



# IPNA Global Registry for Kidney Replacement Therapy in Children

## Annual Report 2017

## Introduction

While chronic renal replacement therapy (RRT) is the standard of care for children with end-stage kidney disease in well developed countries, dialysis and transplantation can be offered only to some children or not at all in other parts of the world. Apart from the differences in access to RRT, modality preferences and treatment outcomes appear to vary substantially across countries and regions.

The causes of the large global heterogeneity in pediatric RRT availability, modality choices and outcomes are not confined to economic factors but may also include differences in healthcare organization, ethnic composition, environmental conditions, and cultural views and attitudes.

A global population-based registry of children undergoing pediatric RRT would allow to analyse the causes of diversity in pediatric RRT and provide clinicians with an evidence base for discussions with families about treatment options, and with healthcare providers and policy makers about the most efficient use of resources.

To serve these needs, IPNA is collecting pediatric RRT information from countries around the world and supports pediatric nephrologists to establish national registries wherever these are lacking. Here, we are proud to present the first Annual Report of the IPNA Global Pediatric RRT Registry.

## Data collection

Each existing national or international registry around the globe has been invited to submit data to the IPNA Global RRT Registry. In addition, direct data submission is made possible for countries without existing registries provided that complete population coverage is attained.

The core dataset requested contains a small set of patient level data: age, sex, primary renal disease, date- and modality of RRT, date- and cause of death. This first annual report is based on the data collected in 2017. It describes country specific RRT prevalence and modality choices. Future reports will also include incidence rates and detailed demographic and benchmarking figures to compare country specific pediatric RRT characteristics on a regional and global level.

We have made Excel formats to facilitate data collection, but we also accept data in SAS and SPSS. To further simplify data entry further, we are working on an online data entry menu that should be ready soon.

## Objectives

1. To empower clinical and translational research through information on disease demographics and comorbidities in children with end-stage kidney disease
2. To provide information on renal replacement therapy practices and outcomes in the context of socioeconomic conditions in children around the globe
3. To facilitate interventional trials in children undergoing dialysis and kidney transplantation

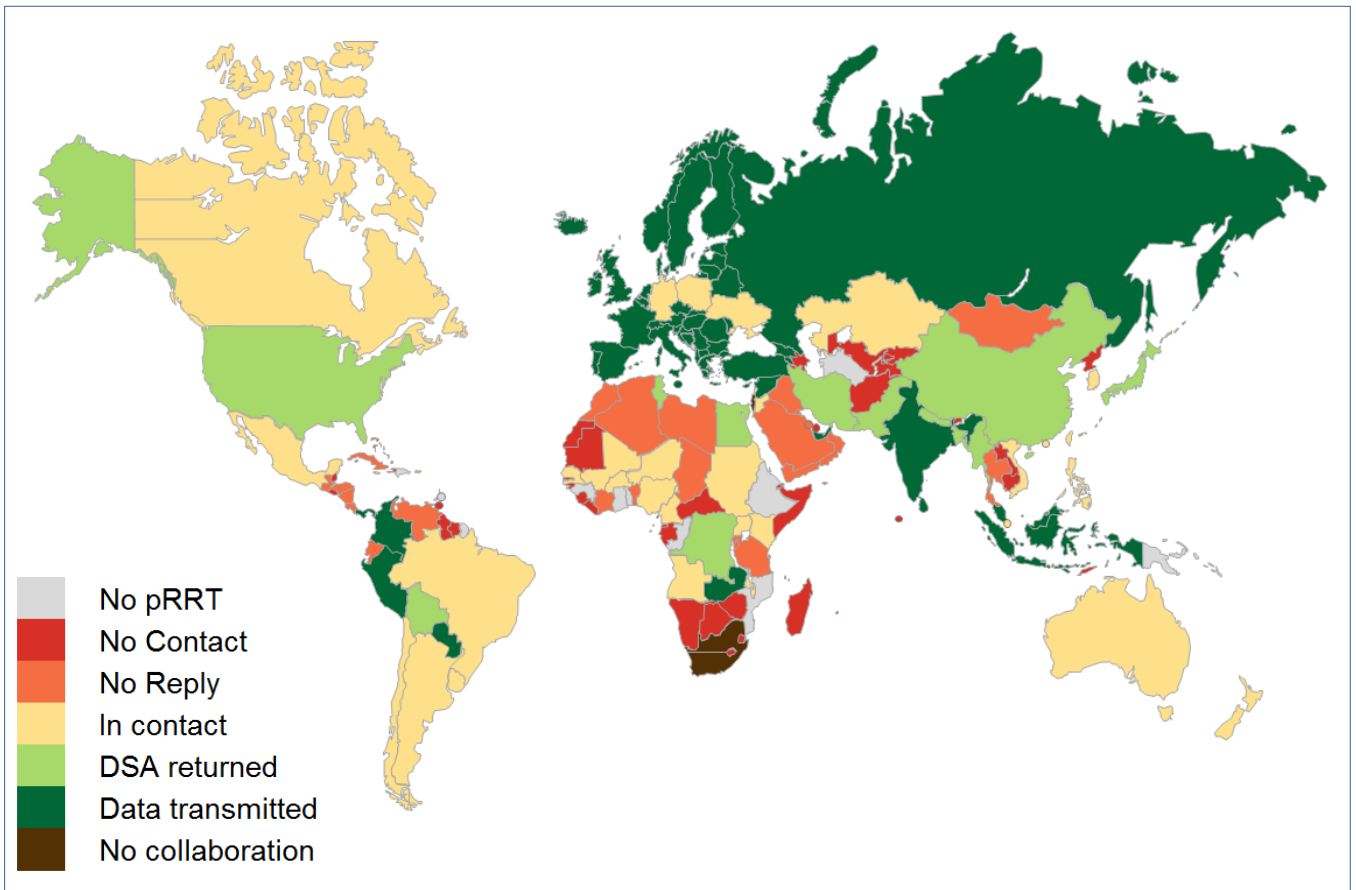
## General Information

AR = Annual Report, pRRT = pediatric Renal Replacement Therapy, DSA = Data Sharing Agreement, WCP = World childhood population

Status	Countries	WCP
	Number	%
No chronic pediatric RRT	9	4.0
DSA returned (no data received)	6	3.8
Data transmitted (complete) <sup>1, 2</sup>	49	32.2
Data transmitted (incomplete) <sup>1</sup>	10	26.0

1. Included in table: 'Number of patients and coverage'.

2. Included in the tables with prevalence of RRT modalities.



## Number of patients and coverage

Number of patients included in the Registry on the 31<sup>st</sup> of December 2017. All coverage percentages are estimates given by the national representatives of the country. When data collection is ongoing, it is impossible to provide a correct estimate of the current percentage of children covered. Coverage percentages from European countries are provided by the ESPN/ERA-EDTA Registry.

Country	Patients	Coverage
	Number	%
<b>AFRICA</b>		
Burkina Faso	16	Unknown <sup>1, 2</sup>
Tunisia	30	Unknown <sup>2</sup>
Zambia	2	100 <sup>1</sup>
<b>ASIA</b>		
Armenia	8	100
Bangladesh	29	Unknown <sup>2</sup>
China	325	100 <sup>1, 3</sup>
Indonesia	220	<100 <sup>4</sup>
India	287	55 <sup>5</sup>
Iran, Islamic Rep.	86	Unknown <sup>2</sup>
Japan	164	100 <sup>6</sup>
Malaysia	553	81-95
Pakistan	97	Unknown <sup>1, 2</sup>
Sri Lanka	40	100
Syria	76	100
United Arab Emirates	71	100

1. The country only provided prevalent patients.
2. Ongoing data collection, preliminary results.
3. Not included in analysis of prevalence, since only transplantation patients are registered.
4. All public hospitals included. Data of private hospitals is currently not available. Unknown % of private hospitals.
5. 60% of public hospitals included. 5-10% of the patients receives RRT in private hospital
6. Not included in analysis of prevalence, since data were obtained in 2010, more recent data is currently not available.

## Number of patients and coverage

Number of patients included in the Registry on the 31<sup>st</sup> of December 2017. All coverage percentages are estimates given by the national representatives of the country. When data collection is ongoing, it is impossible to provide a correct estimate of the current percentage of children covered. Coverage percentages from European countries are provided by the ESPN/ERA-EDTA Registry.

Country	Patients	Coverage
	Number	%
<b>EUROPE <sup>7</sup></b>		
Albania	13	100
Austria	597	100
Bosnia and Herzegovina	124	100
Bulgaria	70	100
Belarus	112	100
Switzerland	335	100
Croatia	34	100
Cyprus	14	100
Czech Republic	155	100
Denmark	331	100
Estonia	8	100
Finland	467	100
France	3067	100
FYR of Macedonia	13	100
Georgia	27	100
Greece	691	100
Hungary	172	100

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5. 60% of public hospitals included. 5-10% of the patients receives RRT in private hospital
6. Not included in analysis of prevalence, since data were obtained in 2010, more recent data is currently not available..
7. Number of patients included in the ESPN/ERA-EDTA registry on the 31st of 2015.

## Number of patients and coverage

Number of patients included in the Registry on the 31<sup>st</sup> of December 2017. All coverage percentages are estimates given by the national representatives of the country. When data collection is ongoing, it is impossible to estimate the exact current percentage of children covered. Coverage percentages from European countries are provided by the ESPN/ERA-EDTA Registry.

Country	Patients	Coverage
	Number	%
Iceland	42	100
Italy	1229	<100 <sup>8</sup>
Latvia	11	100
Lithuania	49	100
Malta	4	100
Norway	381	100
Portugal	246	100
Republic of Serbia	113	100
Romania	337	100
Russia	984	100
Slovakia	115	100
Slovenia	41	100
Spain	1724	100
Sweden	827	100
Switzerland	335	100
The Netherlands	1624	100
Turkey	599	100
United Kingdom	3115	100

1. The country only provided prevalent patients.
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4. All public hospitals included. Data of private hospitals is currently not available.
5. 60% of public hospitals included. 5-10% of the patients receives RRT in private hospital
6. Not included in analysis of prevalence, since data were obtained in 2010, more recent data is currently not available.
7. Number of patients included in the ESPN/ERA-EDTA registry on the 31<sup>st</sup> of 2015.
8. In Italy, (pre-emptive) transplantation patients are not included, this results in an underestimation of true prevalence.

## Number of patients and coverage

Number of patients included in the Registry on the 31<sup>st</sup> of December 2017. All coverage percentages are estimates given by the national representatives of the country. When data collection is ongoing, it is impossible to estimate the exact current percentage of children covered. Coverage percentages from European countries are provided by the ESPN/ERA-EDTA Registry.

Country	Patients Number	Coverage %
<b>LATIN AMERICA</b>		
Colombia	118	100
Panama	29	100
Peru	160	85
Paraguay	20	100
<b>NORTH AMERICA <sup>10</sup></b>		
United States of America	56907	100%

1. The country did not provide any additional events, only prevalent patients.
2. Ongoing data collection, preliminary data.
3. Only transplantation patients are registered.
4. All public hospitals included. Data of private hospitals is currently not available.
5. 60% of public hospitals included. 5-10% of the patients receives RRT in private hospital
6. Not included in analysis, since data were obtained in 2010, more recent data is not available.
7. Number of patients transmitted by ESPN/ERA-EDTA registry.
8. In Italy, (pre-emptive) transplantation patients are not included, this results in an underestimation of true prevalence

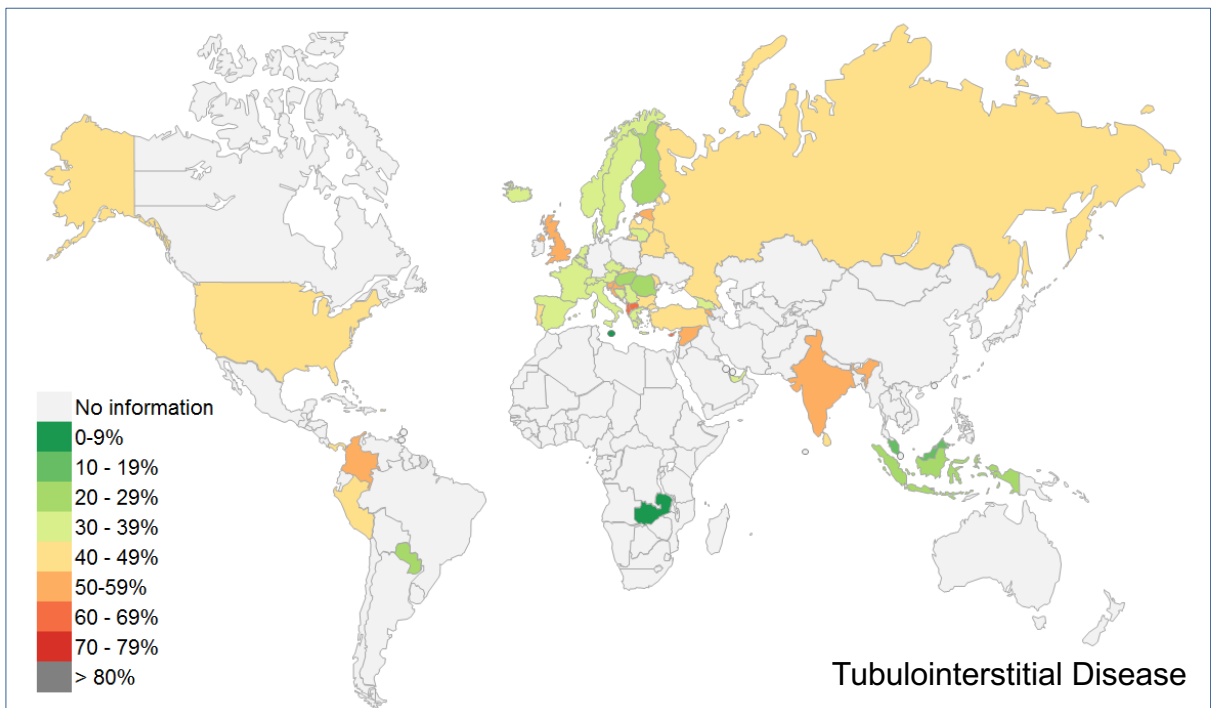
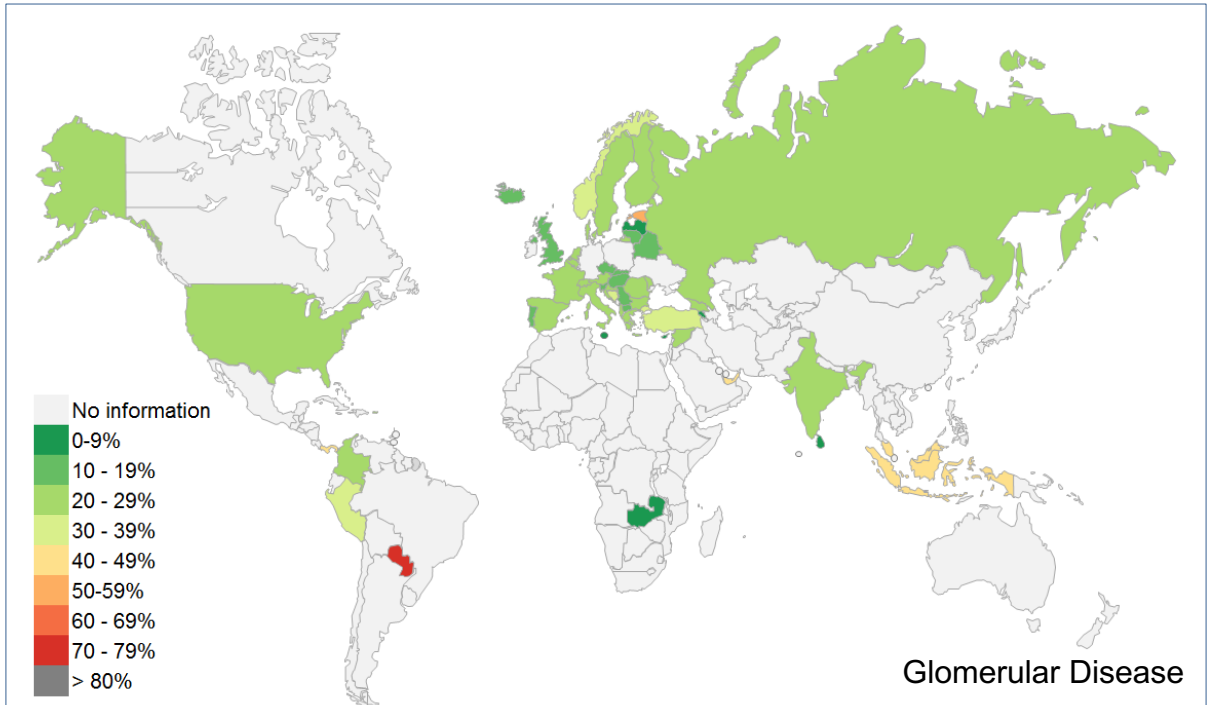


Fig 1a + b: Primary renal disease categories (glomerular disease, tubulointerstitial disease), percentage of all registered children on chronic renal replacement therapy per country.

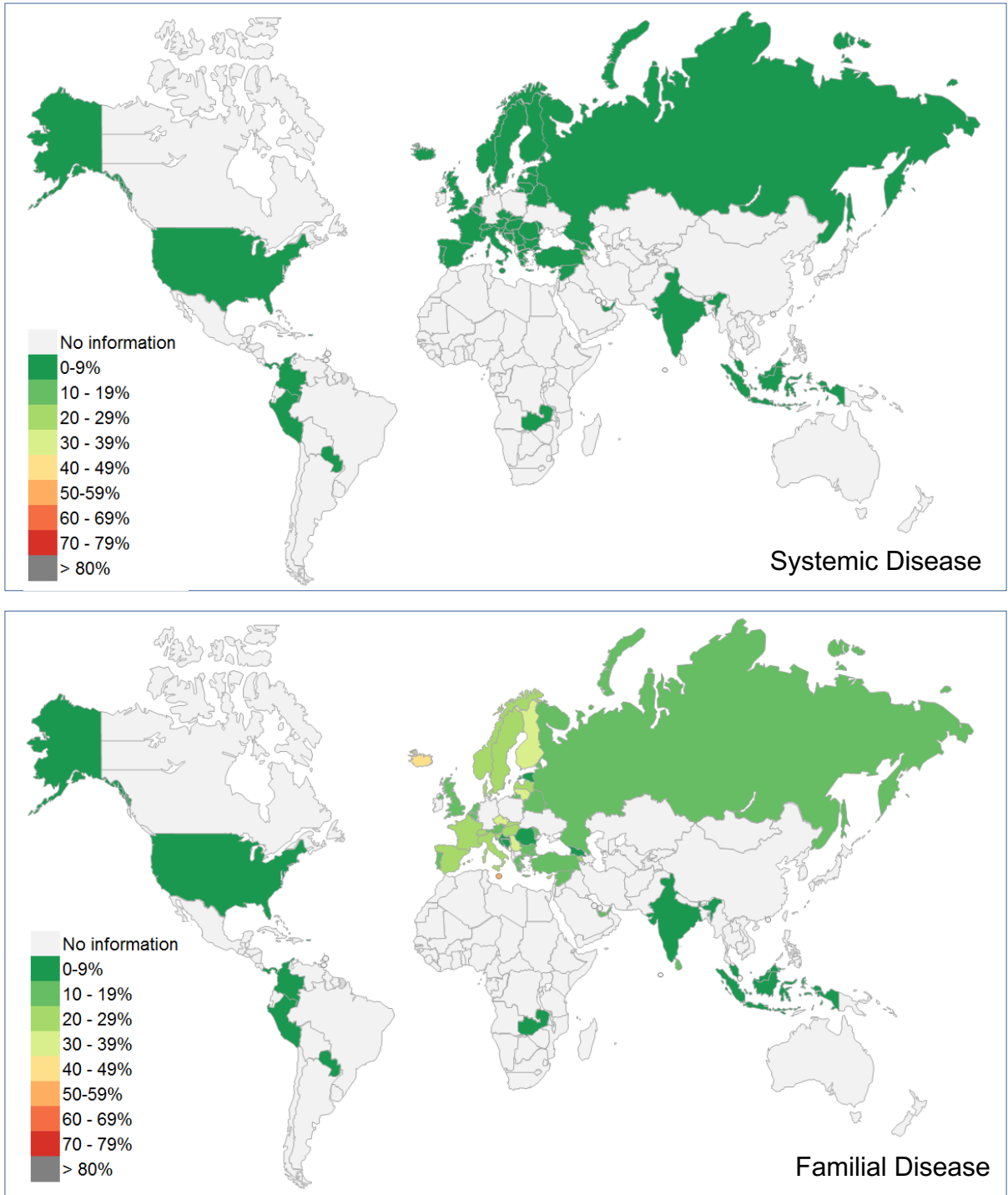


Fig 1c + d: Primary renal disease categories (systemic disease, familial disease), percentage of all registered children on chronic renal replacement therapy per country.

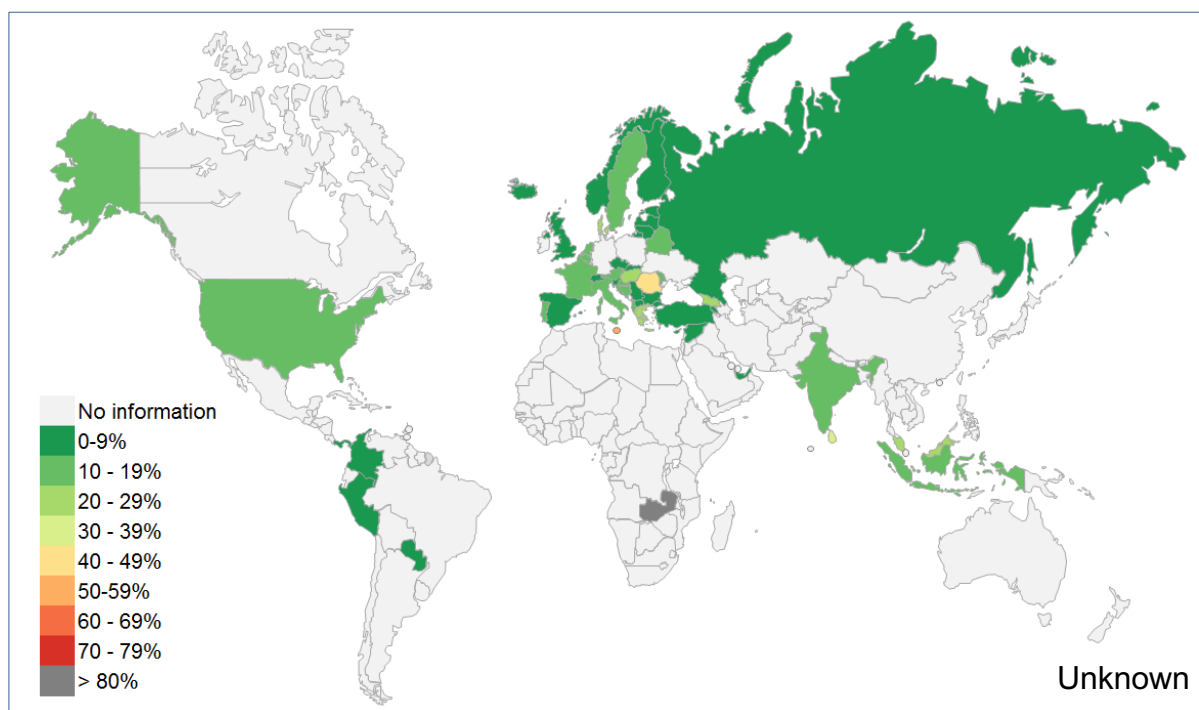
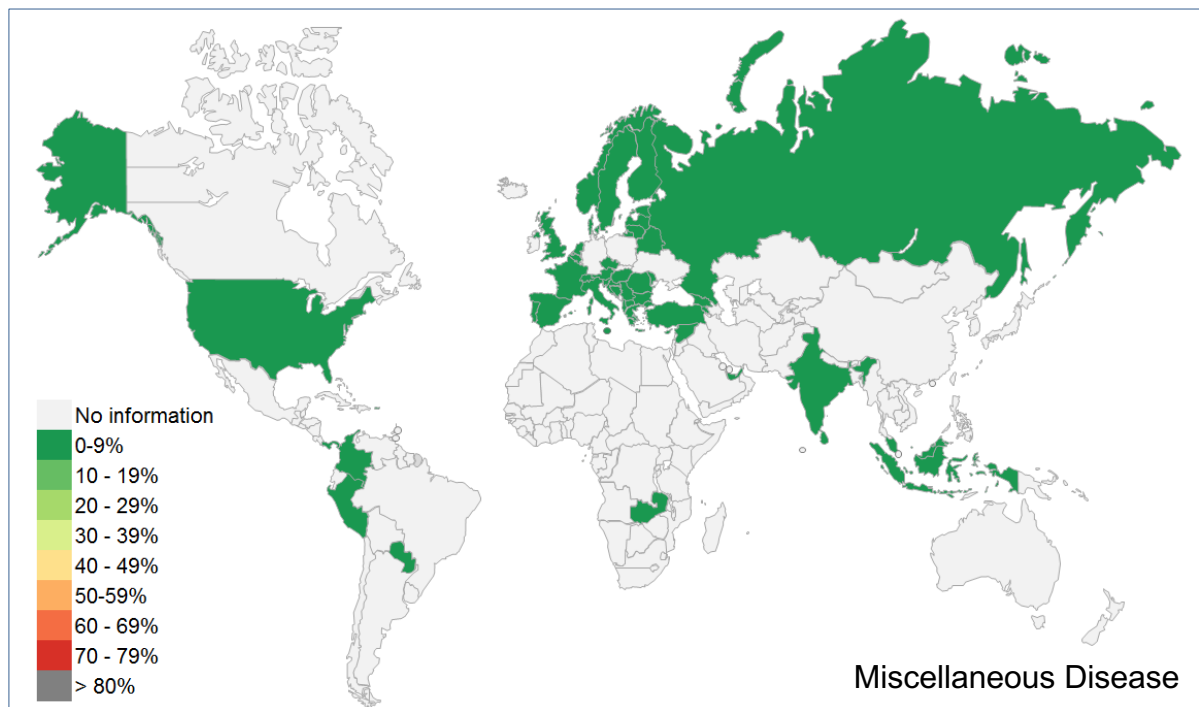


Fig 1e + f: Primary renal disease categories (miscellaneous and unknown), percentage of all registered children on chronic renal replacement therapy per country.

Primary Renal Disease distribution (%)						
	Glom. Disease	Tub. Disease	Systemic disease	Familial disease	Misc.	Unknown
<b>AFRICA <sup>1</sup></b>						
Zambia	-	-	-	-	-	100.0
<b>ASIA <sup>1</sup></b>						
United Arab Emirates	44.8	32.8	1.5	16.4	1.5	3.0
Armenia	0.0	57.1	14.3	28.6	0.0	0.0
Indonesia	49.5	26.4	1.1	3.3	3.3	16.5
India	26.6	50.9	4.1	6.0	0.9	11.5
Sri Lanka	3.6	46.4	0.0	10.7	3.6	35.7
Malaysia	43.2	17.8	5.1	4.2	0.2	29.5
Syria	21.1	50.7	5.6	12.7	1.4	8.5
<b>EUROPE <sup>2</sup></b>						
Albania	23.1	61.5	0.0	0.0	0.0	15.4
Austria	29.3	32.8	5.9	19.6	1.8	10.5
Bosnia and Herzegovina	37.1	33.1	6.5	8.1	0.8	14.5
Belgium	28.1	33.9	4.1	14.9	2.5	16.5
Bulgaria	21.4	48.6	4.3	17.1	4.3	4.3
Belarus	18.8	43.8	8.9	13.4	1.8	13.4

Abbreviations: Glom. Disease = Glomerular Disease, Tub. Disease = Tubulointerstitial Disease, Misc. = Miscellaneous.

<sup>1</sup> In percentage of total prevalent patients per country on 30th of June 2017.

<sup>2</sup> In percentage of total prevalent patients per country on 31st of December 2015.

<sup>3</sup> Percentage of total prevalent patients on 31st of December 2016.

## Primary Renal Disease distribution (%)

	<b>Glom. Disease</b>	<b>Tub. Disease</b>	<b>Systemic disease</b>	<b>Familial disease</b>	<b>Misc.</b>	<b>Unknown</b>
Croatia	23.5	50.0	2.9	8.8	2.9	11.8
Cyprus	7.1	64.3	7.1	21.4	0.0	0.0
Czech Republic	15.5	34.2	5.8	35.5	1.3	7.7
Denmark	20.2	31.7	5.5	20.8	0.2	21.7
Estonia	50.0	50.0	0.0	0.0	0.0	0.0
Finland	22.3	25.5	3.4	38.3	1.9	8.6
France	24.4	33.9	6.3	20.8	2.5	12.2
FYR of Macedonia	15.4	69.2	7.7	0.0	0.0	7.7
Georgia	29.6	37.0	3.7	7.4	0.0	22.2
Greece	25.3	36.3	4.5	11.9	1.3	20.7
Hungary	16.9	25.0	3.5	25.0	0.6	29.1
Iceland	19.1	33.3	2.4	40.5	0.0	4.8
Italy	27.7	33.0	5.8	20.3	2.4	13.8
Latvia	9.1	45.5	9.1	27.3	9.1	0.0
Lithuania	18.4	32.7	8.2	30.6	2.0	8.2
Malta	0.0	0.0	0.0	50.0	0.0	50.0
Moldova	25.0	45.0	0.0	15.0	0.0	15.0
Norway	34.7	33.3	3.9	22.8	2.6	2.6
Portugal	19.9	48.4	4.9	13.4	3.3	10.2
Republic of Serbia	17.7	37.2	4.4	31.9	3.5	5.3

Abbreviations: Glom. Disease = Glomerular Disease, Tub. Disease = Tubulointerstitial Disease, Misc. = Miscellaneous.

1 In percentage of total prevalent patients per country on 30th of June 2017.

2 In percentage of total prevalent patients per country on 31st of December 2015.

3 Percentage of total prevalent patients on 31st of December 2016.

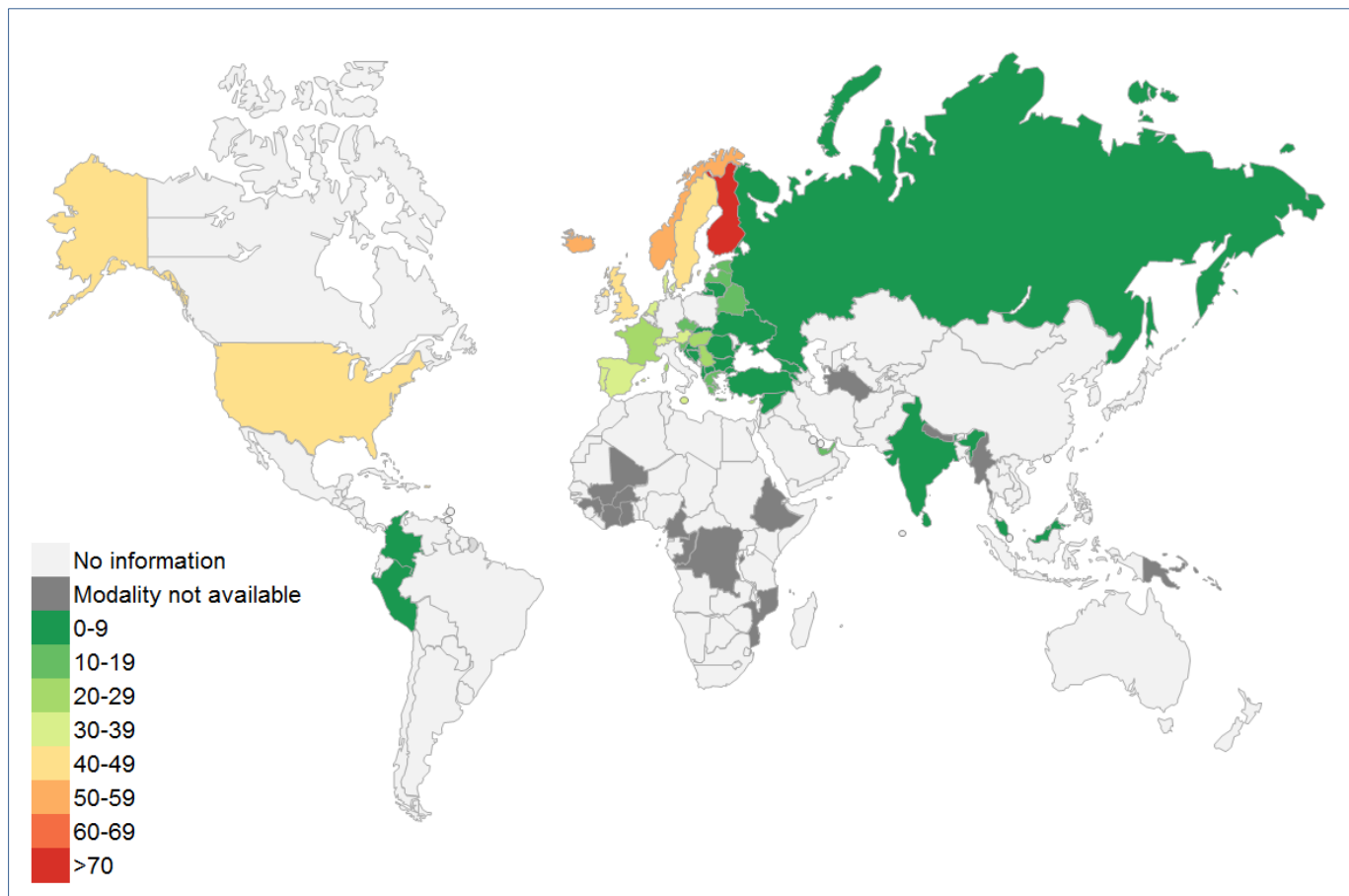
Primary Renal Disease distribution (%)						
	Glom. Disease	Tub. Disease	Systemic disease	Familial disease	Misc.	Unknown
Romania	23.7	27.3	2.1	5.7	0.9	40.4
Russia	21.5	40.7	9.8	16.2	2.0	9.9
Slovakia	17.4	49.6	2.6	28.7	0.0	1.7
Slovenia	17.1	53.7	0.0	22.0	4.9	2.4
Spain	23.2	38.1	6.0	21.2	4.2	7.4
Sweden	29.1	30.2	3.8	20.7	2.1	14.2
Switzerland	26.3	35.5	3.9	29.3	2.4	2.7
The Netherlands	28.1	31.3	5.8	13.6	2.4	18.8
Turkey	36.7	43.3	3.3	13.3	0.0	3.3
United Kingdom	14.4	50.1	4.0	19.8	3.2	8.5
<b>LATIN AMERICA <sup>1</sup></b>						
Colombia	27.5	53.2	5.5	7.3	0.9	5.5
Panama	40.7	48.1	0.0	3.7	0.0	7.4
Peru	33.6	49.3	2.7	6.2	0.7	7.5
Paraguay	70.0	20.0	0.0	5.0	0.0	5.0
<b>NORTH AMERICA <sup>3</sup></b>						
USA	27.6	42.1	4.4	9.3	3.3	13.3

Abbreviations: Glom. Disease = Glomerular Disease, Tub. Disease = Tubulointerstitial Disease, Misc. = Miscellaneous.  
TBD = To be determined

<sup>1</sup> In percentage of total prevalent patients per country on 30th of June 2017.

<sup>2</sup> In percentage of total prevalent patients per country on 31st of December 2015.

<sup>3</sup> Percentage of total prevalent patients on 31st of December 2016.



Attention: Prevalent patients on RRT . Prevalence per million age related population (pmarp). US data from 31st of December 2016. European data 31st of December 2015. Other countries 30th of June 2017.

## Africa <sup>1</sup>

Country	Total RRT				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
Congo, Rep	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Ethiopia	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Ghana	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Guinea	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Mozambique	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Zambia	1	0.1	1	0.1	0.0	0.0	0.5	0.0

## Asia <sup>1</sup>

Country	Total RRT				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
United Arab Emirates	60	46.3	67	39.8	45.6	56.7	34.4	18.1
Armenia	6	10.3	7	9.2	0.0	4.9	27.9	5.8
Indonesia	76	1.1	135	1.4	0.3	0.9	2.0	2.6
India	109	0.3	195	0.4	0.1	0.3	0.5	0.7
Sri Lanka	12	2.3	26	3.8	0.6	1.7	4.6	8.6
Malaysia	116	15.1	345	32.8	2.3	14.0	29.3	81.2
Syria	56	8.3	68	7.6	0.0	8.1	15.5	5.5
Turkmenistan	0	0.0	0	0.0	0.0	0.0	0.0	0.0

<sup>1</sup> Prevalent pediatric patients on RRT on the 30th of June 2017. Prevalent counts and prevalence per million age related population (pmarp), by age group.

## Europe <sup>2</sup>

Country	Total RRT				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	Pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
Albania	6	11.0			0.0	12.1	19.2	-
Austria	50	40.8	89	53.2	17.2	52.0	52.9	85.8
Belarus	38	24.5			6.8	24.9	47.5	-
Bosnia and Herzegovina	12	22.1	21	28.2	40.2	5.7	20.8	38.6
Bulgaria	18	18.0			3.0	11.6	41.0	-
Croatia	25	40.6			19.8	37.9	63.9	-
Cyprus	9	64.6			83.9	85.2	22.3	-
Czech Republic	46	28.5			12.6	18.9	58.9	-
Denmark	35	36.4	84	63.8	16.9	36.2	54.0	138.9
Estonia	4	19.0			0.0	0.0	63.0	-
Finland	87	97.1	119	99.1	80.7	71.9	139.9	105.7
France	477	38.6	891	55.3	19.1	32.0	64.0	107.2
Georgia	13	17.1			7.1	17.3	28.1	-
Greece	57	36.4			8.2	41.9	56.7	-
Hungary	53	37.2			8.8	30.5	70.7	-
Iceland	4	59.9			0.0	43.1	140.8	-
Italy	260	31.2			14.9	30.4	46.9	-

1. Prevalent pediatric patients on RRT on the 30th of June 2017. Prevalent counts and prevalence per million age related population (pmarp), by age group.
2. Prevalent pediatric patients on RRT on the 31st of December 2015. Prevalent counts and prevalence per million age related population (pmarp). Numbers are derived from ESPN/ERA-EDTA Registry Report 2015. Most European prevalences for 15-19 years are not reported due to suspected incompleteness.

## Europe <sup>2</sup>

	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
Latvia	5	16.7	11	28.5	9.8	9.6	32.5	69.3
Lithuania	8	18.8			13.2	21.5	22.3	-
Macedonia	5	14.4			0.0	35.2	8.5	-
Malta	2	32.4			0.0	49.3	49.6	-
Norway	53	56.8	77	61.2	35.8	40.8	94.3	76.7
Portugal	80	54.2			18.1	46.3	91.6	-
Republic of Serbia	32	31.3			9.1	29.7	53.2	-
Romania	42	13.7	114	27.5	4.2	13.1	22.8	66.4
Russia	396	18.4			8.4	16.9	32.0	-
Slovakia	18	21.7			17.4	17.8	30.4	-
Slovenia	6	19.6			36.9	19.0	0.0	-
Spain	291	41.4			16.1	43.9	62.7	-
Sweden	93	54.7	176	79.9	25.6	55.1	86.1	163.6
Switzerland	52	42.0			23.6	21.8	82.4	-
Netherlands	125	44.4			19.3	55.9	55.9	-
Turkey	269	14.3			6.0	11.1	25.9	-
Ukraine	78	11.9			2.2	12.6	23.2	-
United Kingdom	687	59.6	1018	77.0	29.5	62.2	90.7	88.7

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## Latin America <sup>1</sup>

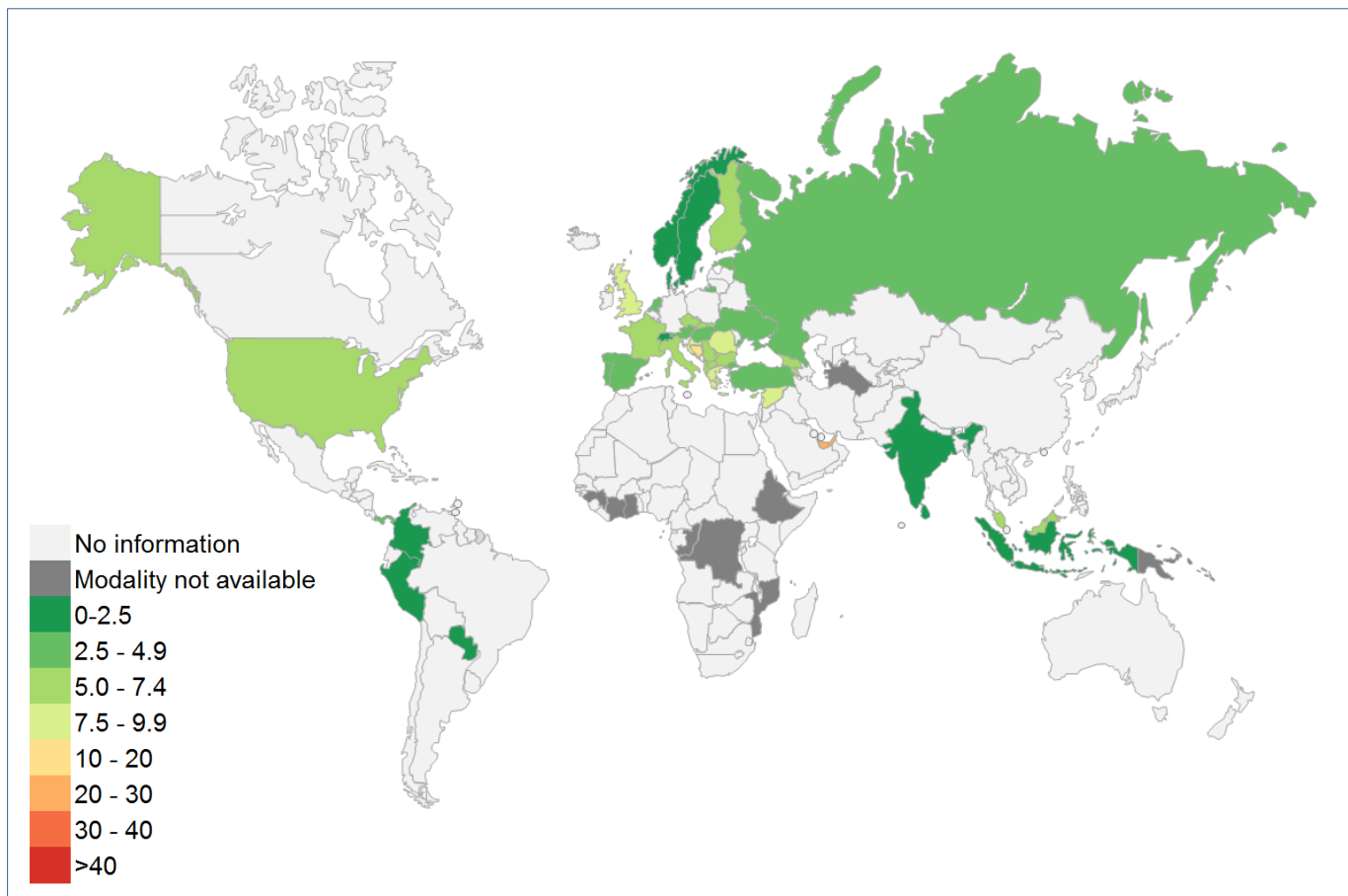
Country	Total RRT				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
Colombia	56	4.8	104	6.7	3.8	3.4	7.2	11.9
Panama	16	14.3	27	18.4	2.6	10.7	30.8	31.6
Peru	53	6.0	128	11.1	0.3	4.8	13.4	27.1
Paraguay	15	7.5	20	7.5	4.5	8.9	9.2	7.4

## North America <sup>2</sup>

Country	Total RRT				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
United States of America	3314	53.9	6550	79.1	25.3	52.2	82.5	152.0

1. Prevalent pediatric patients on RRT on the 30th of June 2017. Prevalent counts and prevalence per million age related population (pmarp), by age group.
2. Prevalent pediatric patients on RRT on the 31st of December 2015. Prevalent counts and prevalence per million age related population (pmarp).

# Prevalence of Hemodialysis



Attention: Prevalent patients on Haemodialysis (HD). Prevalence per million age related population (pmarp). US data from 31st of December 2016. European data 31st of December 2015. Other countries 30th of June 2017.

## Africa <sup>1</sup>

Country	Total HD				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
Congo, Rep	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Ethiopia	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Ghana	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Guinea	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Mozambique	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Zambia	0	0.0	0	0.0	0.0	0.0	0.0	0.0

## Asia <sup>1</sup>

Country	Total HD				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
United Arab Emirates	28	21.6	30	17.8	17.4	34.9	10.6	5.2
Armenia	4	6.9	5	6.6	0.0	0.0	22.4	5.8
Indonesia	40	0.6	71	0.7	0.2	0.6	0.9	1.4
India	29	0.1	42	0.1	0.0	0.1	0.1	0.1
Sri Lanka	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Malaysia	40	5.2	148	14.1	0.8	4.8	10.1	38.3
Syria	54	8.0	66	7.4	0.0	7.2	15.5	5.5
Turkmenistan	0	0.0	0	0.0	0.0	0.0	0.0	0.0

1. Prevalent pediatric patients on hemodialysis (HD) on the 30th of June 2017. Prevalent counts and prevalence per million age related population (pmarp), by age group.

## Europe <sup>2</sup>

Country	Total HD
	0-14 years
	Pmarp
Albania	5.5
Austria	3.3
Belarus	2.6
Bosnia and Herzegovina	12.9
Bulgaria	6.0
Croatia	9.7
Cyprus	7.2
Czech Republic	5.6
Denmark	2.1
Estonia	4.7
Finland	5.6
France	6.9

Country	Total HD
	0-14 years
	Pmarp
FYR of Macedonia	5.8
Georgia	6.6
Greece	8.9
Hungary	4.9
Iceland	0.0
Italy	5.3
Latvia	0.0
Lithuania	0.0
Malta	0.0
Norway	1.1
Portugal	3.4
Republic of Serbia	5.9

Country	Total HD
	0-14 years
	Pmarp
Romania	8.8
Russia	3.4
Slovakia	6.0
Slovenia	0.0
Spain	4.0
Sweden	2.4
Switzerland	1.6
the Netherlands	3.6
Turkey	2.8
Ukraine	3.5
United Kingdom	8.1

1. Prevalent pediatric patients on hemodialysis (HD) on the 30th of June 2017. Prevalent counts and prevalence per million age related population (pmarp), by age group.
2. Prevalent pediatric patients on haemodialysis (HD) on the 31st of December 2015. Prevalent counts and prevalence per million age related population (pmarp). Numbers are derived from ESPN/ERA-EDTA Registry Report 2017. European prevalences for 15-19 years not reported due to suspected incompleteness.

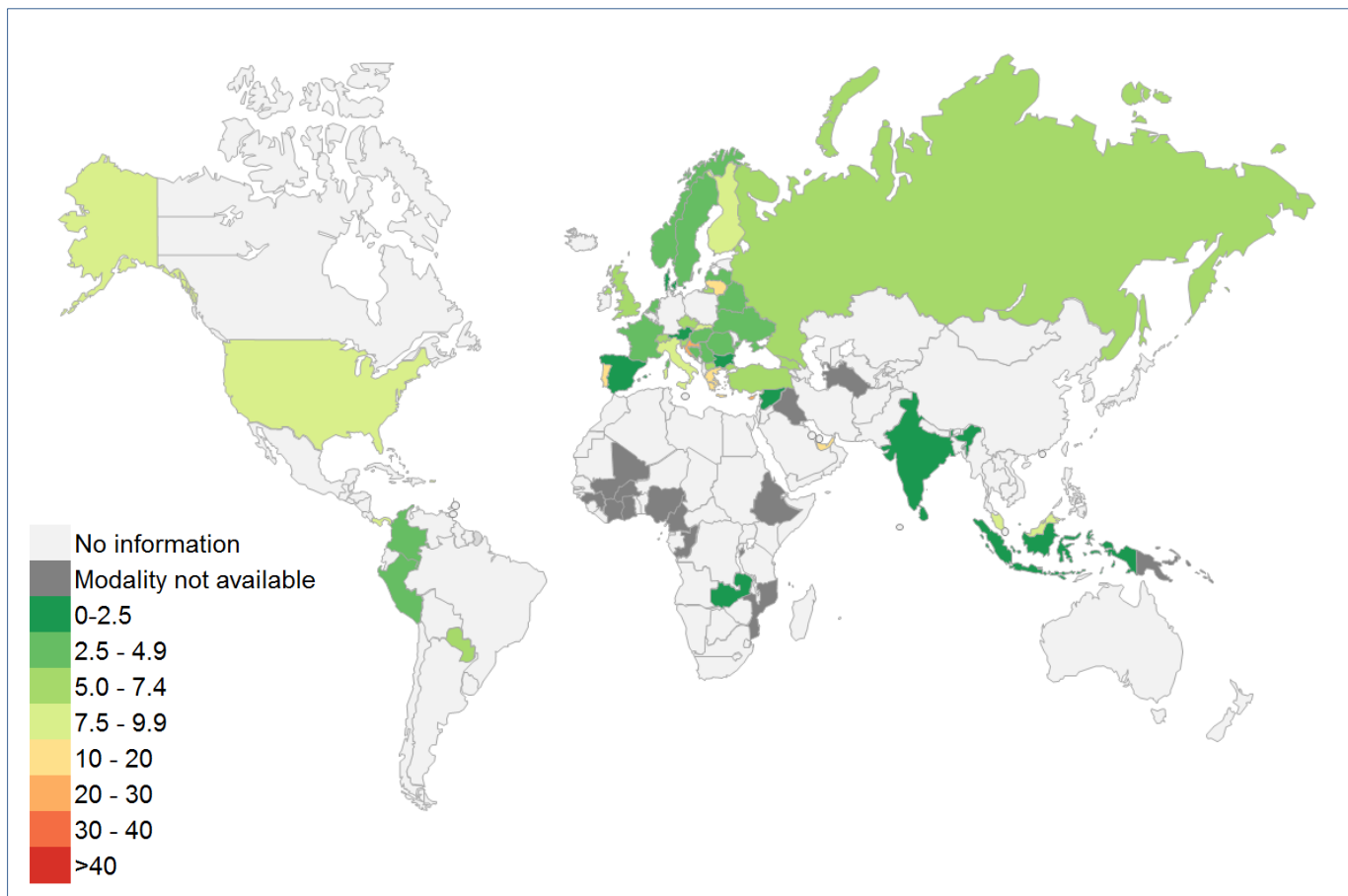
## Latin America <sup>1</sup>

Country	Total HD				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
Colombia	7	0.6	15	1.0	0.5	0.5	0.7	2.0
Panama	5	4.5	9	6.1	0.0	2.6	11.2	11.5
Peru	20	2.3	60	5.2	0.0	1.7	5.3	14.4
Paraguay	3	1.5	3	1.1	1.5	1.5	1.5	0.0

## North America <sup>3</sup>

Country	Total HD				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
United States of America	354	5.8	840	10.1	4.9	4.7	7.6	22.8

1. Prevalent pediatric patients on hemodialysis (HD) on the 30th of June 2017. Prevalent counts and prevalence per million age related population (pmarp), by age group.
2. Prevalent pediatric patients on haemodialysis (HD) on the 31st of December 2015. Prevalent counts and prevalence per million age related population (pmarp). Numbers are derived from ESPN/ERA-EDTA Registry Report 2017. European prevalences for 15-19 years not reported due to suspected incompleteness.
3. Prevalent pediatric patients on hemodialysis (HD) on the 31st of December 2015. Prevalent counts and prevalence per million age related population (pmarp), by age group.



Attention: Prevalent patients on Peritoneal Dialysis (PD). Prevalence per million age related population (pmarp). US data from 31st of December 2016. European data 31st of December 2015. Other countries 30th of June 2017.

## Africa <sup>1</sup>

Country	Total PD				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
Congo, Rep	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Ethiopia	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Ghana	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Guinea	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Mozambique	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Zambia	1	0.1	1	0.1	0.0	0.0	0.5	0.0

## Asia <sup>1</sup>

Country	Total PD				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
Arab Emirates	18	13.9	22	13.1	26.1	10.9	2.6	10.4
Armenia	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Indonesia	35	0.5	56	0.6	0.1	0.3	1.1	0.9
India	31	0.1	40	0.1	0.0	0.1	0.1	0.1
Sri Lanka	1	0.2	1	0.1	0.0	0.0	0.6	0.0
Malaysia	72	9.4	182	17.3	1.5	9.2	17.6	39.0
Syria	1	0.1	1	0.1	0.0	0.4	0.0	0.0
Turkmenistan	0	0.0	0	0.0	0.0	0.0	0.0	0.0

1. Prevalent pediatric patients on peritoneal dialysis (PD) on the 30th of June 2017. Prevalent counts and prevalence per million age related population (pmarp), by age group.

## Europe <sup>2</sup>

Country	Total PD
	0-14 years
	Pmarp
Albania	0.0
Austria	1.6
Belarus	4.5
Bosnia and Herzegovina	3.7
Bulgaria	2.0
Croatia	27.6
Cyprus	28.7
Czech Republic	5.6
Denmark	2.1
Estonia	0.0
Finland	8.9
France	3.7

Country	Total PD
	0-14 years
	Pmarp
FYR of Macedonia	5.8
Georgia	6.6
Greece	12.8
Hungary	4.2
Iceland	0.0
Italy	8.9
Latvia	3.3
Lithuania	14.1
Malta	0.0
Norway	3.2
Portugal	11.5
Republic of Serbia	3.9

Country	Total PD
	0-14 years
	Pmarp
Romania	4.2
Russia	6.5
Slovakia	8.5
Slovenia	6.5
Spain	2.3
Sweden	2.9
Switzerland	5.7
The Netherlands	2.8
Turkey	5.8
Ukraine	2.5
United Kingdom	7.2

1. Prevalent pediatric patients on peritoneal dialysis (PD) on the 30th of June 2017. Prevalent counts and prevalence per million age related population (pmarp), by age group.
2. Prevalent pediatric patients on peritoneal dialysis (PD) on the 31st of December 2015. Prevalent counts and prevalence per million age related population (pmarp). Numbers are derived from ESPN/ERA-EDTA Registry Report 2017. European prevalences for 15-19 years not reported due to suspected incompleteness.

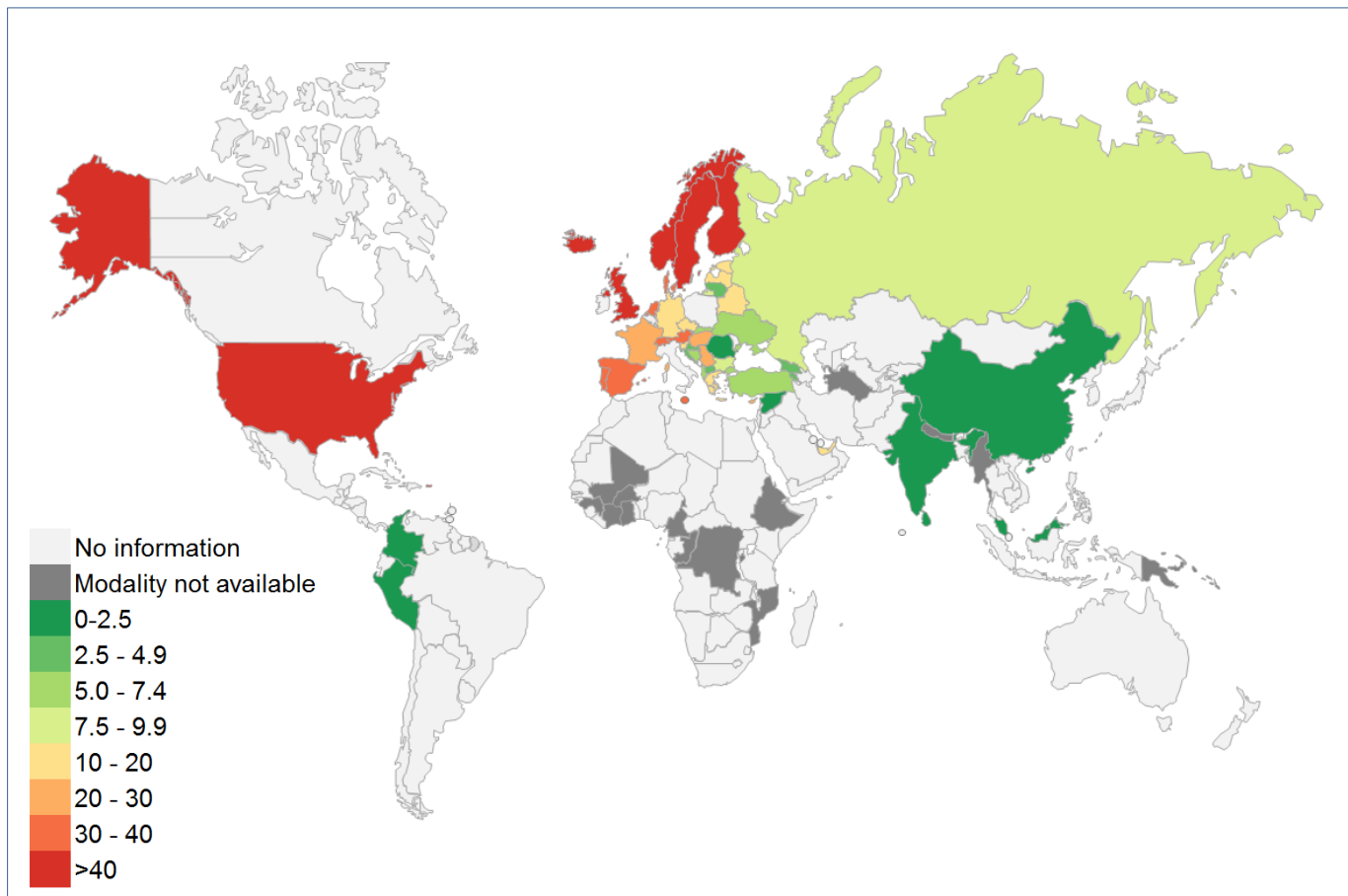
## Latin America <sup>1</sup>

Country	Total PD				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
Colombia	45	3.9	83	5.3	3.2	2.3	6.0	9.4
Panama	11	9.8	18	12.3	2.6	8.0	19.6	20.1
Peru	29	3.3	47	4.1	0.3	2.7	7.0	6.5
Paraguay	12	6.0	17	6.3	3.0	7.4	7.6	7.4

## North America <sup>3</sup>

Country	Total PD				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
United States of America	471	7.7	753	9.1	12.0	5.1	6.2	13.2

1. Prevalent pediatric patients on peritoneal dialysis (PD) on the 30th of June 2017. Prevalent counts and prevalence per million age related population (pmarp), by age group.
2. Prevalent pediatric patients on peritoneal dialysis (PD) on the 31st of December 2015. Prevalent counts and prevalence per million age related population (pmarp). Numbers are derived from ESPN/ERA-EDTA Registry Report 2017. European prevalences for 15-19 years not reported due to suspected incompleteness.
3. Prevalent pediatric patients on peritoneal dialysis (PD) on the 31st of December 2016. Prevalent counts and prevalence per million age related population (pmarp), by age group.



Attention: Prevalent patients on transplantation (TX). Prevalence per million age related population (pmarp). US data from 31st of December 2016. European data 31st of December 2015. Other countries 30th of June 2017.

## Africa <sup>1</sup>

Country	Total TX				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
Congo, Rep	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Ethiopia	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Ghana	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Guinea	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Mozambique	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Zambia	0	0.0	0	0.0	0.0	0.0	0.0	0.0

## Asia <sup>1</sup>

Country	Total TX				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
United Arab Emirates	14	10.8	15	8.9	2.2	10.9	21.2	2.6
Armenia	2	3.4	2	2.6	0.0	4.9	5.6	0.0
Indonesia	1	0.0	8	0.1	0.0	0.0	0.0	0.3
India	49	0.1	113	0.2	0.0	0.1	0.2	0.5
Sri Lanka	11	2.1	25	3.7	0.6	1.7	4.0	8.6
Malaysia	4	0.5	15	1.4	0.0	0.0	1.6	3.9
Syria	1	0.1	1	0.1	0.	0.4	0.0	0.0
Turkmenistan	0	0.0	0	0.0	0.0	0.0	0.0	0.0

1. Prevalent pediatric patients on a functioning graft (TX) on the 30th of June 2017. Prevalent counts and prevalence per million age related population (pmarp), by age group.

## Europe <sup>2</sup>

Country	Total TX
	0-14 years
	Pmarp
Albania	5.5
Austria	35.9
Belarus	17.4
Bosnia and Herzegovina	5.5
Bulgaria	8.0
Croatia	3.2
Cyprus	28.7
Czech Republic	19.2
Denmark	31.2
Estonia	14.2
Finland	82.6
France	28.0

Country	Total TX
	0-14 years
	Pmarp
FYR of Macedonia	2.9
Georgia	3.9
Germany	13.4
Greece	14.7
Hungary	28.1
Iceland	59.9
Italy	-
Latvia	13.4
Lithuania	4.7
Malta	32.4
Norway	52.5
Portugal	39.3

Country	Total TX
	0-14 years
	Pmarp
Republic of Serbia	20.5
Romania	0.7
Russia	8.5
Slovakia	6.0
Slovenia	13.1
Spain	35.1
Sweden	48.8
Switzerland	34.8
The Netherlands	38.0
Turkey	5.6
Ukraine	6.0
United Kingdom	44.1

1. Prevalent pediatric patients on a functioning graft (TX) on the 30th of June 2017. Prevalent counts and prevalence per million age related population (pmarp), by age group.
2. Prevalent pediatric patients on functioning graft (TX) on the 31st of December 2015. Prevalent counts and prevalence per million age related population (pmarp). Numbers are derived from ESPN/ERA-EDTA Registry Report 2017. European prevalences for 15-19 years not reported due to suspected incompleteness.

## Latin America <sup>1</sup>

Country	Total TX				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	Pmarp	pmarp	pmarp	pmarp
Colombia	4	0.3	6	0.4	0.0	0.5	0.5	0.5
Panama	0	0.0	0	0.0	0.0	0.0	0.0	0.0
Peru	4	0.5	21	1.8	0.0	0.3	1.1	6.1
Paraguay	0	0.0	0	0.0	0.0	0.0	0.0	0.0

## North America <sup>3</sup>

Country	Total TX				Age groups			
	0-14 yr		0-19 yr		0-4 yr	5-9 yr	10-14 yr	15-19 yr
	N	pmarp	N	pmarp	pmarp	pmarp	pmarp	pmarp
United States of America	2493	40.5	4969	60.0	8.4	42.5	68.9	116.3

1. Prevalent pediatric patients on a functioning graft (TX) on the 30th of June 2017. Prevalent counts and prevalence per million age related population (pmarp), by age group.
2. Prevalent pediatric patients on functioning graft (TX) on the 31st of December 2015. Prevalent counts and prevalence per million age related population (pmarp). Numbers are derived from ESPN/ERA-EDTA Registry Report 2017. European prevalences for 15-19 years not reported due to suspected incompleteness.
3. Prevalent pediatric patients on a functioning graft (TX) on the 31st of December 2016. Prevalent counts and prevalence per million age related population (pmarp), by age group.

## Africa <sup>1</sup>

Country	Total RRT		Modalities	
	ALL	HD	PD	TX
	pmarp	pmarp	pmarp	pmarp
Congo, Rep	0.0	0.0	0.0	0.0
Ethiopia	0.0	0.0	0.0	0.0
Ghana	0.0	0.0	0.0	0.0
Guinea	0.0	0.0	0.0	0.0
Mozambique	0.0	0.0	0.0	0.0
Zambia	0.1	0.0	0.1	0.0

## Asia <sup>1</sup>

Country	Total RRT		Modalities	
	ALL	HD	PD	TX
	pmarp	pmarp	pmarp	pmarp
United Arab Emirates	46.3	21.6	13.9	10.8
Armenia	10.3	6.9	0.0	3.4
Indonesia	1.1	0.6	0.5	0.0
India	0.3	0.1	0.1	0.1
Sri Lanka	2.3	0.0	0.2	2.1
Malaysia	15.1	5.2	9.4	0.5
Syria	8.3	8.0	0.1	0.1
Turkmenistan	0.0	0.0	0.0	0.0

1. Prevalent pediatric patients on RRT on the 30th of June 2017, 0 - 14 years. Prevalent counts and prevalence per million age related population (pmarp).

## Europe <sup>2</sup>

Country	Total RRT		Modalities	
	ALL	HD	PD	TX
	Pmarp	pmarp	pmarp	pmarp
Albania	11.0	5.5	0.0	5.5
Austria	40.8	3.3	1.6	35.9
Belarus	24.5	2.6	4.5	17.4
Bosnia and Herzegovina	22.1	12.9	3.7	5.5
Bulgaria	18.0	6.0	2.0	8.0
Croatia	40.6	9.7	27.6	3.2
Cyprus	64.6	7.2	28.7	28.7
Czech Republic	28.5	5.6	5.6	19.2
Denmark	36.4	2.1	2.1	31.2
Estonia	19.0	4.7	0.0	14.2
Finland	97.1	5.6	8.9	82.6
France	38.6	6.9	3.7	28.0
Georgia	17.1	6.6	6.6	3.9
Greece	36.4	8.9	12.8	14.7
Hungary	37.2	4.9	4.2	28.1
Iceland	59.9	0.0	0.0	59.9
Italy	31.2	5.3	8.9	-

1. Prevalent pediatric patients on RRT on the 30th of June 2017, 0 - 14 years. Prevalent counts and prevalence per million age related population (pmarp).
2. Prevalent pediatric patients on RRT on the 31st of December 2015. Prevalent counts and prevalence per million age related population (pmarp). Numbers are derived from ESPN/ERA-EDTA Registry Report 2015.

## Europe <sup>2</sup>

	ALL	HD	PD	TX
	pmarp	pmarp	pmarp	pmarp
Latvia	16.7	0.0	3.3	13.4
Lithuania	18.8	0.0	14.1	4.7
Macedonia	14.4	5.8	5.8	2.9
Malta	32.4	0.0	0.0	32.4
Norway	56.8	1.1	3.2	52.5
Portugal	54.2	3.4	11.5	39.3
Republic of Serbia	31.3	5.9	3.9	20.5
Romania	13.7	8.8	4.2	0.7
Russia	18.4	3.4	6.5	8.5
Slovakia	21.7	6.0	9.6	6.0
Slovenia	19.6	0.0	6.5	13.1
Spain	41.4	4.0	2.3	24.1
Sweden	54.7	2.4	2.9	48.8
Switzerland	42.0	1.6	5.7	34.8
Netherlands	44.4	3.6	2.8	38.0
Turkey	14.3	2.8	5.8	5.6
Ukraine	11.9	3.5	2.5	6.0
United Kingdom	59.6	8.1	7.2	44.1

1. Prevalent pediatric patients on RRT on the 30th of June 2017, 0 - 14 years. Prevalent counts and prevalence per million age related population (pmarp).
2. Prevalent pediatric patients on RRT on the 31st of December 2015. Prevalent counts and prevalence per million age related population (pmarp). Numbers are derived from ESPN/ERA-EDTA Registry Report 2017.

## Latin America <sup>1</sup>

Country	Total RRT			
	ALL	HD	PD	TX
	pmarp	pmarp	pmarp	pmarp
Colombia	4.8	0.6	3.9	0.3
Panama	14.3	4.5	9.8	0.0
Peru	6.0	2.3	3.3	0.5
Paraguay	7.5	1.5	6.0	0.0

## North America <sup>2</sup>

Country	Total RRT			
	ALL	HD	PD	TX
	pmarp	pmarp	pmarp	pmarp
United States of America	62.3	5.8	7.7	40.5

1. Prevalent pediatric patients on RRT on the 30th of June 2017, 0 - 14 years. Prevalent counts and prevalence per million age related population (pmarp).
2. Prevalent pediatric patients on RRT on the 31st of December 2015. Prevalent counts and prevalence per million age related population (pmarp). Numbers are derived from ESPN/ERA-EDTA Registry Report 2017.

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For more information, please visit the IPNA Global RRT Registry website at: <http://www.ipna-online.org/>

## Registry Committee

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Registry Coordinator	<i>Sophie Ploos van Amstel *</i>

## Contact

IPNA Global RRT Registry

E-mail: [ipna-registry@amc.nl](mailto:ipna-registry@amc.nl)

Department of Medical Informatics

Tel: +31 20 5665738

Academic Medical Center

P.O. Box 22700

Website: <http://www.ipna-online.org/>

Room J1B-109

1100 DE Amsterdam

The Netherlands