



# **US Creutzfeldt-Jakob Disease Lookback Study: 28 Years of Monitoring for Transfusion Transmission Risk**

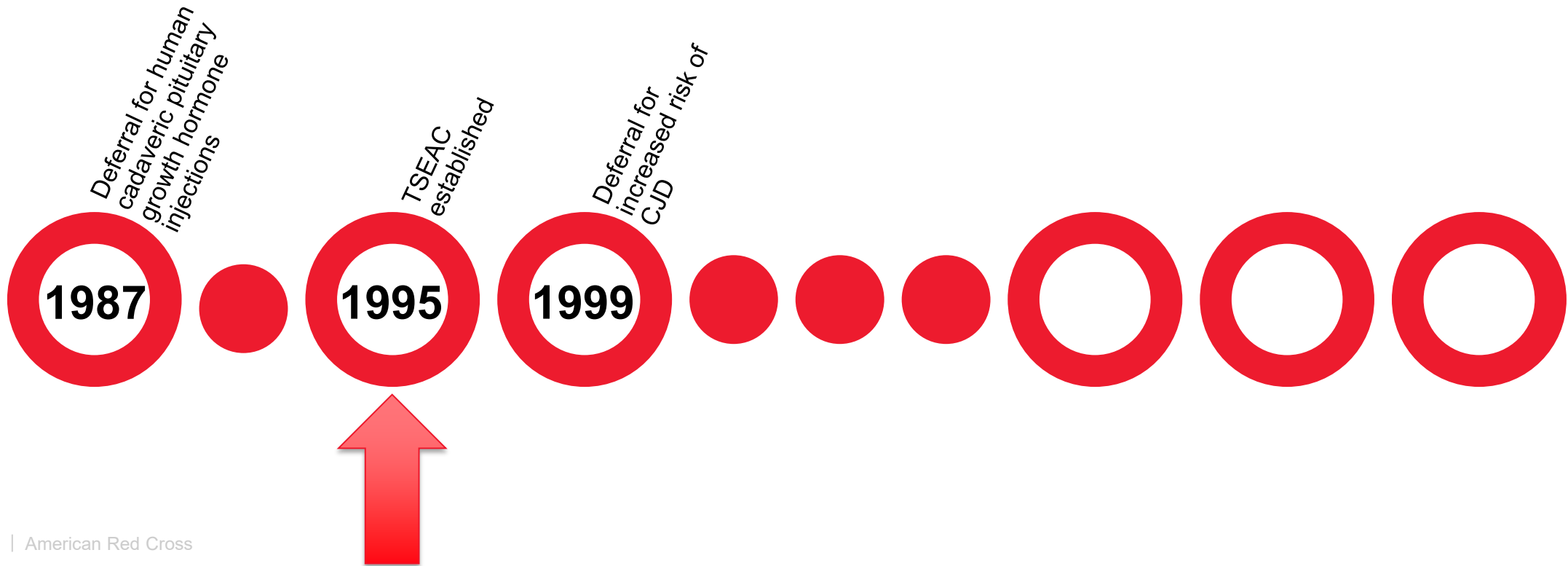
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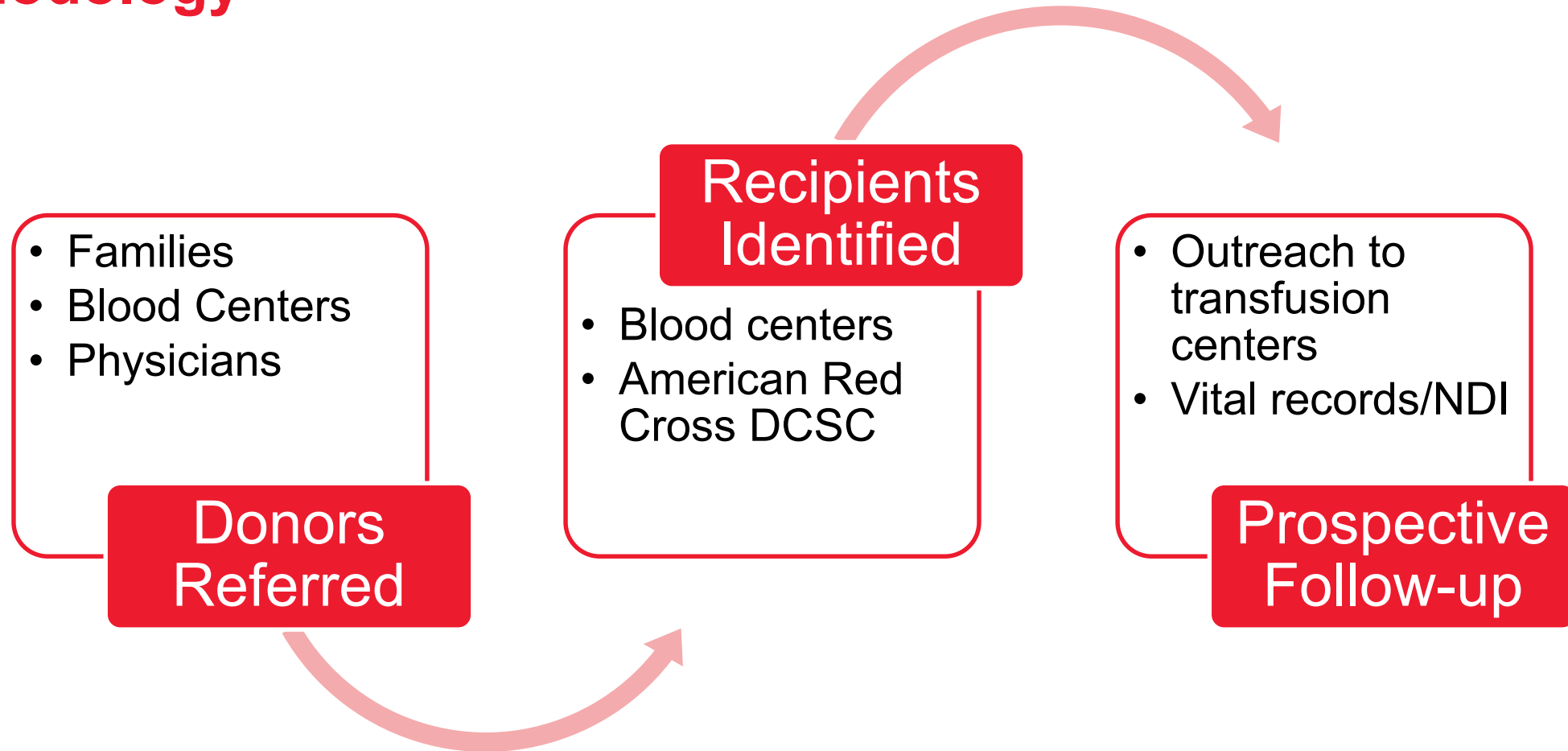
**American  
Red Cross**

# Background & Policy Timeline

- Variant CJD known to be transmitted through transfusion
- Concerns in the early 1990's prompted the development of the US CJD Lookback Study to assess for transfusion-transmission risk of non-variant CJD



# Methodology



# Results

## 84 Blood Donors

- 63 Male; 20 Female
- Mean age: 62 years
- 2235 total donations from 19xx-2021
- 3284 total transfusable components distributed



# Results

- 1245 Traceable Recipients
  - 619 Male; 596 Female
  - Mean age at transfusion: 59 years
  - Mean age at death: 70 years
  - 6795 Person-Years of follow-up
    - 428 5+ years
    - 78 20+ years
  - 973 Deceased
- Special interest groups
  - 641 received donation within 5 years of donor's diagnosis/death
  - 438 recipients have survived for 5+ years following their transfusion
  - 182 fall into both of these categories

**\*\*No recipients have CJD listed as a cause of death\*\***

# Conclusions

- Our study finds no evidence for transmission of non-variant CJD by blood transfusion.
- The absence of evidence to support transfusion transmission of CJD is consistent with other studies
- The risk, if any, of transfusion transmission of CJD is theoretical



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# Supporting Policy Change - CJD

- Exposure of transfusion recipients to blood from asymptomatic CJD donors has been demonstrated. No transfusion-transmitted cases of CJD have been reported, and the risk of such transmission remains theoretical.
- Five case-control studies of over 600 CJD cases,
- Two autopsy studies of patients with hemophilia,
- A large binational cohort study, and
- Two ongoing lookback studies tracing recipients of components collected from donors later found to have CJD.
  - 13 sCJD blood donors with transfusions to 1425 recipients
  - 1 iCJD donor linked to eight recipients
  - 6 fCJD donor linked to 38 recipients



# Supporting Policy Change - vCJD

- Geographic deferral recommendations for vCJD risk based on new information in the risk assessments published by U.K.'s SaBTO and MHRA.
  - In the UK, the current risk of vCJD transmission by blood and blood components would expose transfusion recipients to no or minimal additional risk of vCJD in the future, and, for blood components that are leukocyte reduced, the possible risk is even further reduced
- 4 cases of vCJD transmitted by blood transfusion in the UK

*Thank you*



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