Summary of the 2018 ERA-EDTA Registry Annual Report
National and regional renal registries that contributed data to the 2018 ERA-EDTA Registry Annual Report

- Red: Renal registries contributing with individual patient data
- Orange: Renal registries contributing with aggregated data
Incident patients accepted for RRT in 2018, at day 1 by country
Incident patients accepted for RRT in 2018 at day 1 by country.

Unadjusted incidence:
renal registries providing individual patient data

- Estonia: 73
- Montenegro: 74
- Iceland: 79
- Serbia: 88
- Finland: 92
- Switzerland: 103
- Norway: 103
- Spain, Aragon: 107
- Sweden: 108
- Spain, Navarre: 110
- UK, Scotland: 113
- Spain, Basque country: 115
- Denmark: 116
- UK, England: 117
- Spain, Castile-La Mancha: 119
- Austria: 120
- UK, Northern Ireland: 121
- the Netherlands: 123
- Bosnia and Herzegovina: 123
- UK, Wales: 123
- Spain, Community of Madrid: 133
- Spain, Castile and Leon: 139
- Spain, Andalusia: 143
- Spain, Galicia: 145
- Spain, Extremadura: 147
- Spain, Murcia: 149
- Spain, Cantabria: 151
- Spain, Valencian region: 158
- Spain, Asturias: 167
- France: 169
- Spain, Canary Islands: 174
- Belgium, Dutch-speaking: 180
- Romania: 183
- Spain, Catalonia: 183
- Belgium, French-speaking: 203
- Greece: 264
- All countries: 145

Unadjusted incidence:
renal registries providing aggregated data

- Ukraine: 37
- Belarus: 83
- Russia: 83
- Latvia: 107
- Lithuania: 112
- Albania: 140
- Spain (All): 148
- Turkey: 149
- Bulgaria: 156
- Italy (7 of 20 regions): 157
- Slovakia: 165
- North Macedonia: 168
- Kosovo: 175
- Israel: 194
- Czech Republic: 227
- Portugal: 256
- Cyprus: 256
- All countries: 119

*a* patients younger than 20 years of age are not included; *b* the incidence is underestimated by 2%; *c* data includes patients receiving dialysis only.
Adjusting incidence
renal registries providing individual patient data

- Estonia: 76
- Montenegro: 78
- Serbia: 82
- Finland: 89
- Iceland: 96
- Spain, Aragon: 102
- Switzerland: 104
- Spain, Basque country: 106
- Spain, Navarre: 107
- Sweden: 110
- Norway: 112
- UK, Scotland: 114
- Denmark: 118
- Austria: 121
- Spain, Castile and León: 122
- the Netherlands: 122
- UK, England: 125
- Spain, Galicia: 128
- UK, Wales: 135
- Bosnia and Herzegovina: 138
- Spain, Asturias: 138
- Spain, Extremadura: 142
- Spain, Community of Madrid: 149
- Spain, Andalusia: 151
- Spain, Valencian region: 155
- Spain, Murcia: 167
- France: 167
- Belgium, Dutch-speaking: 169
- Spain, Canary Islands: 183
- Romania: 184
- Spain, Catalonia: 185
- Belgium, French-speaking: 222
- Greece: 231
- All countries: 144

Incidence (per million population)

- patients younger than 20 years of age are not included; ② the incidence is underestimated by 2%; ③ data includes patients receiving dialysis only

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Adjusting incidence
renal registries providing aggregated data

- Russia: 87
- Latvia: 106
- Lithuania: 113
- Italy (7 of 20 regions): 135
- Spain (All): 141
- Albania: 153
- Slovakia: 158
- Cyprus: 187
- North Macedonia: 233
- Israel: 260
- Kosovo: 291
- All countries: 385

Incidence (per million population)
Mean age at start of RRT
renal registries providing individual patient data

Mean age at start of RRT
renal registries providing aggregated data

patients younger than 20 years of age are not included;  b data includes patients receiving dialysis only
Incident patients accepted for RRT in 2018, at day 1
registries providing individual patient data only

Mean age at start of RRT

**male patients**

- Montenegro: 61.6
- Estonia: 61.2
- Iceland: 61.2
- Serbia: 61.2
- UK, Scotland: 60.6
- Finland: 60.6
- Bosnia and Herzegovina: 60.6
- Sweden: 60.6
- Spain, Murcia: 60.6
- UK, England: 60.6
- Spain, Andalusia: 60.6
- Spain, Extremadura: 60.6
- Denmark: 60.6
- UK, Wales: 60.6
- the Netherlands: 60.6
- Austria: 60.6
- Spain, Basque country: 60.6
- Norway: 60.6
- Spain, Canary Islands: 60.6
- Spain, Catalonia: 60.6
- UK, Northern Ireland: 60.6
- Spain, Castile-La Mancha: 60.6
- Spain, Galicia: 60.6
- Switzerland: 60.6
- Spain, Asturias: 60.6
- Spain, Aragon: 60.6
- Spain, Navarre: 60.6
- Spain, Basque country: 60.6
- Spain, Valencia region: 60.6
- Spain, Community of Madrid: 60.6
- Spain, Aragon: 60.6
- Belgium, French-speaking: 60.6
- Spain, Castile and Leon: 60.6
- Spain, Navarre: 60.6
- Spain, Cantabria: 60.6
- Greece: 60.6
- Belgium, Dutch-speaking: 60.6
- All countries: 65.5

**female patients**

- Montenegro: 54.6
- Estonia: 59.6
- UK, Scotland: 60.1
- UK, England: 61.0
- Spain, Andalusia: 61.4
- Spain, Murcia: 61.6
- Norway: 61.6
- Iceland: 61.9
- UK, Northern Ireland: 62.4
- Spain, Castile-La Mancha: 62.4
- Spain, Galicia: 62.8
- Denmark: 62.8
- UK, Wales: 62.8
- Spain, Canary Islands: 63.2
- the Netherlands: 63.2
- Sweden: 63.6
- Austria: 63.7
- Spain, Basque country: 64.2
- Australia: 64.2
- Spain, Community of Madrid: 64.3
- Spain, Galicia: 64.8
- Switzerland: 64.8
- Spain, Asturias: 64.9
- Spain, Aragon: 65.3
- Spain, Navarre: 65.4
- Spain, Valencia region: 65.8
- Spain, Castile-La Mancha: 66.6
- Spain, Asturias: 66.6
- Spain, Aragon: 67.0
- Spain, Castile and Leon: 67.1
- Spain, Basque country: 68.9
- Spain, Cantabria: 69.5
- Belgium, French-speaking: 69.8
- Belgium, Dutch-speaking: 70.9
- Greece: 71.1
- All countries: 65.0

*a patients younger than 20 years of age are not included; † data includes patients receiving dialysis only*
Incident patients accepted for RRT in 2018, at day 1

by age category

Incidence by age category
for all registries

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Incidence (per million age-related population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>75+</td>
<td>353.1</td>
</tr>
<tr>
<td>65-74</td>
<td>319.7</td>
</tr>
<tr>
<td>45-64</td>
<td>156.2</td>
</tr>
<tr>
<td>20-44</td>
<td>48.6</td>
</tr>
<tr>
<td>0-19</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Incidence by age category
by type of data provided by registry

<table>
<thead>
<tr>
<th>Data Type</th>
<th>All countries</th>
<th>Individual data</th>
<th>Aggregated data</th>
</tr>
</thead>
<tbody>
<tr>
<td>75+</td>
<td>25</td>
<td>26</td>
<td>18</td>
</tr>
<tr>
<td>65-74</td>
<td>30</td>
<td>28</td>
<td>24</td>
</tr>
<tr>
<td>45-64</td>
<td>39</td>
<td>31</td>
<td>18</td>
</tr>
<tr>
<td>20-44</td>
<td>34</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>0-19</td>
<td>18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Incident patients accepted for RRT in 2018, at day 1

by sex

Incidence by sex
for all registries

Incidence by sex
by type of data provided by registry

Women
Men

Incidence (per million population)

0 50 100 150 200

All countries
Individual data
Aggregated data

38 62
36 64
41 59

Women
Men
Incident patients accepted for RRT in 2018, at day 1 by primary renal disease.

Incidence by primary renal disease for all registries:
- Unknown/missing: 23.4
- Miscellaneous: 24.5
- Renal vascular disease: 2.1
- Hypertension: 16.4
- Diabetes mellitus: 27.7
- Polycystic kidneys, adult type: 6.8
- Pyelonephritis: 7.3
- Glomerulonephritis/sclerosis: 15.9

Incidence by primary renal disease by type of data provided by registry:

- All countries:
  - Unknown/missing: 27
  - Miscellaneous: 21
  - Renal vascular disease: 16
  - Hypertension: 10
  - Diabetes mellitus: 1
  - Polycystic kidneys, adult type: 20
  - Pyelonephritis: 5
  - Glomerulonephritis/sclerosis: 12

- Individual data:
  - Unknown/missing: 5
  - Miscellaneous: 6
  - Renal vascular disease: 5
  - Hypertension: 5
  - Diabetes mellitus: 5
  - Polycystic kidneys, adult type: 23
  - Pyelonephritis: 5
  - Glomerulonephritis/sclerosis: 5

- Aggregated data:
  - Unknown/missing: 11
  - Miscellaneous: 11
  - Renal vascular disease: 10
  - Hypertension: 5
  - Diabetes mellitus: 5
  - Polycystic kidneys, adult type: 19
  - Pyelonephritis: 5
  - Glomerulonephritis/sclerosis: 5
Incident patients accepted for RRT in 2018, at day 1
by primary renal disease and age category

Incidence by primary renal disease
patients from registries providing individual patient data only

all patients
- Glomerulonephritis/sclerosis, 11%
- Pyelonephritis, 5%
- Polycystic kidneys, adult type, 5%
- Diabetes mellitus, 22%
- Hypertension, 17%
- Miscellaneous, 18%
- Renal vascular disease, 2%
- Unknown/missing, 20%

patients younger than 65 years of age at the start of RRT
- Unkn/miss, 18%
- GN, 16%
- PN, 5%
- PKD, 10%
- DM, 20%
- HT, 10%
- RVD, 1%

patients aged 65 years or older at the start of RRT
- Unkn/miss, 22%
- GN, 7%
- PN, 4%
- PKD, 3%
- DM, 23%
- HT, 21%
- RVD, 3%
Incident patients accepted for RRT in 2018, at day 91
by established modality

Incidence at day 91 by established modality
for all registries

- Haemodialysis: 102.6
- Peritoneal dialysis: 15.7
- Transplant: 6.2
- Unknown/missing: 0.1

Incidence at day 91 by established modality
by type of data provided by registry

- All countries:
  - Unkn: 5
  - Tx: 13
  - PD: 14
  - HD: 82
- Individual data:
  - Unkn: 6
  - Tx: 80
  - PD: 80
  - HD: 89
- Aggregated data:
  - Unkn: 2
  - Tx: 10
  - PD: 10
  - HD: 89
Incident patients accepted for RRT in 2018, at day 91
by established modality and age category

Incidence at day 91 by established modality
patients from registries providing individual patient data only

- **All patients**
  - Transplant, 5%
  - Peritoneal dialysis, 13%
  - Haemodialysis, 82%

- **Patients younger than 65 years of age at the start of RRT**
  - Transplant, 10%
  - Peritoneal dialysis, 15%
  - Haemodialysis, 75%

- **Patients aged 65 years or older at the start of RRT**
  - Peritoneal dialysis, 12%
  - Transplant, 2%
  - Haemodialysis, 85%
Incident patients accepted for RRT, at day 1
last 20 years (1999-2018)

Unadjusted incidence over time
all patients starting RRT

Adjusted incidence over time
all patients starting RRT
Incident patients accepted for RRT, at day 1
last 15 years (2004-2018)

Unadjusted incidence over time
all patients starting RRT

Adjusted incidence over time
all patients starting RRT
Incident patients accepted for RRT, at day 1
last 10 years (2009-2018)

Unadjusted incidence over time
all patients starting RRT

Adjusted incidence over time
all patients starting RRT

Incidence (per million population)

Incident patients accepted for RRT, at day 1

last 5 years (2014-2018)

Unadjusted incidence over time
all patients starting RRT

Adjusted incidence over time
all patients starting RRT
Prevalent patients on RRT in 2018 by country

Legend:
- <750 pmp
- 750-999 pmp
- 1000-1499 pmp
- ≥ 1500 pmp
- No data available
Prevalent patients on RRT in 2018 by country

Unadjusted prevalence
renal registries providing individual patient data

- Montenegro: 313
- Serbia: 730
- Estonia: 744
- Iceland: 754
- Bosnia and Herzegovina: 64
- Finland: 764
- Denmark: 926
- Switzerland: 947
- UK, England: 949
- UK, Scotland: 974
- Norway: 979
- Sweden: 1003
- UK, Northern Ireland: 1015
- UK, Wales: 1031
- the Netherlands: 1057
- Austria: 1086
- Romania: 1140
- Spain, Cantabria: 1185
- Spain, Community of Madrid: 1188
- Spain, Castile-La Mancha: 1222
- Spain, Extremadura: 1236
- Spain, Basque country: 1252
- Spain, Andalusia: 1256
- Belgium, Dutch-speaking: 1287
- Spain, Castile and Leon: 1298
- Spain, Aragon: 1299
- Spain, Navarre: 1337
- France: 1349
- Belgium, French-speaking: 1353
- Greece: 1366
- Spain, Asturias: 1371
- Spain, Murcia: 1382
- Spain, Galicia: 1412
- Spain, Canary Islands: 1460
- Spain, Catalonia: 1469
- Spain, Valencian region: 1547

All countries: 1153

Unadjusted prevalence
renal registries providing aggregated data

- Ukraine: 229
- Russia: 411
- Belarus: 432
- Kosovo: 477
- Albania: 564
- Bulgaria: 638
- Slovakia: 659
- Israel: 760
- Latvia: 778
- Lithuania: 834
- North Macedonia: 868
- Turkey: 988
- Italy (7 of 20 regions): 1212
- Czech Republic: 1220
- Spain (All): 1322
- Portugal: 2011

All countries: 754

* patients younger than 20 years of age are not included; ¹ the prevalence is underestimated by 1%; ² data includes patients receiving dialysis only
Prevalent patients on RRT in 2018
by country
adjusted for age and sex

Adjusted prevalence
renal registries providing individual patient data

Prevalence (per million population)

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Adjusted prevalence
renal registries providing aggregated data

Prevalence (per million population)

* patients younger than 20 years of age are not included; ** the prevalence is underestimated by 1%; *** data includes patients receiving dialysis only
Prevalent patients on RRT in 2018

Mean age on 31 December 2018
renal registries providing individual patient data

<table>
<thead>
<tr>
<th>Country</th>
<th>Mean Age (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iceland</td>
<td>56.3</td>
</tr>
<tr>
<td>Montenegro</td>
<td>57.0+a</td>
</tr>
<tr>
<td>UK, Scotland</td>
<td>57.1</td>
</tr>
<tr>
<td>Estonia</td>
<td>57.3</td>
</tr>
<tr>
<td>UK, England</td>
<td>59.0+a</td>
</tr>
<tr>
<td>Denmark</td>
<td>59.1</td>
</tr>
<tr>
<td>UK, Northern Ireland</td>
<td>59.3+a</td>
</tr>
<tr>
<td>UK, Wales</td>
<td>59.6+a</td>
</tr>
<tr>
<td>Finland</td>
<td>59.6</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>59.9</td>
</tr>
<tr>
<td>Norway</td>
<td>60.0</td>
</tr>
<tr>
<td>Serbia</td>
<td>60.0</td>
</tr>
<tr>
<td>Sweden</td>
<td>60.3</td>
</tr>
<tr>
<td>the Netherlands</td>
<td>60.8</td>
</tr>
<tr>
<td>Spain, Andalusia</td>
<td>60.9</td>
</tr>
<tr>
<td>Spain, Canary Islands</td>
<td>61.8</td>
</tr>
<tr>
<td>Austria</td>
<td>62.0</td>
</tr>
<tr>
<td>Spain, Basque country</td>
<td>62.2</td>
</tr>
<tr>
<td>Spain, Community of Madrid</td>
<td>62.3</td>
</tr>
<tr>
<td>Spain, Extremadura</td>
<td>62.4</td>
</tr>
<tr>
<td>Spain, Murcia</td>
<td>62.4</td>
</tr>
<tr>
<td>Switzerland</td>
<td>62.5</td>
</tr>
<tr>
<td>Romania</td>
<td>62.6</td>
</tr>
<tr>
<td>Spain, Galicia</td>
<td>63.1</td>
</tr>
<tr>
<td>Spain, Navarre</td>
<td>63.2+a</td>
</tr>
<tr>
<td>France</td>
<td>63.2</td>
</tr>
<tr>
<td>Spain, Catalonia</td>
<td>63.3</td>
</tr>
<tr>
<td>Spain, Castile-La Mancha</td>
<td>63.3+a</td>
</tr>
<tr>
<td>Spain, Cantabria</td>
<td>63.4+a</td>
</tr>
<tr>
<td>Spain, Valencian region</td>
<td>63.5</td>
</tr>
<tr>
<td>Spain, Aragon</td>
<td>63.8</td>
</tr>
<tr>
<td>Spain, Asturias</td>
<td>63.9</td>
</tr>
<tr>
<td>Belgium, French-speaking</td>
<td>65.2+a</td>
</tr>
<tr>
<td>Greece</td>
<td>65.4</td>
</tr>
<tr>
<td>Spain, Castile and León</td>
<td>66.4+a</td>
</tr>
<tr>
<td>Belgium, Dutch-speaking</td>
<td>66.4+a</td>
</tr>
<tr>
<td>All countries</td>
<td>61.9</td>
</tr>
</tbody>
</table>

Mean age on 31 December 2018
renal registries providing aggregated data

<table>
<thead>
<tr>
<th>Country</th>
<th>Mean Age (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ukraine</td>
<td>50.7+a</td>
</tr>
<tr>
<td>Albania</td>
<td>51.3</td>
</tr>
<tr>
<td>Latvia</td>
<td>51.5</td>
</tr>
<tr>
<td>Russia</td>
<td>56.8</td>
</tr>
<tr>
<td>North Macedonia</td>
<td>58.8</td>
</tr>
<tr>
<td>Spain (All)</td>
<td>59.9</td>
</tr>
<tr>
<td>Italy (7 of 20 regions)</td>
<td></td>
</tr>
<tr>
<td>Kosovo</td>
<td>62.8</td>
</tr>
<tr>
<td>Slovakia</td>
<td>62.9</td>
</tr>
<tr>
<td>Israel</td>
<td>64.1+c</td>
</tr>
<tr>
<td>Portugal</td>
<td>66.6+c</td>
</tr>
<tr>
<td>All countries</td>
<td>60.0</td>
</tr>
</tbody>
</table>

*p patients younger than 20 years of age are not included; *a data includes patients receiving dialysis only
Prevalent patients on RRT in 2018
for registries providing individual patient data only

Mean age on 31 December 2018

**Male patients**

- Iceland: 57.1
- UK, Scotland: 57.2
- Montenegro: 58.3
- Estonia: 58.4
- UK, England: 59.2
- Denmark: 59.3
- Bosnia and Herzegovina: 59.7
- UK, Northern Ireland: 59.7
- Finland: 59.9
- UK, Wales: 60.0
- Serbia: 60.0
- Spain, Andalusia: 60.5
- Norway: 60.5
- Sweden: 60.8
- the Netherlands: 60.9
- Romania: 62.0
- Austria: 62.0
- Spain, Canaries: 62.0
- Spain, Extremadura: 62.1
- Spain, Murcia: 62.3
- Switzerland: 62.3
- Spain, Basque country: 62.7
- Spain, Community of Madrid: 62.8
- Spain, Galicia: 63.1
- Spain, Castile-La Mancha: 63.1
- Spain, Catalonia: 63.1
- France: 63.2
- Spain, Valencia: 63.4
- Spain, Asturias: 63.5
- Spain, Navarra: 63.6
- Spain, Aragon: 63.6
- Spain, Cantabria: 63.6
- Belgium, French-speaking: 65.1
- Spain, Castile and Leon: 65.3
- Belgium, Dutch-speaking: 66.2

**Female patients**

- Iceland: 55.0
- Montenegro: 55.2
- UK, Scotland: 57.1
- Estonia: 58.2
- UK, England: 58.6
- UK, Northern Ireland: 58.8
- Norway: 58.9
- Denmark: 59.0
- UK, Wales: 59.0
- Sweden: 59.0
- Finland: 59.2
- Serbia: 60.1
- the Netherlands: 60.9
- Bosnia and Herzegovina: 61.2
- Spain, Cantabria: 61.3
- Spain, Canary Islands: 61.4
- Spain, Extremadura: 61.4
- Spain, Community of Madrid: 61.5
- Spain, Andalusia: 61.5
- Spain, Navarre: 61.6
- Switzerland: 62.0
- Spain, Murcia: 62.3
- Spain, Galicia: 62.6
- Spain, Extremadura: 62.8
- Spain, Aragon: 62.9
- Spain, Valencia: 63.0
- France: 63.2
- Romania: 63.4
- Spain, Galicia: 63.5
- Spain, Valencia: 63.6
- Spain, Castile-La Mancha: 63.7
- Spain, Asturias: 63.7
- Belgium, French-speaking: 65.7
- Spain, Castile and Leon: 65.9
- Belgium, Dutch-speaking: 66.7

*patients younger than 20 years of age are not included; ° data includes patients receiving dialysis only*
Prevalent patients on RRT in 2018
by age category

Prevalence by age category
for all registries

- 75+: 2574
- 65-74: 2174
- 45-64: 1282
- 20-44: 401
- 0-19: 35

Prevalence (per million age-related population)

Prevalence by age category
by type of data provided by registry

- 75+: 19
- 65-74: 24
- 45-64: 25
- 20-44: 24
- 0-19: 17

(All countries, Individual data, Aggregated data)
Prevalent patients on RRT in 2018 by sex

Prevalence by sex for all registries:
- Women: 671
- Men: 1068

Prevalence by sex by type of data provided by registry:
- All countries:
  - Women: 40
  - Men: 60
- Individual data:
  - Women: 38
  - Men: 62
- Aggregated data:
  - Women: 41
  - Men: 59
Prevalent patients on RRT in 2018
by primary renal disease

Prevalence by primary renal disease
for all registries

- Unknown/missing: 243.4
- Miscellaneous: 124.3
- Renal vascular disease: 10.8
- Hypertension: 84.4
- Diabetes mellitus: 130.7
- Polycystic kidneys, adult type: 69.7
- Pyelonephritis: 62.5
- Glomerulonephritis/sclerosis: 168.2

Prevalence by primary renal disease
by type of data provided by registry

<table>
<thead>
<tr>
<th>Category</th>
<th>All countries</th>
<th>Individual data</th>
<th>Aggregated data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown/missing</td>
<td>27</td>
<td>17</td>
<td>39</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>14</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>Renal vascular disease</td>
<td>1</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Hypertension</td>
<td>9</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>15</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>Polycystic kidneys, adult type</td>
<td>8</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Pyelonephritis</td>
<td>7</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Glomerulonephritis/sclerosis</td>
<td>19</td>
<td>19</td>
<td>18</td>
</tr>
</tbody>
</table>
Prevalent patients on RRT in 2018
by primary renal disease and age category

Prevalence by primary renal disease
patients from registries providing individual patient data only

- All patients:
  - Glomerulonephritis/sclerosis, 20%
  - Miscellaneous, 18%
  - Diabetes mellitus, 16%
  - Polycystic kidneys, adult type, 9%
  - Renal vascular disease, 1%
  - Hypertension, 12%

- Patients younger than 65 years of age:
  - Glomerulonephritis, 25%
  - Miscellaneous, 20%
  - Diabetes mellitus, 13%
  - Polycystic kidneys, 10%
  - Hypertension, 9%
  - Renal vascular disease, 7%

- Patients aged 65 years or older:
  - Glomerulonephritis, 14%
  - Miscellaneous, 15%
  - Polycystic kidneys, 8%
  - Renal vascular disease, 2%
  - Hypertension, 17%
Prevalent patients on RRT in 2018 by modality

Prevalence by modality for all registries:
- Haemodialysis: 514
- Peritoneal dialysis: 43
- Transplant: 338
- Unknown / missing: 1

Prevalence by modality by type of data provided by registry:
- All countries:
  - Unkn: 57
  - Tx: 48
  - PD: 65
- Individual data:
  - Unkn: 5
  - Tx: 5
  - PD: 65
- Aggregated data:
  - Unkn: 5
Prevalent patients on RRT in 2018
by modality and age category

Prevalence by modality
patients from registries providing individual patient data only

- **All patients**
  - Transplant, 45%
  - Haemodialysis, 50%
  - Peritoneal dialysis, 5%

- **Patients younger than 65 years of age**
  - Transplant, 60%
  - Haemodialysis, 36%
  - Peritoneal dialysis, 4%

- **Patients aged 65 years or older**
  - Transplant, 30%
  - Haemodialysis, 64%
Prevalent patients on RRT
last 20 years (1999-2018)

Unadjusted prevalence over time
all patients on RRT

Adjusted prevalence over time
all patients on RRT
Prevalent patients on RRT
last 15 years (2004-2018)

Unadjusted prevalence over time
all patients on RRT

Adjusted prevalence over time
all patients on RRT
Prevalent patients on RRT
last 5 years (2014-2018)

Unadjusted prevalence over time
all patients on RRT

Adjusted prevalence over time
all patients on RRT

Prevalence (per million population)


Prevalence (per million population)


Map of Europe
Kidney transplants performed
renal registries providing individual patient data

- Serbia: 4
- Bosnia and Herzegovina: 6
- Montenegro: 8
- Romania: 9
- Greece: 14
- Iceland: 12
- Belgium, French-speaking: 38
- UK, Wales: 39
- Denmark: 40
- Switzerland: 41
- Finland: 42
- Belgium, Dutch-speaking: 43
- Sweden: 43
- Estonia: 43
- Norway: 45
- Austria: 45
- Spain, Castile-La Mancha: 47
- UK, England: 49
- France: 53
- UK, Scotland: 55
- the Netherlands: 56
- Spain, Murcia: 57
- UK, Northern Ireland: 57
- Spain, Community of Madrid: 59
- Spain, Aragon: 60
- Spain, Navarre: 60
- Spain, Galicia: 63
- Spain, Valencian region: 64
- Spain, Castile and León: 64
- Spain, Basque country: 66
- Spain, Andalusia: 72
- Spain, Extremadura: 73
- Spain, Canary Islands: 75
- Spain, Asturias: 76
- Spain, Cantabria: 77
- Spain, Catalonia: 102

- All countries: 47

Kidney transplants performed (per million population)

Kidney transplants performed
renal registries providing aggregated data

- Ukraine: 3
- Bulgaria: 4
- North Macedonia: 9
- Albania: 9
- Russia: 10
- Kosovo: 12
- Cyprus: 22
- Slovakia: 27
- Belarus: 29
- Lithuania: 30
- Latvia: 40
- Italy (7 of 20 regions): 41
- Turkey: 47
- Portugal: 49
- Czech Republic: 51
- Israel: 53
- Spain (All): 71

- All countries: 30

Kidney transplants performed (per million population)

a patients younger than 20 years of age are not included;
icked transplant rates are underestimated by 15% (b), 30% (c), 7% (d)
Kidney transplants performed in 2018
transplants from deceased donors
by country

Deceased donor transplant rate
renal registries providing individual patient data

Deceased donor transplant rate
renal registries providing aggregated data

Patients younger than 20 years of age are not included; limited transplant rates are underestimated by 15% (b), 30% (c), 7% (d)
Living donor transplant rate
renal registries providing individual patient data

Kidney transplants performed in 2018
transplants from living donors by country

Living donor transplant rate
renal registries providing aggregated data

a patients younger than 20 years of age are not included; b transplant rates are underestimated by 15% (b), 30% (c), 7% (d)
Kidney transplants performed in 2018
by donor type

Kidney transplants by donor type
for all registries

- Unknown donor: 0.7
- Deceased donor: 23.9
- Living donor: 10.3

Transplant rate (per million population)

Kidney transplants by donor type
by type of data provided by registry

- All countries:
  - Unknown: 2
  - Deceased: 68
  - Living: 30

- Individual data:
  - Unknown: 4
  - Deceased: 76
  - Living: 20

- Aggregated data:
  - Unknown: 1
  - Deceased: 64
  - Living: 35
Kidney transplants performed in 2018 by donor type

Kidney transplants by donor type
patients from registries providing individual patient data only

- **All patients**
  - Donor type unknown: 2%
  - Living donor: 21%
  - Deceased donor: 77%

- **Patients younger than 65 years of age on transplantation**
  - Donor type unknown: 2%
  - Living donor: 24%
  - Deceased donor: 74%

- **Patients aged 65 years or older on transplantation**
  - Donor type unknown: 3%
  - Living donor: 13%
  - Deceased donor: 84%
Adjusted patient survival by primary renal disease
Incident RRT patients

from day 1, adjusted for age and sex

Survival probabilities were adjusted for fixed values for age (67 years), sex (63% men), and the primary renal disease distribution (24% diabetes mellitus, 19% hypertension / renal vascular disease, 11% glomerulonephritis and 46% other primary renal diseases). Cox regression model was used to calculate survival probabilities.
Adjusted patient survival by modality
Incident dialysis patients
from day 91, adjusted for age, sex, and primary renal disease

Survival probabilities were adjusted for fixed values for age (67 years), sex (63% men), and the primary renal disease distribution (24% diabetes mellitus, 19% hypertension / renal vascular disease, 11% glomerulonephritis and 46% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.
Adjusted patient survival by donor type

Patients receiving a first kidney transplant

from day of transplant, adjusted for age, sex, and primary renal disease

Survival probability

Survival probabilities were adjusted for fixed values for age (50 years), sex (63% men), and the primary renal disease distribution (14% diabetes mellitus, 10% hypertension / renal vascular disease, 23% glomerulonephritis and 53% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.
Survival probabilities were adjusted for fixed values for age (67 years), sex (63% men), and the primary renal disease distribution (24% diabetes mellitus, 19% hypertension / renal vascular disease, 11% glomerulonephritis and 46% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.
Survival probabilities were adjusted for fixed values for age (67 years), sex (63% men), and the primary renal disease distribution (24% diabetes mellitus, 19% hypertension / renal vascular disease, 11% glomerulonephritis and 46% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.
Patient survival on dialysis by cohort

Patient survival incident dialysis patients
adjusted for age, sex and cause of renal failure

Survival probabilities were adjusted for fixed values for age (67 years), sex (63% men), and the primary renal disease distribution (24% diabetes mellitus, 19% hypertension / renal vascular disease, 11% glomerulonephritis and 46% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.
Survival probabilities were adjusted for fixed values for age (67 years), sex (63% men), and the primary renal disease distribution (24% diabetes mellitus, 19% hypertension/renal vascular disease, 11% glomerulonephritis and 46% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.
Patient survival after kidney transplantation

by cohort

Patient survival after first kidney transplantation
adjusted for age, sex and cause of renal failure

Survival probabilities were adjusted for fixed values for age (50 years), sex (63% men), and the primary renal disease distribution (14% diabetes mellitus, 10% hypertension / renal vascular disease, 23% glomerulonephritis and 53% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.
Patient survival after kidney transplantation by cohort

Patient survival after first kidney transplantation
adjusted for age, sex and cause of renal failure

Survival probabilities were adjusted for fixed values for age (50 years), sex (63% men), and the primary renal disease distribution (14% diabetes mellitus, 10% hypertension / renal vascular disease, 23% glomerulonephritis and 53% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.
Graft survival after kidney transplantation by cohort

Graft survival after first kidney transplantation

adjusted for age, sex and cause of renal failure

Survival probabilities were adjusted for fixed values for age (50 years), sex (63% men), and the primary renal disease distribution (14% diabetes mellitus, 10% hypertension / renal vascular disease, 23% glomerulonephritis and 53% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.
Graft survival after first kidney transplantation

Survival probabilities were adjusted for fixed values for age (50 years), sex (63% men), and the primary renal disease distribution (14% diabetes mellitus, 10% hypertension / renal vascular disease, 23% glomerulonephritis and 53% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.