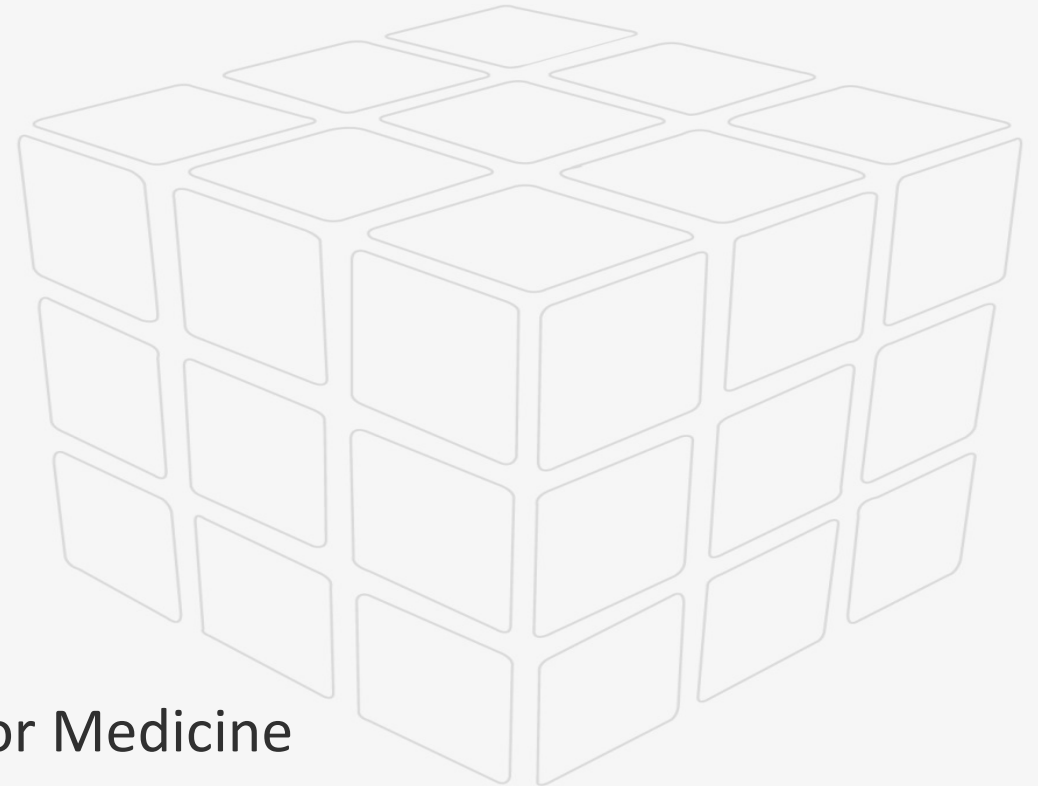


# Chlorhexidine- a cause of allergic reactions in blood donors



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## **Other contributors:**

Dr. JB Muller- Specialty Doctor, Clinical Support Team, NHSBT

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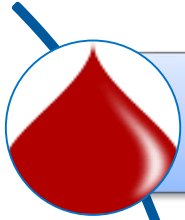
Dr. Nicky Anderson, Associate Medical Director, Blood Donation  
and

Dr. Gail Miflin Medical and Research Director, NHSBT

***Disclaimers: None***

**Caring Expert Quality**

# Background



Around 1.8million blood donations are collected by NHSBT annually



Since 2006, ChloraPrep (2% Chlorhexidine gluconate and 70% Isopropyl alcohol) is the only skin disinfectant used



Allergic or irritation skin reactions are very rare (<1/10,000)



Reactions are reported via the Yellow Card Scheme to the Medicines and Healthcare products Regulatory Agency(MHRA).

# Aim of this study:



# Methodology

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Data between 2012-2016 analysed

A red arrow graphic pointing to the right, with a white rectangular box in the center containing the text. The arrow has a red border and a red fill with a diagonal line pattern.

All relevant policies, documents and practices were also reviewed

# Current practice with any donors suspected of a reaction to chlorhexidine

Reviewed by nurse on session- donor assessment and management as appropriate

Donor provided with post donation advice and card

Reaction documented on donor health check with product and reaction details and permanent withdrawal donation instruction applied

Logged as Quality incident, Clinical Support team(CST) informed as needed. QA report these to MHRA via the Yellow Card system. CST follow up donor via phone calls as appropriate.

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# Results:



Approximate  
risk of 0.5 per  
10,000 donors

A red circle containing the white number 1, indicating the first point in a list.

Only one donor developed a systemic reaction with shortness of breath and generalized hives warranting hospital referral

A blue circle containing the word 'MAJORITY' in large, 3D blue letters. A small green figure is standing on top of the letters.

In majority (36/46=78%) of the affected donors, symptoms resolved before the donor left the session

A red circle containing a close-up of a red computer keyboard key with the word 'persistent' and a downward arrow.

Six donors had some persistent symptoms for a variable period of time post exposure

# Impact

3 donors with a localized reaction following previous donations developed recurrent and worsening symptoms after subsequent donations

6 donors with non specific localized symptoms continued to donate with no recurrent of symptoms

40/46  
(87%)  
donors permanently withdrawn from further donations

*No further information was available in any of the donors regarding further investigations including allergen skin testing*



Uniformity in  
advice



Challenges in  
diagnosis



Alert



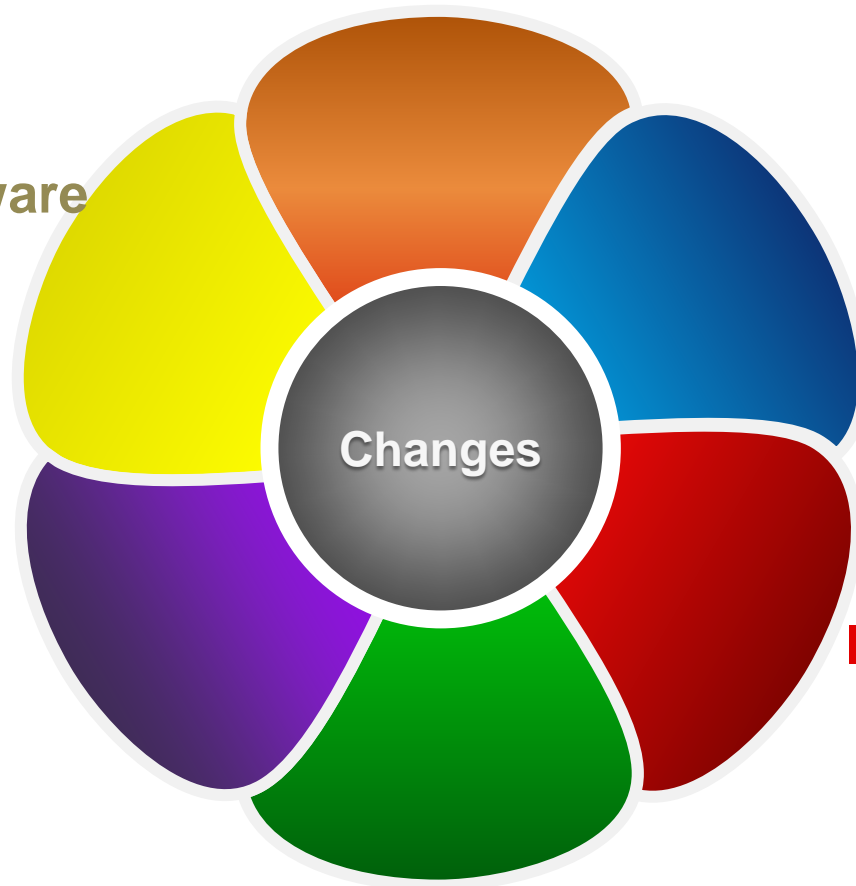
Communicate

Potential areas for improvement noted.

**Standardised information letter from  
Clinical team to donors suspected of  
chlorhexidine reactions**

**Relevant documents being  
updated**

**All stakeholders involved aware  
of the study and changes**

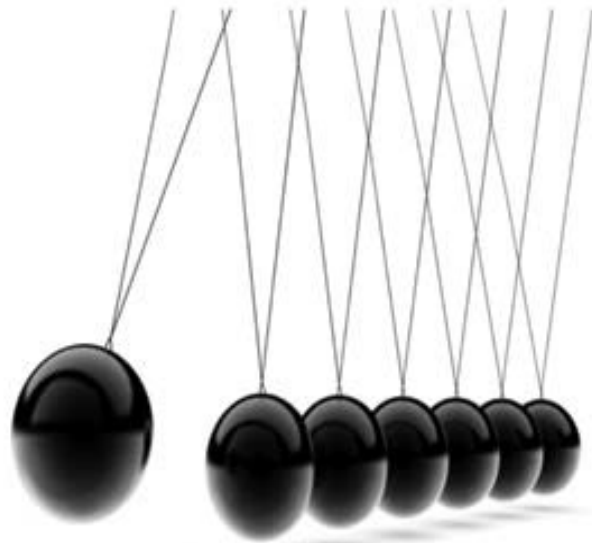


**Improving donor safety**

**Adequate dissemination of  
information and  
empowerment of staff**

**Education and training**

We are what we repeatedly  
do. Excellence, then, is not an  
act, but a habit



— Delivering Results —



MAKE A DIFFERENCE



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