Hepatitis E and blood donation safety in selected European countries: a shift to screening?
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Abstract
The public health implications of hepatitis E virus (HEV) in Europe have changed due to increasing numbers of hepatitis E cases and recent reports of chronic, persistent HEV infections associated with progression to cirrhosis in immunosuppressed patients. The main infectious risk is exposure to undercooked infected pork products and blood transfusion.

This article summarizes the epidemiology of HEV infections among blood donors and also outlines strategies to prevent transfusion-transmitted HEV, in 11 European countries. In response to the threat posed by HEV and related public and political concerns, most of the observed countries determined seroprevalence of HEV in donors and presence of HEV RNA in blood donations.

| Country       | HEV RNA positive donations | Reported TT* HEV infections | Screening of blood donors                                      |
|---------------|-----------------------------|----------------------------|----------------------------------------------------------------|
| Denmark       | 1:2,331                     | Not recommended            |                                                                 |
| France        | 1:2,218                     | yes                        | Under consideration - for now testing part of plasma products for use in patient at risk |
| Germany       | 1:1,241                     | yes                        | Under consideration - for now general screening in some blood centers |
| Greece        | N/A                         |                            | In evaluation                                                  |
| Ireland       | 1:2,778                     |                            | Implemented - universal screening since 2016                  |
| Italy         | N/A                         |                            | In evaluation                                                  |
| The Netherlands | 1:726                       |                            | In implementation - universal screening planned to start in 2017 |
| Portugal      | N/A                         |                            | In evaluation                                                  |
| Spain         | 1:3,333                     | yes                        | In evaluation                                                  |
| Switzerland   | N/A                         |                            | Under consideration                                            |
| United Kingdom | 1:340 - 5,000               | yes                        | Implemented - universal screening since 2017                  |

France, Germany, Spain and the United Kingdom (UK) reported cases of transfusion-transmitted HEV. Ireland and the UK have already implemented HEV RNA screening of blood donations; the Netherlands will start in 2017. Germany and France perform screening for HEV RNA in several blood establishments or plasma donations intended for use in high-risk patients respectively and, with Switzerland, are considering implementing selective or universal screening nationwide. In Greece, Portugal, Italy and Spain, the blood authorities are evaluating the situation. Denmark decided not to implement the HEV screening of blood donations.

Comment
This article demonstrates that the handling of HEV is a highly discussed topic since it was shown to be endemic in Europe. The recomWell IgG / IgM and the ampliCube HEV 2.0 kits from Mikrogen have been used in several of the mentioned seroprevalence studies (see full article).

Some European countries have already implemented a universal blood donor screening for HEV; in many others it is under consideration. The sensitivity of the ampliCube HEV 2.0 kit allows a pool screening strategy and therefore meets the requirements for blood donor screening perfectly.