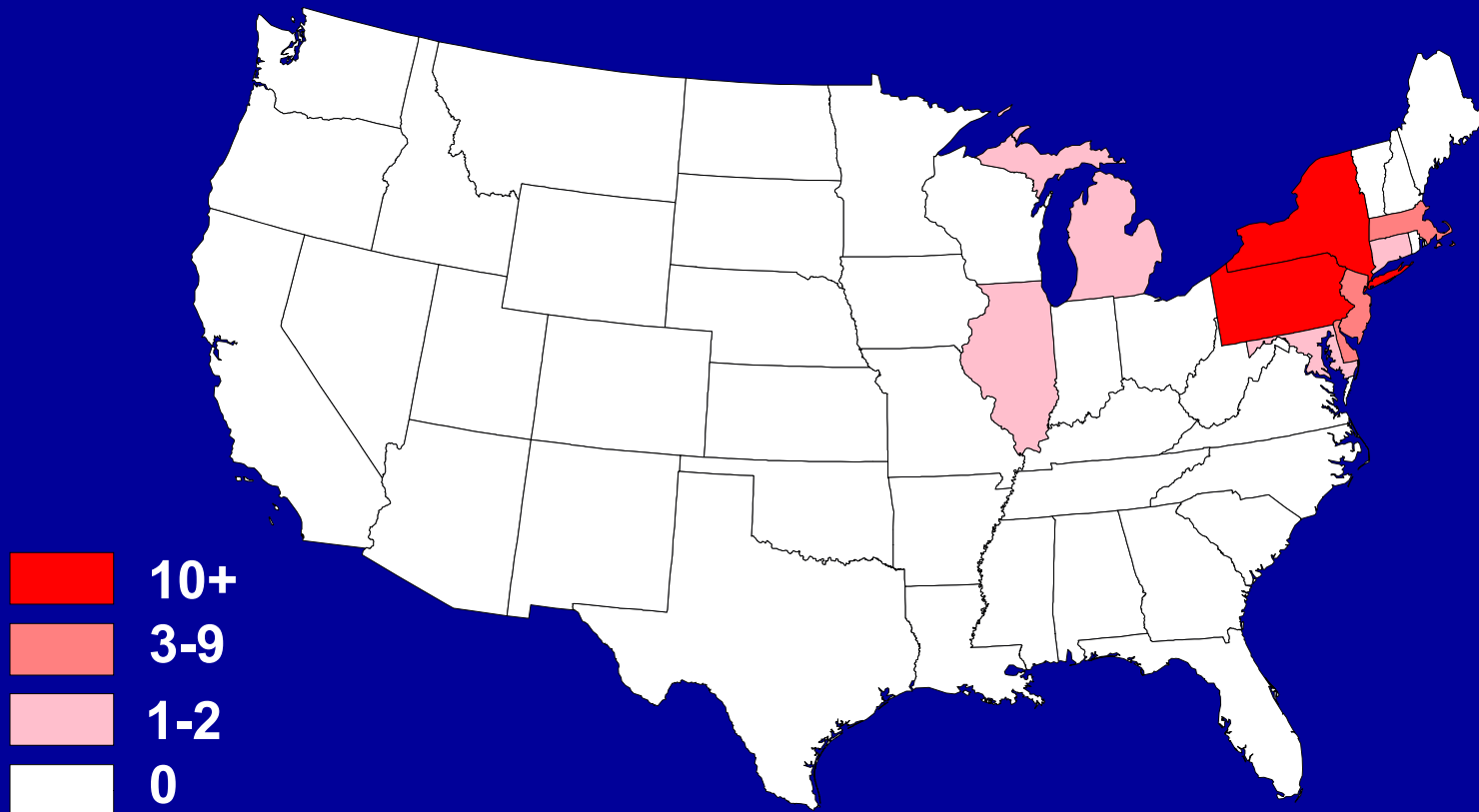
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Listeria monocytogenes

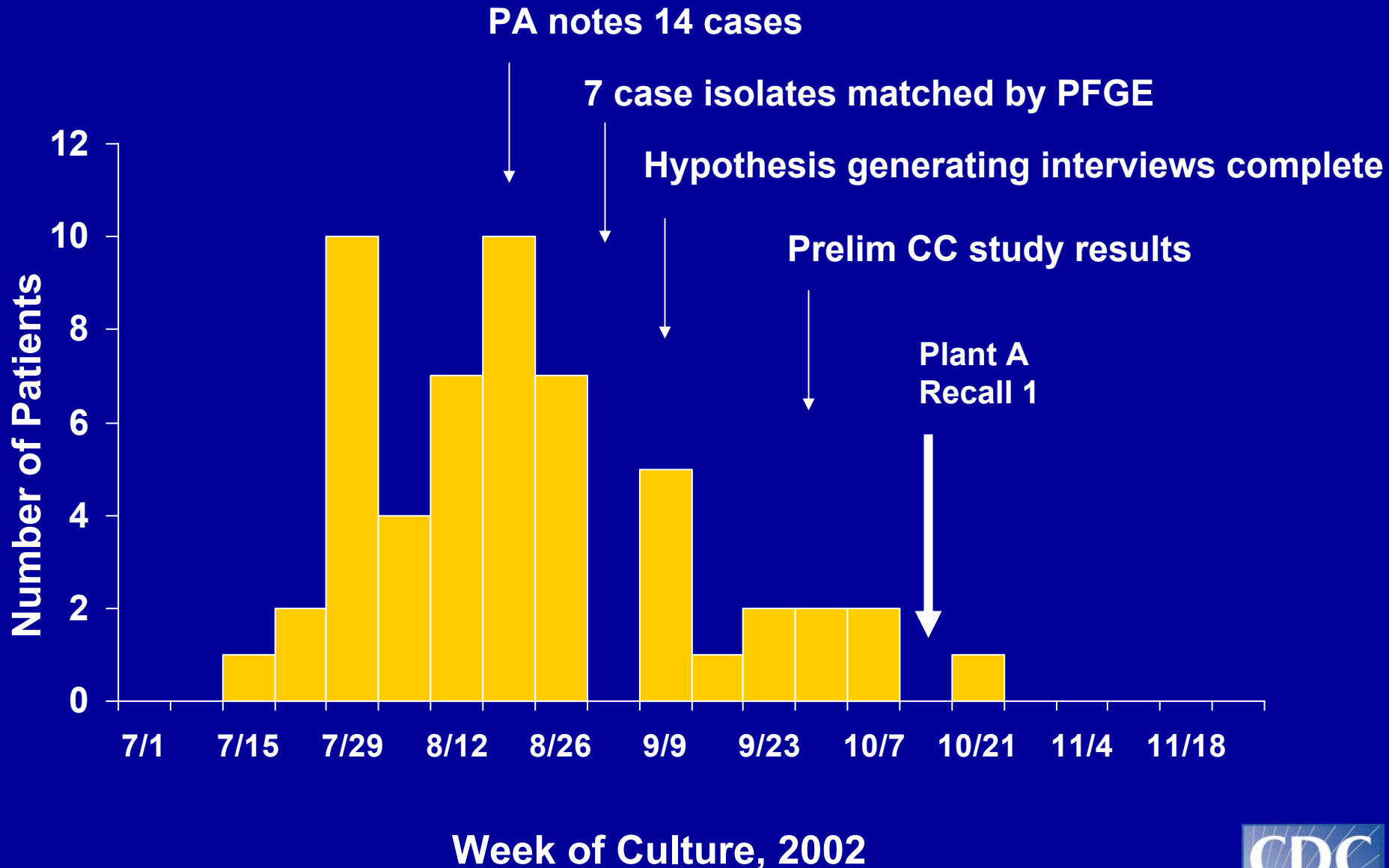
- **Causes foodborne illness listeriosis**
 - Estimated 2,500 cases/year
 - Case fatality rate ~20%
 - Incubation period up to 30 days
- **Reduction in listeriosis important part of national food safety goals**
- **Delays in outbreak detection and investigation**

Multistate Outbreak of Listeriosis Associated with Turkey Deli Meat, 2002

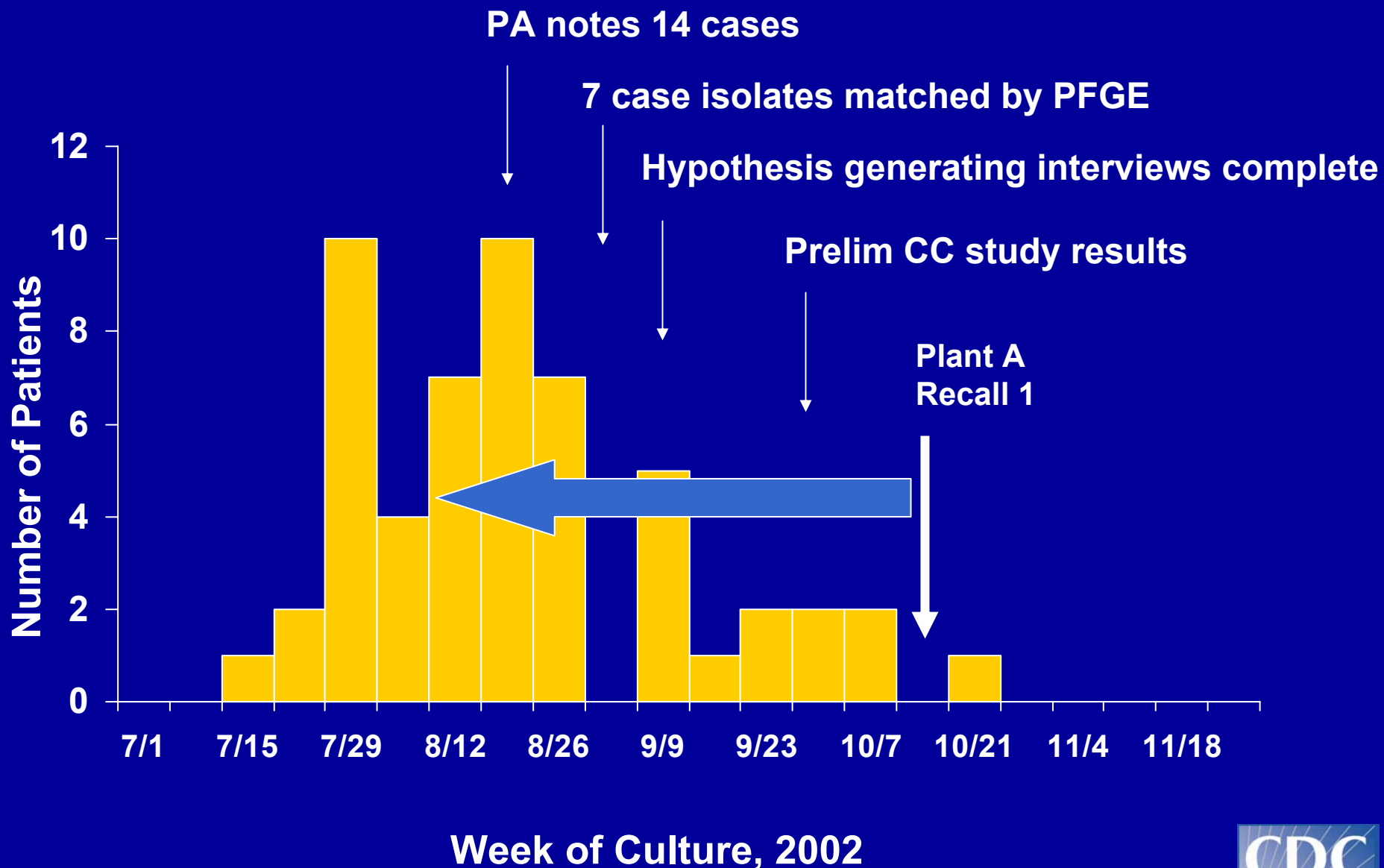
- July – Nov 2002: 54 isolates with outbreak PFGE pattern in 9 states



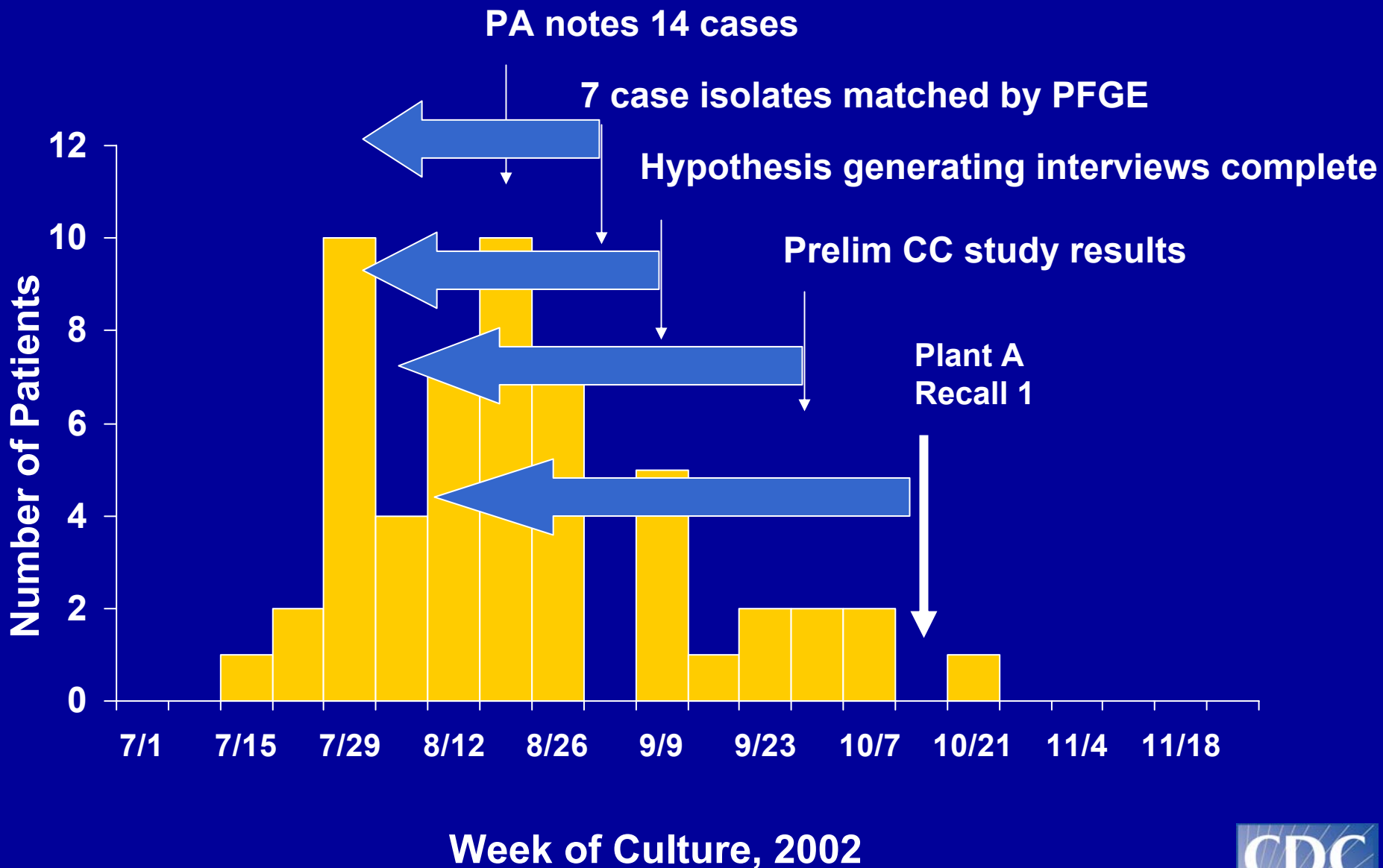
Milestones in 2002 Listeriosis Outbreak



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Recommendations following 2002 Listeriosis Investigation

- **To prevent future outbreaks**
 - Post-packaging pathogen reduction for ready-to-eat foods
 - Implementation of new USDA-FSIS policy
- **To aid investigation of future outbreaks**
 - Rapid PFGE, posting to PulseNet
 - Prompt interviews of all listeriosis patients with standardized questionnaire

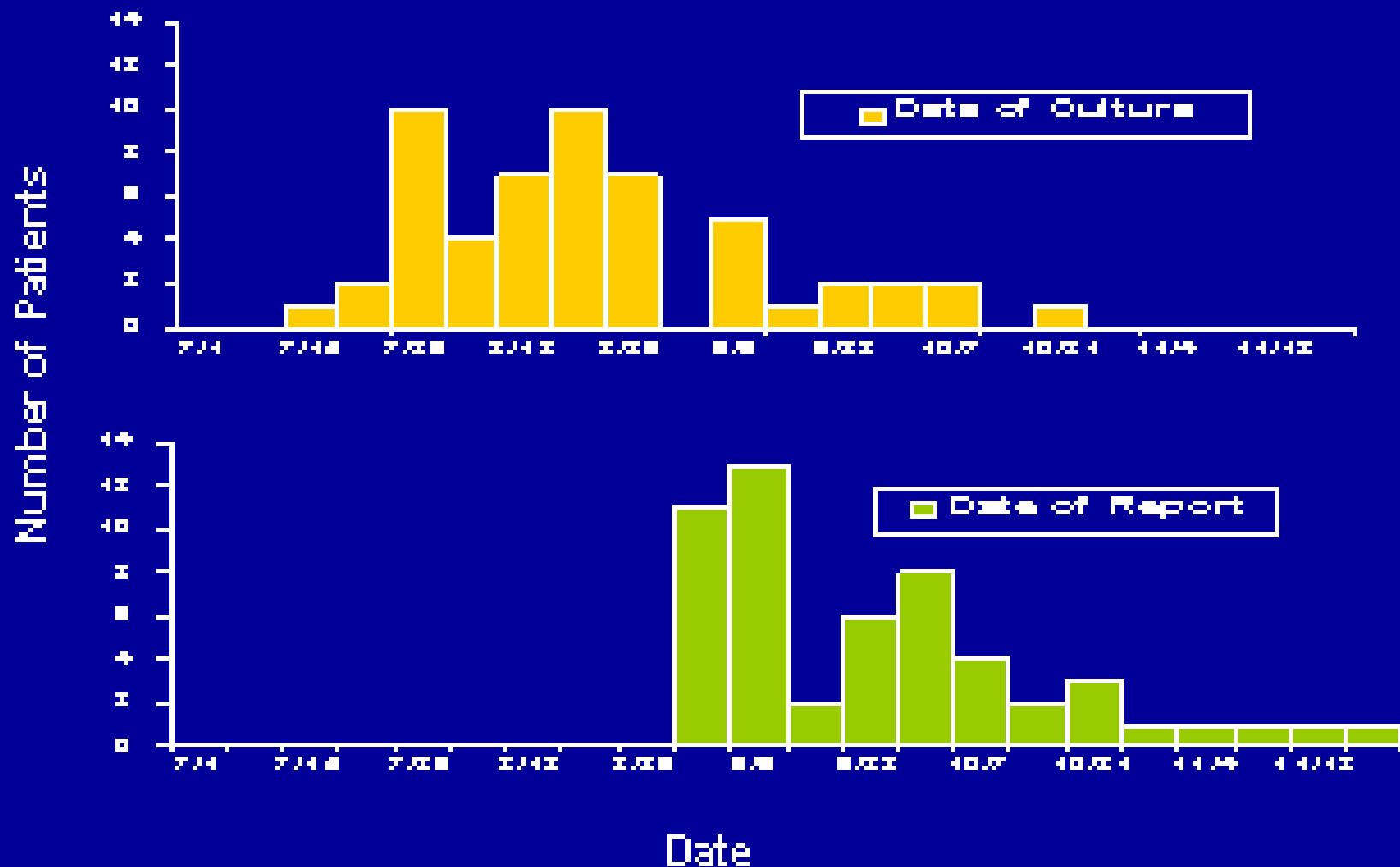
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- **All *L. monocytogenes* isolates identified and subtyped in timely manner**
- **All patients interviewed with standard form when case identified (i.e before subtyping)**
- **All data collected in single database to facilitate rapid analysis**

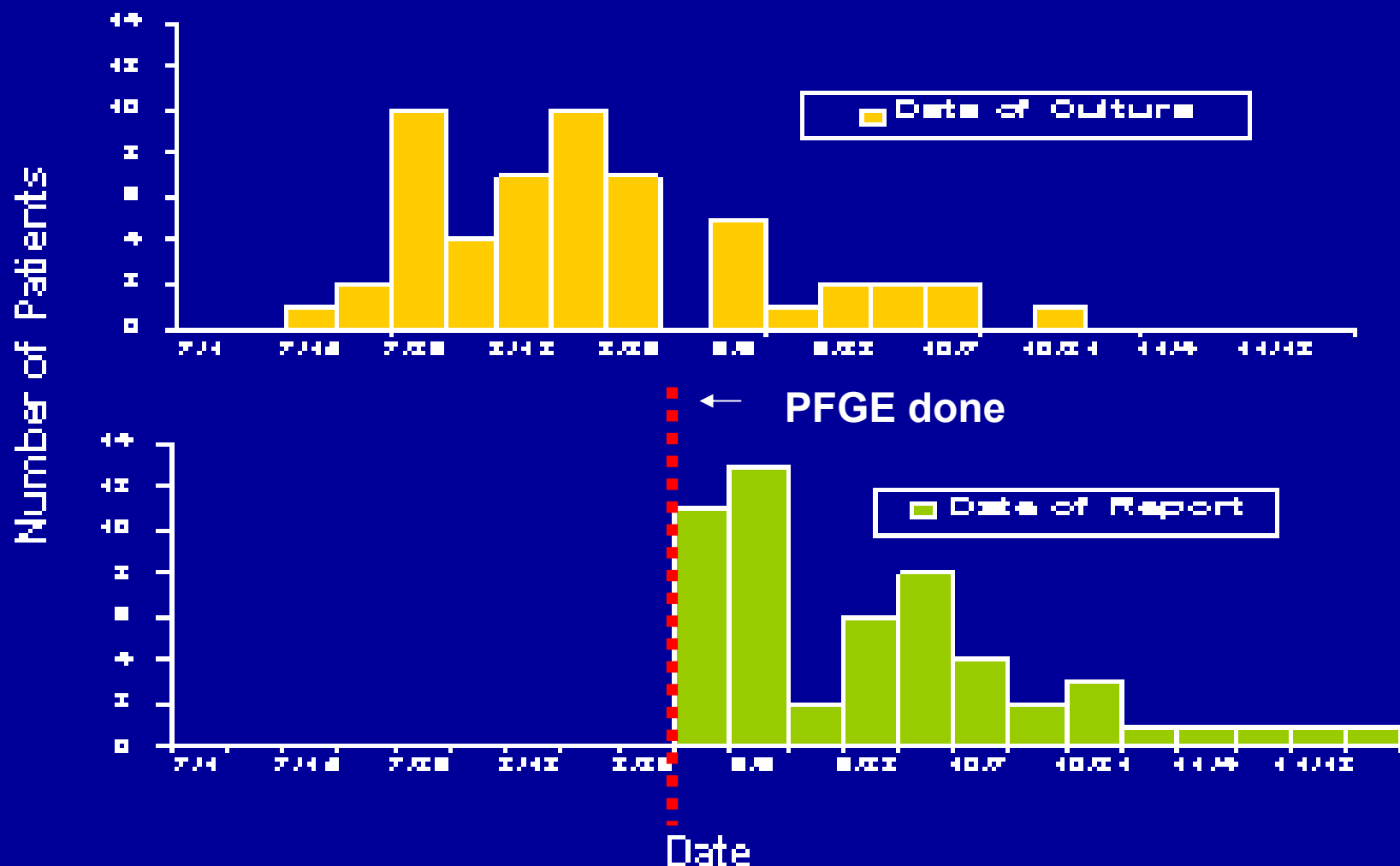
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- **Monitor clusters**
- **Immediate analysis of clusters using case-control study design**
 - **Cases: serotype/genotype matched**
 - **Controls: patients with non-matching isolates**
- **Potential to decrease time of outbreak investigation and public health intervention from months to weeks**

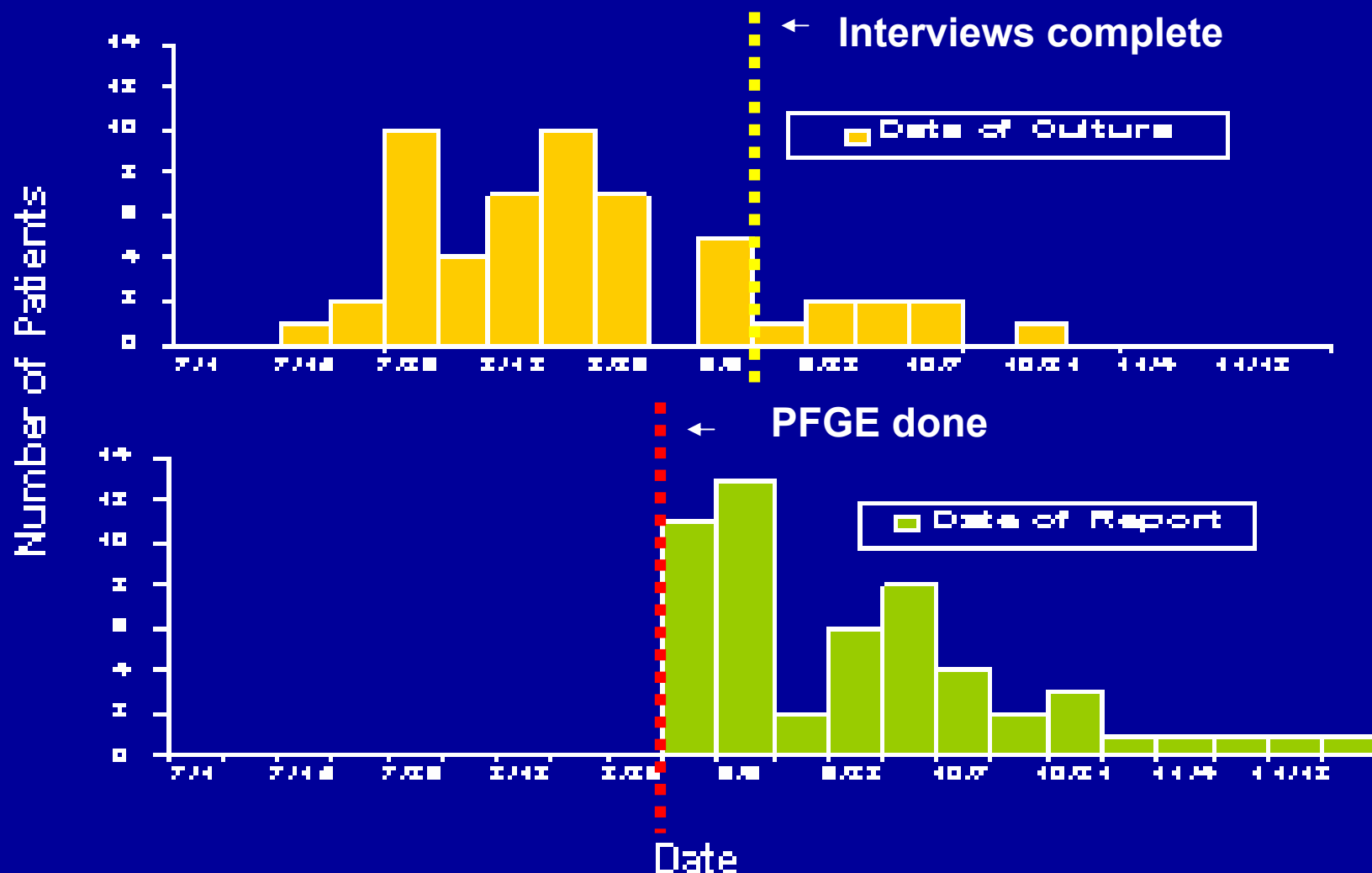
Comparison of Dates of Culture and Dates of Final PFGE Report



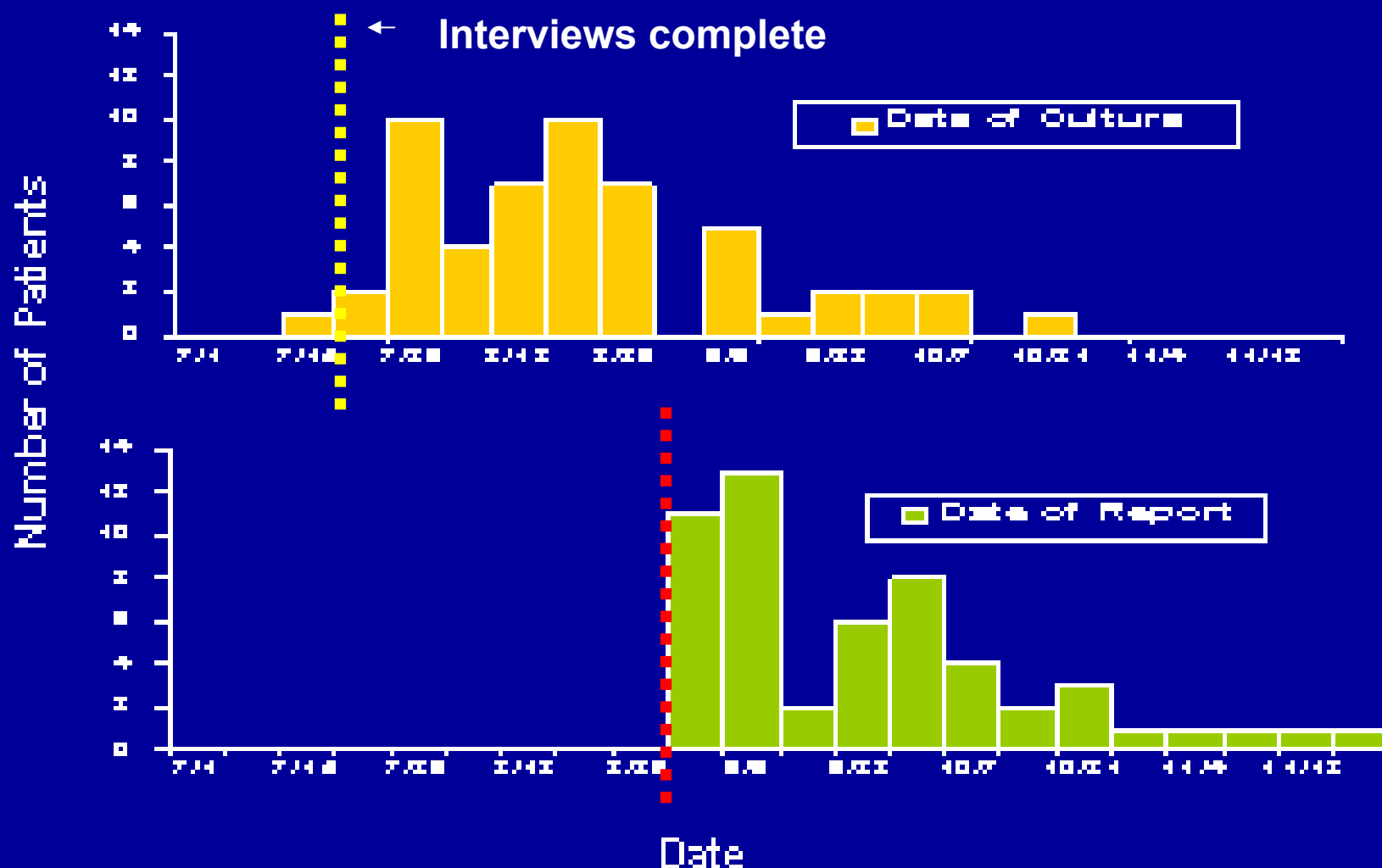
Comparison of Dates of Culture and Dates of Final PFGE Report



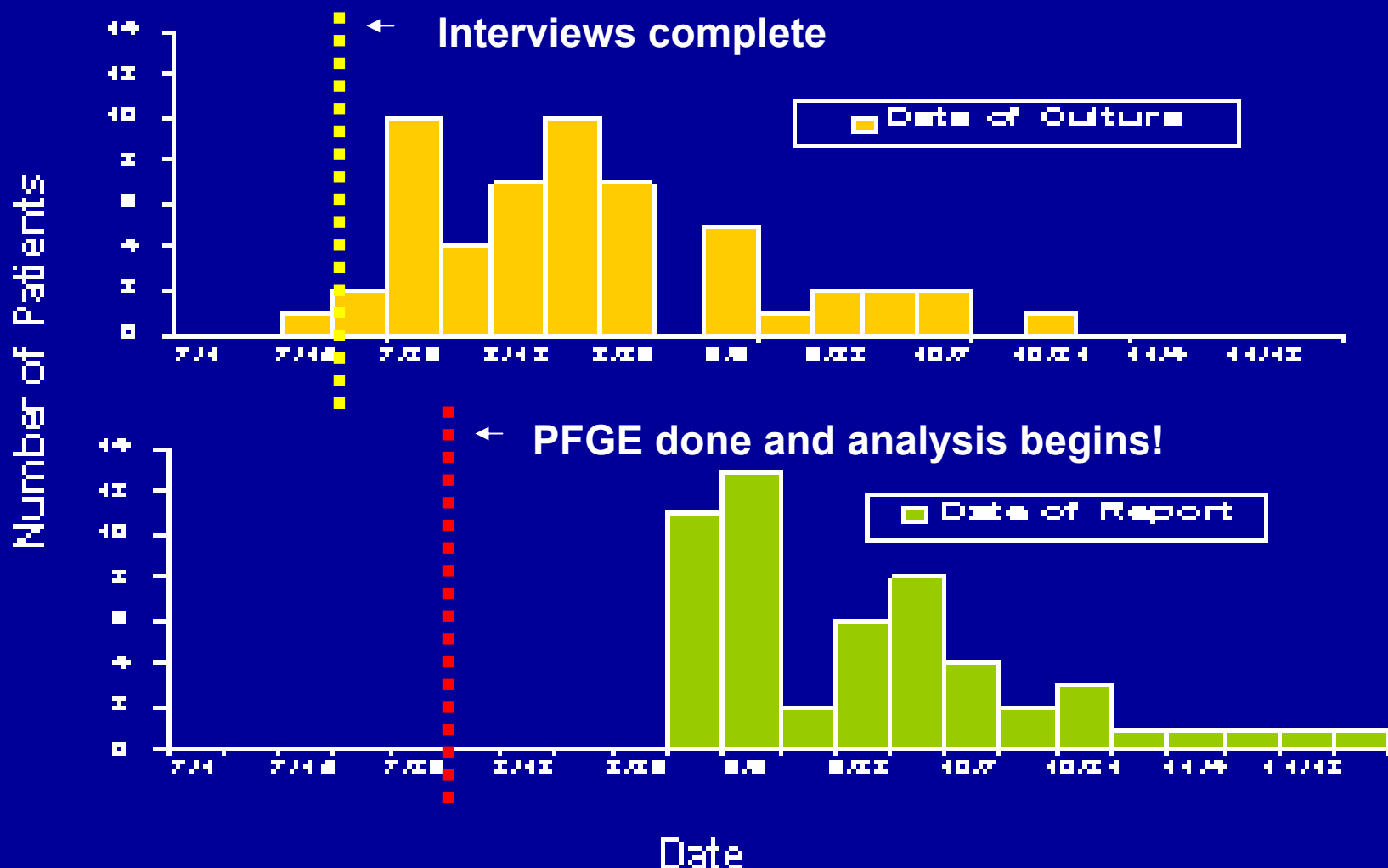
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Current status of initiative

- **Approved by CSTE**
- **Data collection form piloted by FoodNet states**
- **Databases under development- eventually will be part of NEDSS**
- **Interim database for cluster investigation should be available soon**

Questions?