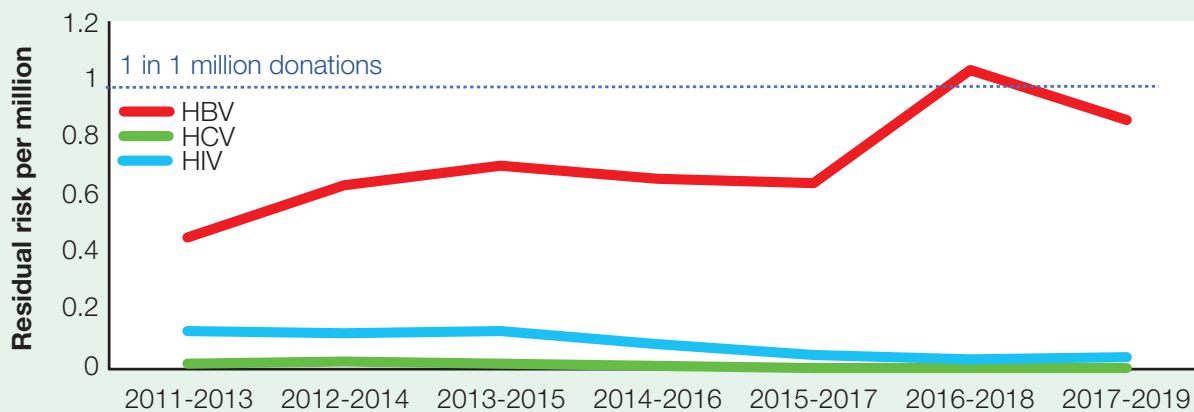


## Undetected HBV, HCV and HIV – the Risk in the UK Blood Supply, 2019

- **residual risk** is the risk that very recently acquired viral infections in blood donations may not be picked up on testing if they are in the window period of the test
- **residual risk** is estimated based on number of recent infections and length of the window period

In 2018 an increase in recent HBV led to a rise in the HBV residual risk for 2016-2018. The 7 recent infections picked up were not associated with the change to a 3-month sex deferral in November 2017.

UK 2017-2019	Recent infection repeat donors	Window period	Estimated residual risk per million	1 positive donation not detected every
HBV	10	30 days	0.87	6 months
HCV	1	4 days	<0.01	76 years
HIV	5	9 days	0.04	12 years



Estimated risks were used to monitor the impact of the changes in donor selection for sex between men in 2011 and 2017.



**November 2011: 12-month deferral**  
HIV and HCV risk decline HBV risk remains stable

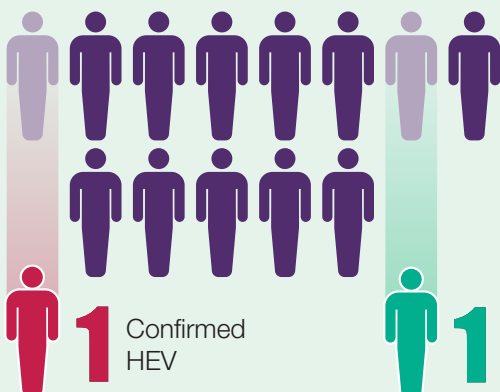


**November 2017: 3-month deferral**  
Initial increase in HBV risk not sustained

### Transfusion transmitted infections (TTI)

Observed transfusion transmitted HBV, HCV and HIV infections are lower than expected from the estimated risks

**13** Suspected viral TTI investigations



- 2<sup>nd</sup> confirmed HEV TTI since universal screening began in 2017, both apheresis platelets
- 12 HEV TTIs have been confirmed through routine surveillance since 1996
- HEV increasing in the general population but no specific deferral for HEV risk since diet is the main source
- HBV TTI from red cells not confirmed as it wasn't possible to genotype the virus from the donor's blood
- 12 HBV TTIs have been confirmed through routine surveillance since 1996
- low incidence in the general population and deferrals are in place that reduce TTI risk

For more details see the annual SHOT report: [www.shotuk.org](http://www.shotuk.org)