Wilms Cancer Foundation

Wilms Tumor

Global Impact

Statistics, Survival, Inequity, Treatment, Availability & Health Costs

Wilms Cancer Foundation (WCF)

The Wilms Cancer Foundation (WCF), is a charitable organization, that supports and represents the needs of children, families and healthcare organizations affected by pediatric renal (kidney) cancer (particularly nephroblastoma commonly known as 'Wilms'). Its mission is to establish an international program of awareness, education, advocacy, early detection treatment and support to tackle the spread of the disease.

This WCF guide is for educational purposes only. It is based on international pediatric oncology standards in Canada, the United States and Europe. Seek advice from a qualified medical professional should you have any concerns or questions.

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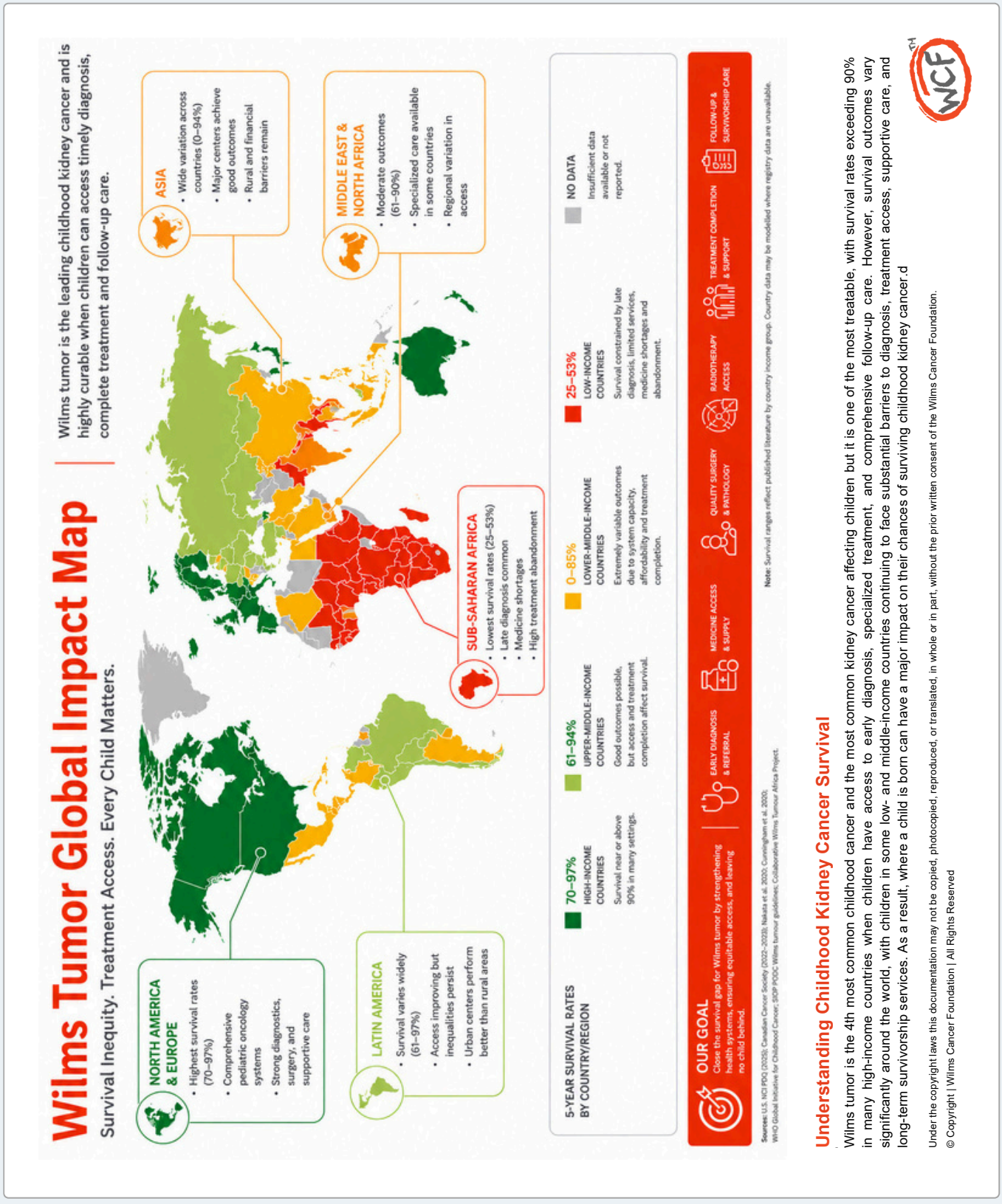
1 - Executive Summary

- Wilms tumor is the leading childhood kidney cancer and is highly curable when children can access timely diagnosis, surgery, chemotherapy, radiotherapy when needed, pathology, blood products, infection management and follow-up;
- The global problem is not only scientific. It is also a health-system access problem: children in high-income settings often have survival near 90% or higher, while outcomes in low-resource settings can be far lower;
- Country-level Wilms-specific statistics are incomplete. Many countries report childhood cancer in aggregate, kidney/renal tumors, or hospital-only cohorts rather than national Wilms tumor registries;
- For advocacy, the most credible approach is to present confirmed country figures where available, modelled burden estimates where registry data are absent, and a transparent data-confidence rating;
- The strongest immediate policy case is that Wilms tumor is a curable cancer where earlier diagnosis, treatment completion, medicine access and referral networks can produce measurable survival gains.

“Wilms tumor is often curable, yet survival still depends on where a child lives and whether treatment is accessible.”

2 - Global Wilms Tumor Survival Equity

Fig.1/ Wilms Tumor Global Impact Map



Understanding Childhood Kidney Cancer Survival

Wilms tumor is the 4th most common childhood cancer and the most common kidney cancer affecting children but it is one of the most treatable, with survival rates exceeding 90% in many high-income countries when children have access to early diagnosis, specialized treatment, and comprehensive follow-up care. However, survival outcomes vary significantly around the world, with children in some low- and middle-income countries continuing to face substantial barriers to diagnosis, treatment access, supportive care, and long-term survivorship services. As a result, where a child is born can have a major impact on their chances of surviving childhood kidney cancer.d

3 - Why Wilms Tumor Mattters Globally

Fig.2/ Impact Area

Impact Area	
Child Survival	Wilms tumor can be highly survivable, but survival depends on access to timely diagnosis and complete treatment.
Equity	The disease exposes the difference between countries with full pediatric oncology systems and countries where surgery, chemotherapy, radiotherapy or supportive care are delayed or unavailable.
Family Burden	Even when medicines are technically available, travel, accommodation, lost wages, diagnostic fees and out-of-pocket costs can cause abandonment or incomplete treatment.
Government	National health systems carry costs for imaging, surgery, chemotherapy, hospitalization, radiotherapy, pathology, etc. Few countries publish Wilms-only government cost data.

4 - Evidence base or Data Limitiations

- Incidence: Public national Wilms-only incidence is available for a small number of countries. The U.S. NCI reports about 650 U.S. Wilms tumor cases annually and an incidence of 9.7 per million children under 15. Canada reports childhood kidney/renal pelvis cancer counts, with almost all being Wilms tumor;
- Global incidence proxy: International renal tumor data show childhood renal tumor incidence around 8.3 per million, with higher rates in North America/Europe and lower rates in many Asian regions;
- Survival: A global review found survival ranges of 70-97% in high-income countries, 61-94% in upper-middle-income countries, 0-85% in lower-middle-income countries, and 25-53% in low-income countries;
- Mortality: Country-level mortality is rarely published as Wilms-only. Mortality in this document is therefore expressed as a relative risk/burden indicator unless a public national number is available;
- Costs: Wilms-specific national government cost data are not routinely published. The document therefore identifies cost drivers and flags where published country-level costs are unavailable.

5 - Global Survival Gap

Fig.3/ Country Income

Country Income/ System Context	Reported Survival Range	Interpretation
High-income countries	**70–97%**	Most children can access multi-modal treatment; late effects and survivorship are major policy issues
Upper-middle-income countries	**61–94%**	Good outcomes possible, but access, regional inequality and treatment completion affect survival.
Lower-middle-income countries	**0–85%**	Extremely variable; outcomes depend on centre capacity, affordability and treatment completion.
Low-income countries	**25–53%**	Survival is commonly constrained by late diagnosis, limited services, medicine shortages & abandonment.

Key Message

Wilms tumor demonstrates one of the clearest global childhood-cancer equity gaps: the same disease may be curable in one country and fatal in another because of system access.

6 - Treatment Availability Framework

Fig.4/ Required Element

Required Element	High Capacity Setting	Limited-Capacity Setting Risk
Early Recognition & Referral	Primary care, imaging & referral pathways identify abdominal masses earlier	Childrend present later with larger tumors or metastatic disease
Imaging & Staging	Ultrasound/CT/MRI, chest imaging and pathology support risk-adapted treatment.	Incomplete staging can lead to over/ under-treatment or delayed treatment.
Surgery	Surgical oncology and anesthetic support available.	Surgical delays, lack of pediatric anesthesia or blood products increase risk.
Chemotherapy	Protocol-based chemotherapy and supportive care available.	Medicine shortages, unaffordable drugs and infection complications interrupt treatment.
Radiotherapy	Available when indicated	Unavailable or delayed radiotherapy worsens outcomes for selected stages/histologies.
Follow-up	Relapse surveillance and late-effects monitoring.	Loss to follow-up can miss relapse or long-term complications.

7 - Cost to Government & Health Care Systems

- Direct medical costs include ultrasound/CT/MRI, pathology, surgery, chemotherapy, inpatient admissions, blood products, antibiotics, radiotherapy where needed, management of relapse, and survivorship clinics;
- Indirect public costs include delayed diagnosis, emergency presentation, intensive care, treatment abandonment, disability, social support, and lost lifetime productivity when curable childhood cancers are not treated successfully.
- In high-income countries, the cost per patient can be substantial, but treatment is usually absorbed by public or insurance systems. In lower-resource settings, lower government expenditure often shifts burden to families and charities;
- Published African project data identified parent costs of about $100-$1,100 (USD) as an important barrier to completing treatment. For many households, that amount is catastrophic even when hospital services are subsidized;
- Policy framing: governments do not save money by leaving Wilms tumor untreated;
- Late presentation, relapse, incomplete treatment and preventable deaths increase humanitarian, economic and health-system losses.

7 - Country Statistics Snapshot

Fig.5/ Country Statistics Snapshot

Country	Annual Diagnosis	Survival Benchmark	Treatment Availability
United States	~650 Confirmed	~85-95%*	Comprehensive pediatric oncology, surgery, radiotherapy, pathology, trials
Canada	30 childhood kidney/renal pelvis diagnoses in 2022	~96% 5-year overall survival	Comprehensive provincial pediatric oncology networks
United Kingdom	~70-90 modelled	~85-95%+	NHS pediatric oncology networks
France	~60-80 modelled	~85-95%+	National pediatric oncology networks
Germany	~70-90 modelled	~85-95%+	Comprehensive pediatric oncology
Italy	~45-65 modelled	~85-95%+	National pediatric oncology centres
Spain	~40-55 modelled	~85-95%+	Comprehensive pediatric oncology
Netherlands	~15-25 modelled	~85-95%+	Highly centralized pediatric oncology
Sweden	~8-15 modelled	~85-95%+	Comprehensive pediatric oncology
Australia	~25-40 modelled	~85-95%+	Comprehensive pediatric oncology centres
Japan	~45-65 modelled	~85-95%	Comprehensive pediatric oncology
South Korea	~15-25 modelled	~85-95%	Comprehensive tertiary pediatric oncology

7 - Country Statistics Snapshot Cont/d

Fig.6/ Country Statistics Snapshot

Country	Annual Diagnoses	Survival Benchmark	Treatment Availability
Saudi Arabia	~60-90 modelled annually	~70-95%	Specialist oncology exists; access varies by region
UAE	~8-15 modelled annually	~70-95%	High-capacity tertiary services
Israel	~8-15 modelled annually	~85-95%+	Comprehensive pediatric oncology
China	~900-1,400 modelled	~61-94% UMIC range	Major tertiary centres; rural/financial gaps
Brazil	~280-420 modelled	~61-94% UMIC range	Large oncology network; state variation
Mexico	~180-280 modelled	~61-94% UMIC range	Specialist centres; delays/barriers persist
Argentina	~60-90 modelled annually	~61-94% UMIC range	Specialist care available; regional variation
Chile	~20-35 modelled annually	~70-95%	Pediatric oncology network
Colombia	~70-110 modelled annually	~61-94% UMIC range	Pediatric oncology centres; continuity varies
Peru	~60-95 modelled annually	~61-94% UMIC range	Specialist care concentrated in cities
South Africa	~100-160 modelled	~61-94% UMIC range	Specialist public/private care; rural barriers
Turkey	~120-180 modelled annually	~61-94% UMIC range	Specialist pediatric oncology in cities

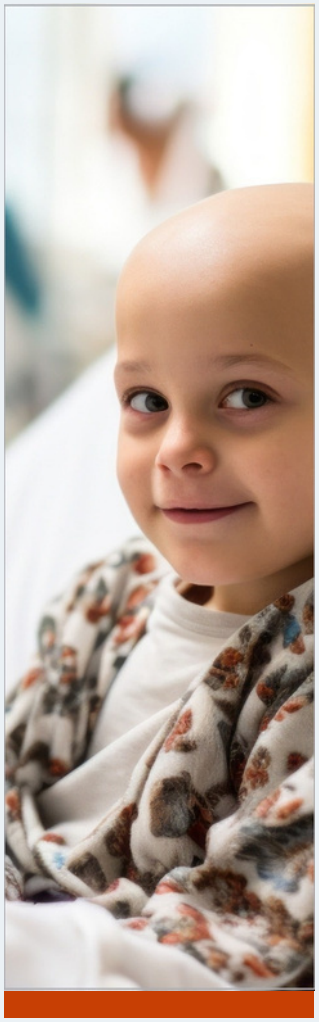
10 - Prioroity Regions for Intervention

Fig.7/ Country Statistics Snapshot

Region/ Context	Why It Matters	Priority Actions
Low-income and fragile states	Highest risk of late diagnosis, abandonment, medicine shortage and lack of radiotherapy.	Referral pathways, medicine supply, treatment subsidies, parent navigation registry development.
Lower-middle-income high-population countries	Largest number of children affected, even when some centres have good outcomes.	Expand regional centres, reduce abandonment, support protection & integrate national protocols.
Upper-middle-income countries with regional inequality	National averages may hide rural or low-income disparities.	Twinning, satellite clinics, telepathology, transport support and outcome reporting by region.
Small states and islands	Low case numbers make specialist domestic care difficult.	Regional referral agreements, shared protocols and cross-border medicine access.

11 - Advocacy Messages for Funders & Governments

- Wilms tumor is a practical entry point for improving childhood cancer systems because it requires coordinated but achievable care: diagnosis, surgery, chemotherapy, supportive care and follow-up;
- The survival gap is unacceptable because the disease is often curable when treatment is timely and complete;
- The goal is not only to buy medicines. It is to build a complete care pathway that keeps children in treatment until cure and monitors them after treatment;
- Country-level investment should measure: time from symptoms to diagnosis, stage at presentation, treatment abandonment, medicine stock-outs, surgery delay, radiotherapy delay, relapse and survival;
- A global Wilms tumor observatory or registry partnership would fill a major evidence gap and help countries compare progress responsibly.



12 - Recomended Data Dashboard

Fig.8/ Indicator

Indicator	Definition	Why It Matters
New diagnoses	Annual confirmed Wilms tumor cases, ages 0-14 or 0-19	Measures burden and planning need
Stage at diagnosis	Stage I-V distribution	Shows early-detection and referral effectiveness
Treatment start time	Days from first presentation to oncology treatment	Identifies delays that reduce survival
Treatment completion	Percentage completing protocol therapy	Directly measures abandonment/ system support
Medicine availability	Stock-out days for core chemotherapy/supportive medicines	Shows supply-chain reliability
Radiotherapy access	Availability and delay when indicated	Important for selected stages and risk groups
Survival	1-year, 3-year and 5-year overall/ event-free survival	Ultimate outcome measure

Appendix A: Country by Country Working Table

Fig.9/ Steps

Steps	Action	Practical Purpose
Step 1	Baseline nutritional assessment	Identify risk early and establish growth/ intake baseline
Step 2	Oral nutrition optimization	Increase intake with preferred foods, meal frequency, and calorie density
Step 3	Oral supplements/ fortified foods	Bridge gaps when regular intake falls short
Step 4	Enteral nutrition	Provide reliable nutrition when oral intake is inadequate
Step 5	Parenteral nutrition	Use when enteral feeding is not possible or insufficient
Step 6	Reassessment and adjustment	Adapt plan as symptoms, renal function, and treatment phase change
Step 7	Baseline nutritional assessment	Identify risk early and establish growth/ intake baseline

Important: Rows marked “modelled” are not registry-confirmed country statistics. They are planning estimates based on public incidence benchmarks and broad system/income-group survival literature.

Appendix B: Country by Country Working Table

Important

Rows mmarked “Modelled” are not registry-confirmed country statistics. They are planning estimates based on public incidence benchmarks and broad system/income group survivial literature.

- United States | High | ~650 confirmed annually | Low relative mortality | ~85-95%+ | Comprehensive pediatric oncology, surgery, radiotherapy, pathology, trials | High direct cost; precise Wilms-only public cost not routinely published
- Canada | High | 30 childhood kidney/renal pelvis diagnoses in 2022 | 6 deaths in 2023 from childhood kidney/renal pelvis cancer | ~96% 5-year overall survival | Comprehensive provincial pediatric oncology networks | Provincial public payer cost; exact Wilms-only cost not routinely published
- United Kingdom | High | ~70-90 modelled annually | Low relative mortality | ~85-95%+ | NHS pediatric oncology networks | Public NHS cost; Wilms-only cost not routinely published
- France | High | ~60-80 modelled annually | Low relative mortality | ~85-95%+ | National pediatric oncology networks | Public/social insurance cost; Wilms-only cost not routinely published
- Germany | High | ~70-90 modelled annually | Low relative mortality | ~85-95%+ | Comprehensive pediatric oncology | Insurance/public cost; Wilms-only cost not routinely published
- Italy | High | ~45-65 modelled annually | Low relative mortality | ~85-95%+ | National pediatric oncology centres | Public health-system cost; Wilms-only cost not routinely published
- Spain | High | ~40-55 modelled annually | Low relative mortality | ~85-95%+ | Comprehensive pediatric oncology | Public health-system cost; Wilms-only cost not routinely published
- Netherlands | High | ~15-25 modelled annually | Low relative mortality | ~85-95%+ | Highly centralized pediatric oncology | Public/insurance cost
- Sweden | High | ~8-15 modelled annually | Low relative mortality | ~85-95%+ | Comprehensive pediatric oncology | Public health-system cost
- Australia | High | ~25-40 modelled annually | Low relative mortality | ~85-95%+ | Comprehensive pediatric oncology centres | Public Medicare/state costs plus insurance
- Japan | High | ~45-65 modelled annually | Low-to-moderate | ~80-95% | Comprehensive pediatric oncology | Public/insurance cost
- South Korea | High | ~15-25 modelled annually | Low-to-moderate | ~80-95% | Comprehensive tertiary pediatric oncology | Public/insurance cost
- Saudi Arabia | High | ~60-90 modelled annually | Moderate; regional referral affects outcomes | ~70-95% | Specialist oncology exists; access varies by region | Government-funded tertiary care
- UAE | High | ~8-15 modelled annually | Moderate; small numbers | ~70-95% | High-capacity tertiary services | Government/private insurance costs
- Israel | High | ~8-15 modelled annually | Low relative mortality | ~85-95%+ | Comprehensive pediatric oncology | Public/insurance cost
- China | Upper-middle | ~900-1,400 modelled annually | Large absolute mortality burden | ~61-94% UMIC range | Major tertiary centres; rural/financial gaps | Mixed public/ private/ out-of-pocket burden
- Brazil | Upper-middle | ~280-420 modelled annually | Moderate-to-high absolute burden | ~61-94% UMIC range | Large oncology network; state variation | SUS/public and private costs
- Mexico | Upper-middle | ~180-280 modelled annually | Moderate-to-high | ~61-94% UMIC range | Specialist centres; delays/barriers persist | Public insurance plus family costs
- Argentina | Upper-middle | ~60-90 modelled annually | Moderate | ~61-94% UMIC range | Specialist care available; regional variation | Public/social insurance costs
- Chile | High/Upper-middle | ~20-35 modelled annually | Moderate-to-low | ~70-95% | Pediatric oncology network | Public system and insurance costs
- Colombia | Upper-middle | ~70-110 modelled annually | Moderate-to-high | ~61-94% UMIC range | Pediatric oncology centres; continuity varies | Public/private payer plus family costs
- Peru, South Africa, Turkey, Iran, India, Pakistan, Bangladesh, Indonesia, Philippines, Vietnam, Thailand, Malaysia, Egypt, Morocco, Algeria, Nigeria, Ghana, Kenya, Uganda, Tanzania, Ethiopia, DR Congo, Sudan, Iraq, Syria, Yemen, Jordan, Lebanon, Palestine, Oman, Kuwait, Bahrain, Afghanistan, Nepal, Sri Lanka, Myanmar, Cambodia, Laos, Mongolia, Ukraine, Poland, Romania.

Appendix B: Country by Country Statistics Working Table Cont/d

Fig.10/ Country Income Group

Country	Income Group	Annual Diagnoses	Mortality/ Burden Signal	Survival Benchmark	Treatment Availability	Cost Pressure
United States	High	~650 Confirmed	Low Relative Mortality	~85-95%*	Comprehensive pediatric oncology, surgery,radiotherapy, pathology, trials	High direct cost; precise Wilms-only public cost not routinely published
Canada	High	30 childhood kidney/renal pelvis diagnoses in 2022	6 deaths in 2023 from childhood kidney/ renal pelvis cancer	~96% 5-year overall survival	Comprehensive provincial pediatric oncology networks	Provincial public payer cost; exact Wilms-only cost not routinely published
United Kingdom	High	~70-90 modelled	Low relative mortality	~85-95%+	NHS pediatric oncology networks	Public NHS cost; Wilms- only cost not routinely published
France	High	~60-80 modelled	Low relative mortality	~85-95%+	National pediatric oncology networks	Public/social insurance cost; Wilms-only cost not routinely published
Germany	High	~70-90 modelled	Low relative mortality	~85-95%+	Comprehensive pediatric oncology	Insurance/public cost; Wilms-only cost not routinely published
Italy	High	~45-65 modelled	Low relative mortality	~85-95%+	National pediatric oncology centres	Public health-system cost; Wilms-only cost not routinely published
Spain	High	~40-55 modelled	Low relative mortality	~85-95%+	Comprehensive pediatric oncology	Public health-system cost; Wilms-only cost not routinely published
Netherlands	High	~15-25 modelled	Low relative mortality	~85-95%+	Highly centralized pediatric oncology	Public/insurance cost
Sweden	High	~8-15 modelled	Low relative mortality	~85-95%+	Comprehensive pediatric oncology	Public health-system cost
Australia	High	~25-40 modelled	Low relative mortality	~85-95%+	Comprehensive pediatric oncology centres	Public Medicare/state costs plus insurance
Japan	High	~45-65 modelled	Low-to-moderate; Asian incidence may be lower	~85-95%	Comprehensive pediatric oncology	Public/insurance cost
South Korea	High	~15-25 modelled	Low relative mortality	~85-95%	Comprehensive tertiary pediatric oncology	Public/insurance cost

Appendix B: Country by Country Statistics Working Table Cont/d

Fig.11/ Country Income Group Cont/d

Country	Income Group	Annual Diagnoses	Mortality/ Burden Signal	Survival Benchmark	Treatment Availability	Cost Pressure
Saudi Arabia	High	~60-90 modelled annually	Moderate; regional referral affects outcomes	~70-95%	Specialist oncology exists; access varies by region	Government-funded tertiary care
UAE	High	~8-15 modelled annually	Moderate; small numbers	~70-95%	High-capacity tertiary services	Government/private insurance costs
Israel	High	~8-15 modelled annually	Low relative mortality	~85-95%+	Comprehensive pediatric oncology	Public/insurance cost
China	Upper-middle	~900-1,400 modelled	Large absolute mortality burden	~61-94% UMIC range	Major tertiary centres; rural/financial gaps	Mixed public/private/out-of-pocket burden
Brazil	Upper-middle	~280-420 modelled	Moderate-to-high absolute burden	~61-94% UMIC range	Large oncology network; state variation	SUS/public and private costs
Mexico	Upper-middle	~180-280 modelled	Moderate-to-high	~61-94% UMIC range	Specialist centres; delays/barriers persist	Public insurance plus family costs
Argentina	Upper-middle	~60-90 modelled annually	Moderate	~61-94% UMIC range	Specialist care available; regional variation	Public/social insurance costs
Chile	High/upper-middle	~20-35 modelled annually	Moderate-to-low	~70-95%	Pediatric oncology network	Public system and insurance costs
Colombia	Upper-middle	~70-110 modelled annually	Moderate-to-high	~61-94% UMIC range	Pediatric oncology centres; continuity varies	Public/private payer plus family costs
Peru	Upper-middle	~60-95 modelled annually	Moderate-to-high	~61-94% UMIC range	Specialist care concentrated in cities	Public and out-of-pocket burden
South Africa	Upper-middle	~100-160 modelled	Moderate-to-high	~61-94% UMIC range	Specialist public/private care; rural barriers	Public/private and family transport costs
Turkey	Upper-middle	~120-180 modelled annually	Moderate	~61-94% UMIC range	Specialist pediatric oncology in cities	Public/social security cost

8 - Country Statistics Snapshot

Fig.12/ Country Income Group Cont/d

Country	Income Group	Annual Diagnoses	Mortality/ Burden Signal	Survival Benchmark	Treatment Availability	Cost Pressure
Iran	Lower/upper-middle	~110-170 modelled annually	Moderate-to-high	~0-85% LMIC range	Tertiary oncology exists; medicine access varies	Public/charity/family cost mix
India	Lower-middle	~1,600-2,500 modelled annually	Very large absolute burden	~0-85% LMIC range	World-class centres exist; access uneven	Government schemes plus high family costs
Pakistan	Lower-middle	~450-700 modelled annually	High absolute burden	~0-85% LMIC range	Major centres; access and affordability vary	Public/charity/family burden
Bangladesh	Lower-middle	~300-500 modelled annually	High	~0-85% LMIC range	Specialist capacity concentrated in major cities	Government/NGO/family burden
Indonesia	Upper/lower-middle	~500-800 modelled annually	High absolute burden	~0-85% to 61-94% mixed range	Specialist centres in major cities	Public insurance plus family costs
Philippines	Lower-middle	~180-280 modelled annually	Moderate-to-high	~0-85% LMIC range	Major-centre pediatric oncology	Public/insurance/family burden
Vietnam	Lower-middle	~130-220 modelled annually	Moderate-to-high	~0-85% LMIC range	Specialist hospitals in major cities	Government insurance plus family cost
Thailand	Upper-middle	~70-110 modelled annually	Moderate	~61-94% UMIC range	Pediatric oncology capacity; universal coverage helps	Public payer cost
Malaysia	Upper-middle	~45-75 modelled annually	Moderate	~61-94% UMIC range	Public pediatric oncology; referral variation	Public health-system cost
Egypt	Lower-middle	~220-350 modelled annually	High absolute burden	~0-85% LMIC range	Major pediatric oncology institutions	Government/charity/family burden
Morocco	Lower-middle	~65-100 modelled annually	Moderate-to-high	~0-85% LMIC range	Specialist oncology in major centres	Public/charity/family burden
Algeria	Upper-middle	~85-130 modelled annually	Moderate	~61-94% UMIC range	Specialist services in major cities	Government-funded care

Appendix B: Country by Country Statistics Working Table Cont/d

Fig.13/ Country Income Group Cont/d

Country	Income Group	Annual Diagnoses	Mortality/ Burden Signal	Survival Benchmark	Treatment Availability	Cost Pressure
Nigeria	Lower-middle	~900-1,500 modelled annually	Very high absolute burden	~0-85% LMIC range; many centres lower	Specialist centres but limited capacity/cost/supply barriers	Limited government spending; family/charity burden
Ghana	Lower-middle	~120-190 modelled annually	High	~0-85% LMIC range	Specialist centres; limited national coverage	Government/insurance/family burden
Kenya	Lower-middle	~150-240 modelled annually	High	~0-85% LMIC range	Major referral centres; access uneven	Public/insurance/charity/family burden
Uganda	Low	~160-250 modelled annually	High	~25-53% LIC range	Limited pediatric oncology; referral/support constraints	Government budget pressure; family cost burden
Tanzania	Lower-middle	~180-290 modelled annually	High	~0-85% LMIC range	Referral centres; national access limited	Government/NGO/family costs
Ethiopia	Low	~300-500 modelled annually	Very high absolute burden	~25-53% LIC range	Specialist care concentrated; diagnostic constraints	Government budget pressure; travel/out-of-pocket burden
DR Congo	Low	~280-450 modelled annually	Very high	~25-53% LIC range	Very limited comprehensive access	Government capacity low; family/charity burden
Sudan	Low/lower-middle	~130-220 modelled annually	Very high; conflict disruption	~25-53% LIC / 0-85% LMIC range	Severely constrained access	Government capacity constrained; NGO/family burden
Iraq	Upper/lower-middle	~80-130 modelled annually	Moderate-to-high	~0-85% to 61-94% mixed range	Specialist services with regional variation	Government/family cost burden
Syria	Low/lower-middle	~50-90 modelled annually	Very high where care disrupted	~25-53% LIC / 0-85% LMIC range	Capacity heavily affected by conflict	Government/NGO/family burden
Yemen	Low	~90-150 modelled annually	Very high	~25-53% LIC range	Very limited comprehensive access	Government capacity very limited; humanitarian/family burden
Jordan	Lower/upper-middle	~18-30 modelled annually	Moderate	~0-85% to 61-94% mixed range	Regional specialist care available	Government/charity/family burden

Appendix B: Country by Country Statistics Working Table Cont/d

Fig.14/ Country Income Group Cont/d

Country	Income Group	Annual Diagnoses	Mortality/ Burden Signal	Survival Benchmark	Treatment Availability	Cost Pressure
Lebanon	Lower-middle	~8-15 modelled annually	Moderate-to-high; economic crisis effects	~0-85% LMIC range	Specialist care exists; affordability barriers	Government/private/charity/family costs
Palestine	Lower-middle	~10-20 modelled annually	High due to referral restrictions	~0-85% LMIC range	Often depends on permits/external centres	Government/NGO/family transport burden
Oman	High	~8-15 modelled annually	Moderate; small numbers	~70-95%	Specialist tertiary referral	Government-funded care
Kuwait	High	~7-12 modelled annually	Moderate; small numbers	~70-95%	High-resource tertiary care	Government-funded care
Bahrain	High	~2-4 modelled annually	Moderate; small numbers	~70-95%	Tertiary care/regional referral	Government-funded care
Afghanistan	Low	~150-250 modelled annually	Very high	~25-53% LIC range	Limited comprehensive access	Government/humanitarian/family burden
Nepal	Lower-middle	~45-75 modelled annually	High	~0-85% LMIC range	Specialist centres; access uneven	Government/NGO/family burden
Sri Lanka	Lower-middle	~25-40 modelled annually	Moderate	~0-85% LMIC range	Public pediatric oncology available	Government-funded care
Myanmar	Lower-middle	~100-170 modelled annually	High	~0-85% LMIC range	Limited and uneven specialist access	Government/family/humanitarian burden
Cambodia	Lower-middle	~35-60 modelled annually	High	~0-85% LMIC range	Limited specialist capacity	Government/NGO/family burden
Laos	Lower-middle	~14-25 modelled annually	High	~0-85% LMIC range	Limited pediatric oncology capacity	Government/NGO/family burden
Mongolia	Lower-middle	~5-10 modelled annually	Moderate-to-high	~0-85% LMIC range	Centralized specialist care	Government/family burden

Appendix B: Country by Country Statistics Working Table Cont/d

Fig.15/ Country Income Group Cont/d

Country	Income Group	Annual Diagnoses	Mortality/ Burden Signal	Survival Benchmark	Treatment Availability	Cost Pressure
Ukraine	Lower-middle	~45-75 modelled annually	Variable due to war disruption	~0-85% LMIC range	Specialist centres exist; continuity disrupted	Government/humanitarian/family costs
Poland	High	~30-45 modelled annually	Low-to-moderate	~85-95%+	Comprehensive pediatric oncology	Public health-system cost
Romania	High/upper -middle	~15-30 modelled annually	Moderate	~61-94% to HIC range	Specialist centres available	Public health-system cost

Source Notes & Bibliography

Important:

- S1: U.S. National Cancer Institute PDQ, Wilms Tumor and Other Childhood Kidney Tumors Treatment, updated Apr. 15, 2025: incidence 9.7 per 1 million children under 15 and about 650 U.S. cases annually;
- S2: Canadian Cancer Society: Canada recorded 30 diagnoses of childhood kidney and renal pelvis cancer in ages 0-14 in 2022 and 6 deaths in 2023; almost all childhood kidney/renal pelvis cancers in children are Wilms tumour;
- S3: Nakata et al., International Journal of Cancer / UKHSA Research Portal, 2020: childhood renal tumour incidence 8.3 per million globally, highest in North America/Europe and lower in most Asian regions;
- S4: Cunningham et al., Global Disparities in Wilms Tumor, 2020: survival ranges 70-97% in high-income countries, 61-94% in upper-middle-income countries, 0-85% in lower-middle-income countries, and 25-53% in low-income countries;
- S5: Cancer.ca survival statistics: 5-year overall survival for Wilms tumour in children 0-14 is about 96% in Canada;
- S6: WHO Global Initiative for Childhood Cancer: goal to reach at least 60% survival for childhood cancer globally by 2030;
- S7: WHO / St. Jude Global Platform for Access to Childhood Cancer Medicines: aims for uninterrupted quality-assured childhood cancer medicines for LMICs and to reach about 120,000 children;
- S8: SIOP PODC Wilms tumour guidelines: treatment with curative intent can be adapted for low-income settings when minimum requirements exist;
- S9: Collaborative Wilms Tumour Africa Project baseline report: 39% survival at end of treatment across participating centres; incomplete treatment and parent costs contributed to failure to complete treatment;
- S10:Disease Control Priorities / Treating Childhood Cancer in LMICs: Wilms tumour therapy is less intensive than some other childhood cancers, supporting cost-effective system strengthening;

Wilms Cancer Foundation

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Wilms Cancer Foundation (WCF)

The Wilms Cancer Foundation (WCF), is a charitable organization, that supports and represents the needs of children, families and healthcare organizations affected by pediatric renal (kidney) cancer (particularly nephroblastoma commonly known as 'Wilms'). Its mission is to establish an international program of awareness, education, advocacy, early detection treatment and support to tackle the spread of the disease.

This WCF guide is for educational purposes only. It is based on international pediatric oncology standards in Canada, the United States and Europe. Seek advice from a qualified medical professional should you have any concerns or questions.