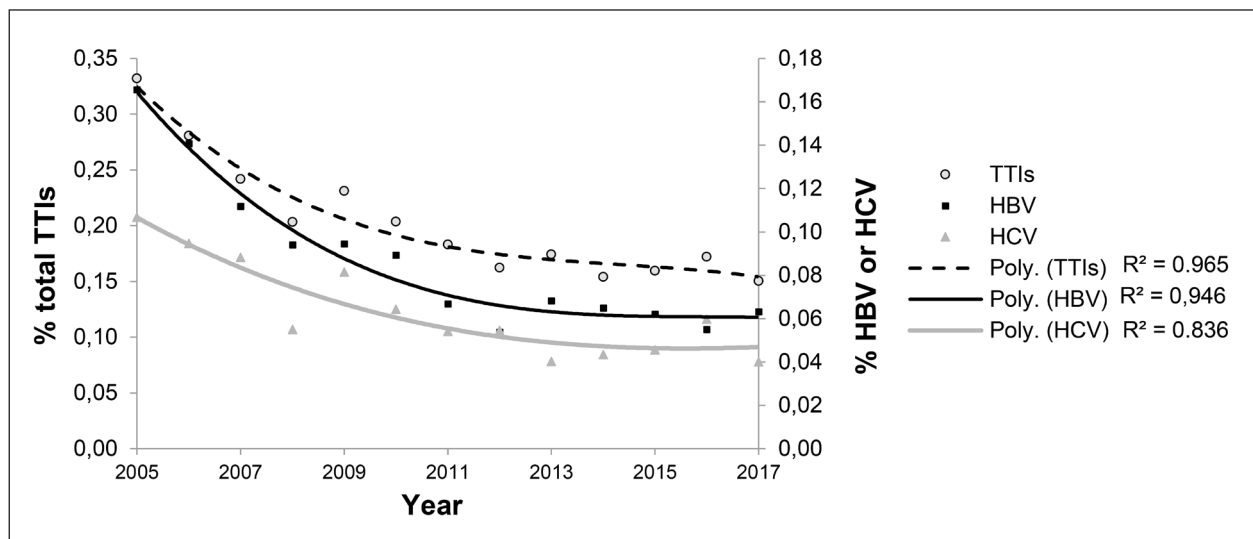


## Online Supplementary Content

**Table SI** - Commercial kit used for serological detection of transfusion-transmitted infection (TTI)-positive blood donations.

|  |
|--|
| Siemens, Enzygnost Anti-HCV 4.0, Germany                     |
| Siemens, Enzygnost Syphilis, Germany                         |
| Siemens, Enzygnost HIV Integral 4, Germany                   |
| Siemens, Enzygnost HBsAg 6.0, Germany                        |
| Genscreen Ultra HIV Ag-Ab, BioRad, France                    |
| Monolisa HBsAg ULTRA, BioRad, France                         |
| Monolisa HCV Ag-Ab ULTRA V2, BioRad, France                  |
| Syphilis EIA II Total antibody, BioRad, France               |
| Architect HBsAg Qualitative II, Abbott, USA                  |
| Architect Syphilis TP, Abbott, USA                           |
| Architect HIV Ab/Ag Combo, Abbott, USA                       |
| Architect Anti-HCV, Abbott, USA                              |
| ADVIA Centaur HBsAg Assay, Germany                           |
| ADVIA Centaur HCV assay, Germany                             |
| ADVIA Centaur HIV Ag/Ab Combo assay, Germany                 |
| ADVIA centaur XP syphilis assay, Germany                     |
| INNO-LIA HCV Score, Fujirebio Europe N.V. Belgium            |
| INNO-LIA HIV I/II Score, Fujirebio Europe N.V. Belgium       |
| INNO-LIA Syphilis Score, Fujirebio Europe N.V. Belgium       |
| Euroimmun Anti-Treponema pallidum EUROLINE-WB (IgG), Germany |
| Euroimmun Anti-Treponema pallidum EUROLINE-WB (IgM), Germany |
| HBsAg confirmatory V.1, Architect system, Abbott, Ireland    |



**Figure S1** - Polynomial regression analysis of trends in seroprevalence of total transfusion-transmitted infections (TTIs), and hepatitis B virus (HBV) and hepatitis C virus (HCV)-positive blood donations in the four largest transfusion centres in Serbia, 2005-2017.

**Table SII** - Total number of blood donations and number of blood donations with transfusion-transmissible infections in Serbia, 2005-2017.

|        | Year  | Total blood donations | N. of TTI-positive blood donations |            |            |                 |             |
|--------|-------|-----------------------|------------------------------------|------------|------------|-----------------|-------------|
|        |       |                       | <i>HBV</i>                         | <i>HCV</i> | <i>HIV</i> | <i>Syphilis</i> | <i>TTIs</i> |
| Serbia | 2005  | 125,480               | 208                                | 134        | 11         | 64              | 417         |
|        | 2006  | 121,411               | 171                                | 115        | 17         | 38              | 341         |
|        | 2007  | 126,881               | 142                                | 112        | 6          | 47              | 307         |
|        | 2008  | 130,711               | 123                                | 72         | 21         | 50              | 266         |
|        | 2009  | 130,082               | 123                                | 106        | 19         | 53              | 301         |
|        | 2010  | 132,024               | 118                                | 85         | 18         | 48              | 269         |
|        | 2011  | 125,470               | 84                                 | 68         | 24         | 54              | 230         |
|        | 2012  | 126,198               | 68                                 | 69         | 11         | 57              | 205         |
|        | 2013  | 128,975               | 88                                 | 52         | 17         | 68              | 225         |
|        | 2014  | 129,133               | 84                                 | 56         | 15         | 44              | 199         |
|        | 2015  | 127,029               | 79                                 | 58         | 22         | 44              | 203         |
|        | 2016  | 127,049               | 70                                 | 76         | 16         | 57              | 219         |
|        | 2017  | 129,576               | 82                                 | 52         | 18         | 43              | 195         |
|        | Total | 1,660,019             | 1,440                              | 1,055      | 215        | 667             | 3,377       |

N: number; HBV: hepatitis B virus; HCV: hepatitis C virus; HIV: human immunodeficiency virus; TTIs: transfusion-transmissible infections.

**Table SIII** - Total number of blood donations and number of blood donations with transfusion-transmissible infections in each of the four largest transfusion centres in Serbia, 2005-2017.

|                 | Year  | Total blood donations | N. of TTI-positive blood donation |     |     |          |       |
|-----------------|-------|-----------------------|-----------------------------------|-----|-----|----------|-------|
|                 |       |                       | HBV                               | HCV | HIV | Syphilis | TTIs  |
| Novi Sad        | 2005  | 30,452                | 19                                | 13  | 0   | 11       | 43    |
|                 | 2006  | 28,689                | 17                                | 10  | 2   | 5        | 34    |
|                 | 2007  | 31,433                | 12                                | 6   | 0   | 4        | 22    |
|                 | 2008  | 34,272                | 16                                | 4   | 0   | 3        | 23    |
|                 | 2009  | 34,059                | 11                                | 8   | 1   | 2        | 22    |
|                 | 2010  | 35,723                | 14                                | 11  | 1   | 5        | 31    |
|                 | 2011  | 29,501                | 7                                 | 2   | 1   | 1        | 11    |
|                 | 2012  | 27,882                | 3                                 | 7   | 0   | 3        | 13    |
|                 | 2013  | 28,695                | 9                                 | 5   | 1   | 5        | 20    |
|                 | 2014  | 26,499                | 11                                | 6   | 0   | 2        | 19    |
|                 | 2015  | 26,485                | 4                                 | 5   | 0   | 5        | 14    |
|                 | 2016  | 27,552                | 5                                 | 7   | 3   | 3        | 18    |
|                 | 2017  | 26,772                | 3                                 | 1   | 1   | 3        | 8     |
|                 | Total | 388,014               | 131                               | 85  | 10  | 52       | 278   |
| Belgrade<br>BTI | 2005  | 59,063                | 112                               | 52  | 4   | 30       | 198   |
|                 | 2006  | 56,560                | 70                                | 54  | 3   | 17       | 144   |
|                 | 2007  | 58,568                | 69                                | 45  | 1   | 18       | 133   |
|                 | 2008  | 59,126                | 51                                | 32  | 2   | 20       | 105   |
|                 | 2009  | 58,210                | 51                                | 31  | 1   | 14       | 97    |
|                 | 2010  | 58,037                | 47                                | 29  | 2   | 13       | 91    |
|                 | 2011  | 60,665                | 37                                | 23  | 3   | 20       | 83    |
|                 | 2012  | 62,416                | 33                                | 34  | 2   | 21       | 90    |
|                 | 2013  | 64,121                | 39                                | 31  | 3   | 16       | 89    |
|                 | 2014  | 64,864                | 31                                | 29  | 5   | 15       | 80    |
|                 | 2015  | 63,440                | 42                                | 20  | 6   | 13       | 81    |
|                 | 2016  | 64,456                | 30                                | 26  | 4   | 23       | 83    |
|                 | 2017  | 66,872                | 38                                | 27  | 6   | 26       | 97    |
|                 | Total | 796,398               | 650                               | 433 | 42  | 246      | 1,371 |
| Belgrade<br>MMA | 2005  | 18,073                | 51                                | 30  | 1   | 8        | 90    |
|                 | 2006  | 18,113                | 46                                | 22  | 1   | 8        | 77    |
|                 | 2007  | 19,084                | 40                                | 29  | 1   | 13       | 83    |
|                 | 2008  | 18,081                | 43                                | 24  | 1   | 10       | 78    |
|                 | 2009  | 17,166                | 36                                | 33  | 1   | 13       | 83    |
|                 | 2010  | 17,401                | 31                                | 15  | 1   | 16       | 63    |
|                 | 2011  | 14,440                | 24                                | 14  | 0   | 8        | 46    |
|                 | 2012  | 16,583                | 17                                | 13  | 1   | 7        | 38    |
|                 | 2013  | 16,538                | 21                                | 7   | 1   | 10       | 39    |
|                 | 2014  | 18,004                | 28                                | 7   | 0   | 11       | 46    |
|                 | 2015  | 18,609                | 15                                | 11  | 0   | 13       | 39    |
|                 | 2016  | 16,461                | 17                                | 7   | 0   | 8        | 32    |
|                 | 2017  | 16,673                | 18                                | 4   | 0   | 3        | 25    |
|                 | Total | 225,226               | 387                               | 216 | 8   | 128      | 739   |
| Niš             | 2005  | 17,892                | 26                                | 39  | 6   | 15       | 86    |
|                 | 2006  | 18,049                | 38                                | 29  | 11  | 8        | 86    |
|                 | 2007  | 17,796                | 21                                | 32  | 4   | 12       | 69    |
|                 | 2008  | 19,232                | 13                                | 12  | 18  | 17       | 60    |
|                 | 2009  | 20,647                | 25                                | 34  | 16  | 24       | 99    |
|                 | 2010  | 20,863                | 26                                | 30  | 14  | 14       | 84    |
|                 | 2011  | 20,864                | 16                                | 29  | 20  | 25       | 90    |
|                 | 2012  | 19,317                | 15                                | 15  | 8   | 26       | 64    |
|                 | 2013  | 19,621                | 19                                | 9   | 12  | 37       | 77    |
|                 | 2014  | 19,766                | 14                                | 14  | 10  | 16       | 54    |
|                 | 2015  | 18,495                | 18                                | 22  | 16  | 13       | 69    |
|                 | 2016  | 18,580                | 18                                | 36  | 9   | 23       | 86    |
|                 | 2017  | 19,259                | 23                                | 20  | 11  | 11       | 65    |
|                 | Total | 250,381               | 272                               | 321 | 155 | 241      | 989   |

N: number; TTIs: transfusion-transmissible infections; HBV: hepatitis B virus; HCV: hepatitis C virus; HIV: human immunodeficiency virus; Novi Sad: Blood Transfusion Institute of Vojvodina, Novi Sad; Belgrade IBT: Blood Transfusion Institute of Serbia, Belgrade; Belgrade MMA: Institute for Transfusiology and Haemobiology of the Military Medical Academy, Belgrade; Niš: Blood Transfusion Institute, Clinical Centre Niš, Niš.