

SETTING
THE STAGE

CHILDREN & EMERGENCY DEPARTMENT SERVICES

MARCH 2023
(2020/21 Data)

childhealthbc.ca



Children & Emergency Department Services: Setting the Stage for Tiers Development

Contents

1.0	Providers of Children's ED Services.....	2
2.0	The Population	3
3.0	Utilization of ED Services by BC Children	3
3.1	Pediatric ED Visits & Visit Rates	4
3.2	Ages & Disposition of Children Utilizing ED Services	5
3.3	Acuity & Reasons for Children Utilizing ED Services	5
3.4	ED Service Locations	7
	Appendix 1: ED and Med/Surg Visits and Days by Facility.....	8
	Appendix 2: Map of Pediatric ED Visits in BC.....	11
	Appendix 3: Total ED & Estimated Pediatric ED Visits by Hospital	12
	Appendix 4: HA Operated & Contracted Child & Youth Inpatient Beds in BC.....	15

HOW TO CITE THE CHILDREN & EMERGENCY DEPARTMENT SERVICES:

We encourage you to share these documents with others and we welcome their use as a reference. Please cite each document in the module in keeping with the citation on the table of contents of each of the three documents. If referencing the full module, please cite as:

Child Health BC. *Children & Emergency Department Services*. Vancouver, BC: Child Health BC, July 2018.

Children & Emergency Department Services: Setting the Stage for Tiers Development

The Children & Emergency Department (ED) Tiers of Service module is made up three components:

- **Setting the Stage** for Tiers Development: Summarizes the data used to create the module (*this document*).
- **Tiers in Brief** to Support System Planning: Provides a high-level description of the tiers, including responsibilities and requirements.
- **Tiers in Full** to Support Operational Planning: Provides a detailed description of the responsibility and requirements at each tier.

1.0 Providers of Children's ED Services

Children's ED services are provided by an interdisciplinary team which includes physicians/nurse practitioners, nurses, allied health and other health care team members.

In BC, physicians that work in EDs have one of three types of qualifications:

1. Royal College of Physicians and Surgeons of Canada (RCPSC)-certified.
 - a) Emergency Medicine specialists (FRCP(EM))
 - Physicians that have completed a 5-year post-graduate Emergency Medicine residency and RCPSC Emergency Medicine examination.
 - Pediatrics is a core component of all Emergency Medicine residency programs.
 - b) Pediatric Emergency Medicine specialists (FRCP(PEM))
 - FRCP-certified specialists in Pediatrics or Emergency Medicine that have completed an additional fellowship in Pediatric Emergency Medicine and the RCPS Pediatric Emergency Medicine examination.
2. Canadian College of Family Physician-certified (CCFP(EM))
 - Physicians that have completed a one-year post-graduate Emergency Medicine fellowship after a two-year Family Medicine residency. Must also have completed the CCFP(EM) examination.
3. Family physicians
 - Smaller rural and community hospitals may be staffed by family physicians who work in the ED on a part-time rotating basis.
 - Basic experience is a core component of family medicine training.

2.0 The Population

Over 800,000 children ages 0-16.9 years live in BC, making up 16% of the population. The highest number is in the FHA (345,503) and the highest percentage of children to total population is in the NHA (20%). See Table 1.

Table 1: Population, 0 – 16.9 Years & Total Population, by HA (2020 Estimates, bcstats.ca)

HA	Age					Total, all Ages	% 0 - 16.9 Yrs within HA	% 0 - 16.9 Yrs within BC
	<1	1-1.9	2-13.9	14-16.9	Total 0-16.9			
Interior	5,940	6,245	89,044	22,636	123,865	817,101	15%	15%
Fraser	17,915	18,455	246,074	63,897	346,341	1,935,495	18%	42%
Vancouver Coastal	10,406	9,843	114,421	31,084	165,754	1,237,665	13%	20%
Vancouver Island	5,976	6,339	90,623	22,419	125,357	857,319	15%	15%
Northern	2,770	3,014	43,447	9,850	59,081	300,132	20%	7%
Total	43,007	43,896	583,609	149,886	820,398	5,147,712	16%	100%
% Total 0-16.9 Yrs	5%	5%	71%	18%	100%			

3.0 Utilization of ED Services by BC Children

Two sources of provincial-level data were used to describe the utilization of ED services by children. Unfortunately, both sources have limitations:

1. National Ambulatory Care Report System (NACRS): ED data collected via NACRS is available at 30 sites in BC (2020/21). These 30 sites represent 28% of the EDs in B.C. and 63% of the total ED visits (many of the NACRS sites are the higher volume EDs). The NACRS provides patient and aggregate level data (including a breakdown of several variables by age).
2. Health Authority Management Information System (HAMIS): HAMIS data has been collected for several years but only provides aggregate-level data on total visits.

Highlights of the data are provided in the next section. Detailed data and a visual representation (map) are available in Appendices 1 - 3.

3.1 Pediatric ED Visits & Visit Rates

In 2020/21, there were approximately 2.1 million visits to EDs in B.C. hospitals (HAMIS data). Percentages from the 2020/21 NACRS data were applied to the 2020/21 BC ED visit data to help understand the utilization of EDs by children ages 0 – 16.9.

The HAMIS/NACRS data suggests in 2020/21:

- There were an estimated 226,730 pediatric visits (children ages 0 - 16.9 years) to BC EDs each year (~700 visits per day). This represents 10.5% of total ED visits. (Note: In previous years, this proportion was around 15% of total visits). See Table 2 for HA-level data and Appendix 3 for hospital-level data on total ED and pediatric ED visits.
- The pediatric ED visit rate averages 313 visits per 1,000 children per year in BC. It ranges from 181 per 1,000 in the Fraser Health Authority (FHA) to 519 in the Northern Health Authority (NHA). See Table 2, including notes 3 and 4.

Table 2: Total ED and Estimated Pediatric ED Visits (2020/21)

HA	Total ED Visits (Adults & Children)	Pediatric ED Visits (Est.)	% Pediatric ED Visits/Tot ED Visits	% Provincial Pediatric ED Visits	Population 0-16.9 years	Pediatric ED Visits (Est.)/1,000 Population Aged 0 – 16.9 years (HA)	Pediatric ED Visits (Est.)/1,000 Population Ages 0 – 16.9 years (HSDA)
IHA	534,317	56,179	10.5%	24.8%	123,865	454	EK: 508 KB: 520 OK: 414 TCS: 475
FHA	602,956	62,718	10.4%	27.7%	346,341	181 ^{Note 3}	FE: 237 FS: 188 FN: 141
VCH	366,276	17,845	4.9%	7.9%	165,754	286 ^{Note3}	Coastal: 257
BCCH	30,396	29,509	97.1%	13.0%			Richmond: 98 ^{Note 3} Van: 556 ^{Note 3}
VIHA	398,412	37,016	9.3%	16.3%	125,357	295	NVI: 336 CVI: 341 SVI: 247
NHA	217,544	23,462	10.8%	10.3%	59,081	397	NE: 330 NI: 337 NW: 586
Total	2,149,901	226,730	10.5%	100.0%	820,398	276	276

Notes re Table 2:

1. Total ED visits (adults and children) were based on 2020/21 HAMIS data.
2. Estimated pediatric ED visits were based on 2020/21 NACRS data for sites where NACRS data was available. Where NACRS data was not available, the provincial average of 11% (excludes “outlier sites” as listed in Appendix 3) of total ED visits was utilized.
3. VCH and BCCH visit data was combined to determine the VCH pediatric visit rate. Given the provincial role of BCCH and the fact that a significant number of children from FHA also present to BCCH, the VCH visit rate is likely overstated and the FHA rate understated. At an HSDA level, the BCCH visits were assumed to be from Vancouver. This likely overstates the Vancouver visit rate and understates the rates from Richmond, Coastal and FHA Health Service Delivery Areas (especially Fraser North as it is closest to BCCH).
4. Estimated pediatric ED visits/1,000 population is significantly higher in areas outside the Lower Mainland and Victoria. This may reflect limitations in alternative options for obtaining medical care.
5. Population estimates were based on B.C. statistics from BC Stats for 2020.

Considering future population growth, these figures are expected to increase by about 5% in the next 10 years. The predicted future rise in the number of ED visits may also be impacted by changes such as the availability of primary care services and the public's perception of the ability to obtain an assessment and diagnosis in the community within an appropriate time frame. These factors have historically increased the rate of ED visits faster than the rate of population growth.

3.2 Ages & Disposition of Children Utilizing ED Services

The highest proportion of pediatric ED visits was comprised of children ages 1 - 4 years of age (27% of the total child visits). See Table 3.

Of the pediatric visits, 91% were discharged home and 6% were admitted to hospital. A few were transferred to other hospitals for admission and/or left without being seen/treated.

Table 3: Ages of Pediatric ED Visits (NACRS data, 2020/21)

Age	% Provincial Pediatric Visits	Disposition after ED Visit						Total
		% Discharged Home	% Left Before End of Visit	% Admitted to Site of Receiving ED	% Transferred to Another Site	% Death On/After Arrival	% Intra Facility TF to Day Surg/Clinic	
<1	12%	88.0%	1.5%	8.7%	0.9%	0.1%	0.8%	100%
1 – 4	27%	93.3%	2.2%	3.6%	0.5%	0.0%	0.4%	100%
5 – 9	22%	93.2%	1.8%	4.1%	0.5%	0.0%	0.3%	100%
10 – 14	26%	90.8%	1.6%	6.7%	0.7%	0.0%	0.2%	100%
15 - 16	13%	87.2%	2.0%	9.5%	0.9%	0.0%	0.2%	100%
Total	100%	91.2%	1.8%	5.9%	0.6%	0.0%	0.4%	100%

3.3 Acuity & Reasons for Children Utilizing ED Services

The acuity levels of children presenting to EDs (NACRS data) are lower than those of adults. Patients triaged at Canadian Triage Acuity Scale (CTAS) levels 4 or 5 comprised 39% of total pediatric ED visits compared to 32% of total adult visits.

Assuming the NACRS percentages are representative of all B.C. EDs, it is estimated that 57,500 children/year present to B.C. EDs with high acuity conditions (CTAS 1 or 2), 161,000 with moderate acuity conditions (CTAS 3) and 147,500 with low acuity conditions (CTAS 4 and 5). See Table 4.

Table 4: CTAS Mix of Pediatric and Adult Visits (NACRS data, 2020/21)

CTAS	Description	Children (0-17)	Adults (18+)	Estimated Pediatric Visits/Year ¹
1	Resuscitation	1%	1%	1,500
2	Emergent	17%	17%	56,000
3	Urgent	43%	49%	161,000
4	Less Urgent	37%	29%	139,000
5	Non-Urgent	2%	3%	8,500
6	Unknown	1%	1%	3,000
Total		100%	100%	369,000

¹ These figures are based on average annual volumes prior to the 20/21. Volumes in 20/21 were unusually low (pandemic year).

The NACRS data suggests:

- The reasons for pediatric ED visits are diverse, although the ten most frequent presenting complaints¹ make up 36% of total cases.
- Fever is the most frequent presenting complaint overall and for children ages 0 – 9 years, while upper extremity injuries are the most common for ages 10 and over.
- See Table 5.

Table 5: Most Frequent Presenting Complaints to ED, by Age Group (NACRS data, 2020/21)

Rank	Top 10 Presenting Complaints								
	<1 Years Old			1-4 Years Old			5-9 Years Old		
	Presenting Complaint	Visits	%	Presenting Complaint	Visits	%	Presenting Complaint	Visits	%
1	Fever	3,399	20%	Fever	5,963	15%	Upper extremity injury	3,653	12%
2	Head injury	1,350	8%	Laceration/puncture	3,958	10%	Laceration/puncture	2,936	9%
3	Nausea and/or vomiting	1,310	8%	Head injury	3,357	9%	Abdominal pain	2,905	9%
4	Rash	1,204	7%	Upper extremity injury	2,889	7%	Head injury	1,714	5%
5	Shortness of breath	749	4%	Rash	1,646	4%	Lower extremity injury	1,610	5%
6	Inconsolable crying	612	4%	Upper extremity pain	1,085	3%	Fever	1,531	5%
7	Minor complaints NOS	547	3%	Lower extremity injury	1,078	3%	Upper extremity pain	1,103	4%
8	Allergic reaction	534	3%	Cough/congestion	1,060	3%	Rash	968	3%
9	Cough/congestion	530	3%	Abdominal pain	1,013	3%	Lower extremity pain	955	3%
10	Neonatal jaundice	441	3%	Nausea and/or vomiting	961	2%	Nausea and/or vomiting	627	2%
Total, top 10		10,676	62%	Total, top 10	23,010	59%	Total, top 10	18,002	57%

¹ “Presenting complaint” refers to the symptom, complaint, problem or reason for seeking emergency medical care as identified by the patient. The Canadian Emergency Department Information System (CEDIS) Working Group developed the Presenting Complaint List (PCL). This information is captured in the NACRS data.

Rank	Top 10 Presenting Complaints					
	10 -14 Years Old			15 – 16 Years Old		
	Presenting Complaint	Visits	%	Presenting Complaint	Visits	%
1	Upper extremity injury	5,199	14%	Abdominal pain	1,732	9%
2	Abdominal pain	3,398	9%	Depression/suicidal/deliberate self-harm	1,728	9%
3	Lower extremity injury	3,184	9%	Upper extremity injury	1,427	8%
4	Laceration/puncture	1812	5%	Lower extremity injury	1245	7%
5	Depression/suicidal/deliberate self-harm	1,788	5%	Laceration/puncture	705	4%
6	Upper extremity pain	1,572	4%	Lower extremity pain	547	3%
7	Lower extremity pain	1520	4%	Head injury	486	3%
8	Head injury	1,127	3%	Upper extremity pain	458	2%
9	Fever	854	2%	Overdose ingestion	418	2%
10	Rash	623	2%	Chest pain - non-cardiac features	413	2%
Total, top 10		21,077	57%	Total, top 10	9,159	50%

Of the patients *admitted* as inpatients, the ten most common presenting complaints were:

- | | |
|---------------------------------------------|--------------------------------------|
| 1. Depression/suicidal/deliberate self-harm | 6. Nausea and/or vomiting |
| 2. Abdominal pain | 7. Shortness of breath |
| 3. Fever | 8. Upper extremity injury |
| 4. Seizure | 9. Abnormal lab/imaging results |
| 5. Overdose ingestion | 10. Direct referral for consultation |

Note: These ten complaints accounted for 60% of pediatric admissions from ED.

3.4 ED Service Locations

In 2020/21, ED care was provided in 109 hospitals in B.C. (Health Authorities Management Information System (HAMIS) reporting tool). This excludes Urgent and Primary Care Centres.

Because children may present to any ED at any time, all EDs in B.C. must be able to provide a high standard of emergent care to children. This includes ensuring appropriate levels of pediatric training for physicians, nurses and other health care providers and the availability of age-appropriate equipment and space that supports child and family-centered care. Processes and protocols must also be in place to support the timely transfer of children to other tiers of service when required.

While ED care is provided in 109 hospitals, relatively few have capacity to admit for inpatient care:

- 26/109 (24%) hospitals have designated pediatric beds (including mental health and substance use beds): 173 beds at B.C. Children's Hospital (BCCH) and 270 in other B.C. hospitals, for a total of 443.
- 31/109 (28%) hospitals do not have any capacity to admit inpatients (adults or children) to their facility.
- Of the 78 hospitals that have capacity to admit inpatients to their facility, 55 admitted children in 2020/21 (>5 inpatient days). 26 of those hospitals have designated pediatric beds, while 34 do not. See Appendix 4 for a list of hospitals with designated inpatient pediatric beds.

Appendix 1: ED and Med/Surg Visits and Days by Facility

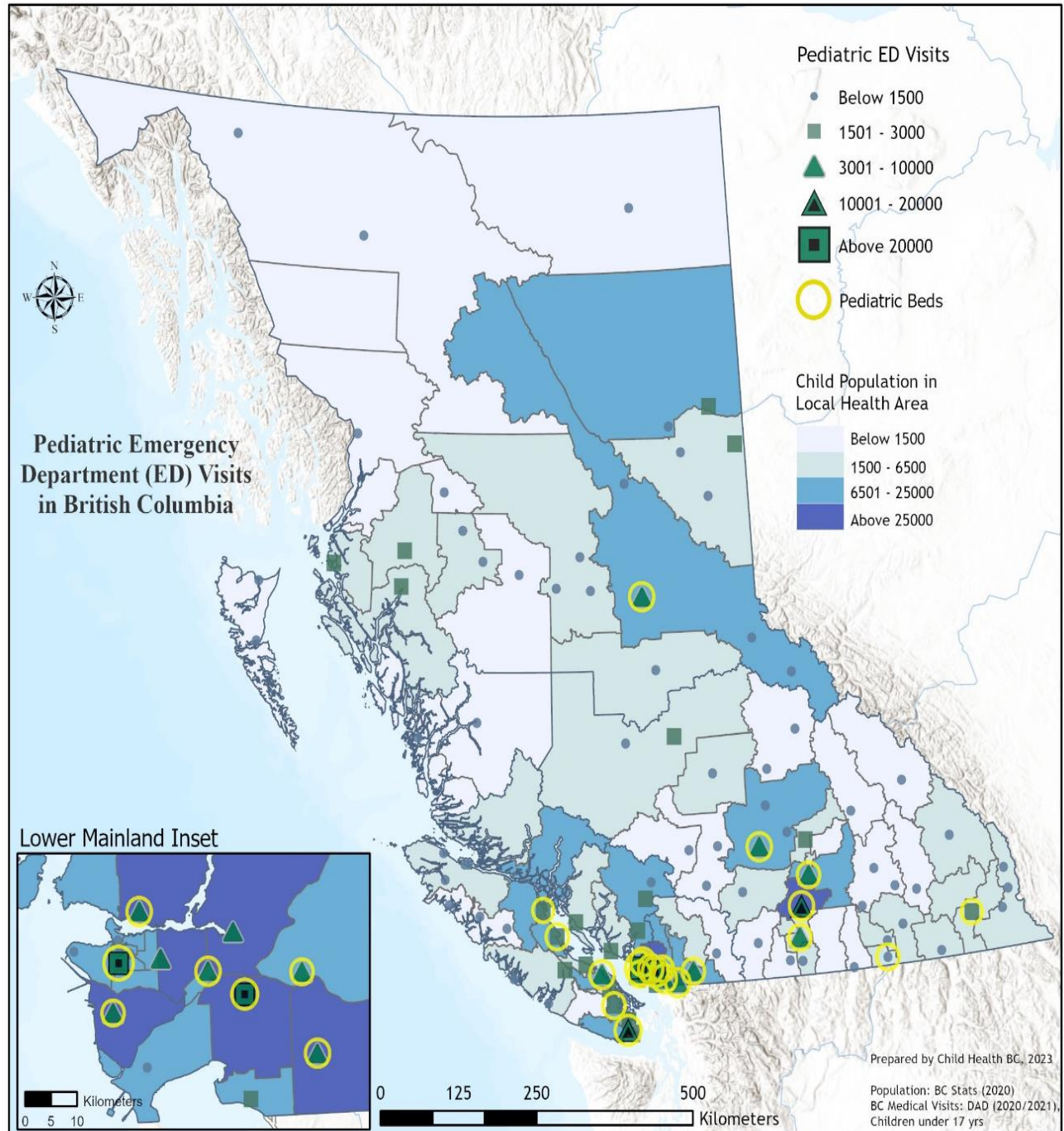
- Includes children ages 0 - 16.9 years.
- Surgical procedures: Procedures performed on children by a surgeon regardless of most responsible physician (MRP). Includes children in NICUs, PICUs, med/surg units and in day care settings.
- Med/surg visits and days: Visits and days sorted by MRP. Includes children in PICUs, med/surg units & day care settings (excludes children in NICUs).
- Day care visits = Surgical or medical day care visits in which an anesthetic was provided.
- Medical and surgical data is for fiscal year 2020/21. Source is the BC MoH Discharge Abstract Database.
- Emergency Department (ED) visits: Based on 2020/21 National Ambulatory Care Reporting System (NACRS) data for children ages 0-16.9 for sites that submit to NACRS. Where NACRS data was not available, visits were calculated as 11% x total ED visits. 2020/21 MIS data was used for total ED visits. *Note the proportion of total ED patients who were children was significantly lower in 2020/21 than previous years, when the proportion was approximately 15%.*

HA/HSDA	Treating Hosp	ED Visits	Surgery							Medical				Med/Surg		Gen Ped Beds
			Day Care Procs	Inpt Procs	Total Procs	Day Care Visits	Inpt Visits	Total Visits	Total Days	Day Care Visits	Inpt Visits	Total Visits	Total Days	Total Visits	Total Days	
Interior HA																
East Kootenay	Creston Valley Hosp	1,332	27		27	27		27		5	10	15	13	42	13	
	East Kootenay Regional Hosp	2,138	224	47	271	224	49	273	95		51	51	135	324	230	2
	Elk Valley Hosp	1,091	90		90	90		90		8	18	26	21	116	21	
	Elkford Htlh Ctre	70														
	Golden and District Hosp	916	39	1	40	39	1	40	1	1	9	10	10	50	11	
	Invermere and District Hosp	1,099									4	4	6	4	6	
	Sparwood Htlh Ctre	385														
Kootenay Boundary	Arrow Lakes Hosp	424														
	Boundary Hosp	1109									3	3	8	3	8	
	Castlegar & Dist Comm Htlh Ctre	871														
	Castlegar UPCC	481														
	Edgewood Htlh Ctre	184														
	Kootenay Boundary Reg Hosp	1484	119	37	156	119	27	146	60	1	116	117	295	263	355	4
	Kootenay Lake Hosp	1347	131	1	132	131	2	133	2	3	22	25	39	158	41	
	Slocan Community Htlh Ctre	239														
Okanagan	Victorian Comm'ty Htlh Ctre of Kaslo	164														
	Kelowna General Hosp	6,497	440	145	585	434	143	577	261	5	310	315	755	892	1016	10
	Orchard Medical UPCC	4,037														
	Penticton Regional Hosp	3,678	56	31	87	54	35	89	50	1	102	103	199	192	249	4
	Princeton General Hosp	583														
	South Okanagan Gen Hosp	1,492														
	South Similkameen Htlh Ctre	318														
	Summerland Mem Htlh Ctre		519		519	520		520						520		
	Vernon Jubilee Hosp	4,889	95	123	218	94	124	218	162	12	137	149	350	367	512	5
Thompson Cariboo Shuswap	Vernon UPCC	2,392														
	West Kelowna UPCC	903														
	100 Mile District Gen Hosp	1,374	1		1	1		1		18	6	24	15	25	15	
	Alexis Creek Htlh Ctre	89														
	Ashcroft Hosp & Comm Htlh Ctre	205														
	Barriere Htlh Ctre	136														
	Blue River Htlh Ctre	19.03														
	Cariboo Memorial Hosp	1,716	96	8	104	96	9	105	12	1	46	47	80	152	92	
	Chase and District Htlh Ctre	359														
	Dr. Helmcken Memorial Hosp	302														
	Kamloops Urgent Family CC	2948														
	Lillooet Hosp And Htlh Ctre	577	11		11	11		11			1	1	1	12	1	
	Nicola Valley Htlh Ctre	1,227														
Queen Victoria Hosp	863	44		44	44		44		3	8	11	10	55	10		
Royal Inland Hosp	5,946	374	169	543	373	156	529	299	1	199	200	517	729	816	9	
Shuswap Lake General Hosp	2,129	27	8	35	27	7	34	10		13	13	19	47	29		
St. Bartholomew's Htlh Ctre	168															
Interior HA Total		56,179	2,293	570	2,863	2,284	553	2,837	952	59	1,055	1,114	2,473	3,951	3,425	30

HA/HSDA	Treating Hosp	ED Visits	Surgery							Medical				Med/Surg		Gen Ped Beds
			Day Care Procs	Inpt Procs	Total Procs	Day Care Visits	Inpt Visits	Total Visits	Total Days	Day Care Visits	Inpt Visits	Total Visits	Total Days	Total Visits	Total Days	
Fraser HA																
Fraser East	Abbotsford Regional Hosp and Cancer Centre	6,810	245	189	434	245	193	438	346		520	520	1,319	958	1665	12
	Chilliwack General Hosp	5,805	58	2	60	58	3	61	3		6	6	7	67	10	4
	Fraser Canyon Hosp	1,042														
	Mission Memorial Hosp	1,907														
Fraser North	Burnaby Hosp	3,191		2	2		4	4	4		41	41	76	45	80	
	Eagle Ridge Hosp	4,029	138		138	138		138						138		
	Ridge Meadows Hosp And Health Care Centre	4,127	157	43	200	157	49	206	71	1	70	71	78	277	149	4
	Royal Columbian Hosp	5,051	61	156	217	61	151	212	204		378	378	902	590	1,106	12
Fraser South	Delta Hosp	1,453	20		20	20		20			4	4	4	24	4	
	Jim Pattison Outpatient Care and Surgery Centre		23		23	23		23						23		
	Langley Memorial Hosp	3,649	89	61	150	88	60	148	107		155	155	297	303	404	8
	Peace Arch District Hosp	2,899		2	2		2	2	2					2	2	
	Surrey Memorial Hosp	22,755	594	327	921	592	340	932	495	5	855	860	2,214	1,792	2,709	16
Fraser HA Total		62,718	1,385	782	2,167	1,382	802	2,184	1,232	6	2,029	2,035	4,897	4,219	6,129	57
Vancouver Coastal HA																
North Shore/Coast Garibaldi	Bella Coola General Hosp	377									5	5	9	5	9	
	Lions Gate Hosp	4,267	128	124	252	128	129	257	192	27	262	289	677	546	869	10
	Pemberton Htlh Ctre	651														
	Powell River General Hosp	1,810	24	3	27	24	3	27	3		10	10	12	37	15	
	R.W. Large Memorial Hosp	319									4	4	9	4	9	
	Sechelt Hosp	1,709	17	1	18	17	2	19	2		25	25	29	44	31	
	Squamish General Hosp	1,754	75		75	75		75			24	24	32	99	32	
	Whistler Htlh Ctre	1,682														
Richmond	Richmond Hosp	3,128	119	27	146	119	30	149	45		99	99	158	248	203	3
Vancouver	Mount Saint Joseph Hosp	540	16		16	16		16						16	0	
	St. Paul's Hosp	537	15	2	17	13	2	15	4	6	88	94	112	109	116	
	UBC Health Sciences Centre	1,006	32	7	39	31	8	39	10			0		39	10	
	Vancouver General Hosp	66	27	17	44	27	14	41	109	9	1	10	1	51	110	
Vancouver Coastal HA Total		17,845	453	181	634	450	188	638	365	42	518	560	1,039	1,198	1,404	14
Vancouver Island HA																
Central Vancouver Island	Bamfield Htlh Ctre	206														
	Chemainus Health Care Ctre	908														
	Cowichan District Hosp	2,553	193	45	238	193	34	227	44		108	108	187	335	231	4
	Ladysmith Comm'ty Htlh Ctre	1,536														
	Nanaimo Regional Gen Hosp	4,951	811	124	935	811	121	932	184		251	251	506	1,183	690	8
	Oceanside Htlh Ctre	2,795														
	Tofino General Hosp	663									13	13	24	13	24	
	West Coast General Hosp	1,554	75	4	79	75	4	79	7		17	17	19	96	26	
North Vancouver Island	Cormorant Island Community Htlh Ctre	142										0		0	0	
	Gold River Htlh Ctre	311														
	Kyuquot Htlh Ctre	188														
	North Isld Hosp Campbell River and District	2,007	117	44	161	117	38	155	59		59	59	127	214	186	3
	North Isld Hosp Comox Valley	2,755	107	37	144	107	39	146	55		67	67	150	213	205	3
	Port Alice Htlh Ctre	108														
	Port Hardy Hosp	727									3	3	4	3	4	
	Port McNeill And Dist Hosp	444												0	0	
	St. Joseph's General Hosp	0														
	Tahsis Htlh Ctre	293														
South Vancouver Island	Lady Minto / Gulf Islds Hosp	977								1	2	3	3	3	3	
	Royal Jubilee Hosp	1,534	253	4	257	253	10	263	10	1	23	24	23	287	33	
	Saanich Peninsula Hosp	1,544	246		246	246		246						246		
	Victoria General Hosp	8,359	1,081	484	1,565	1,081	386	1,467	669	3	736	739	2,649	2,206	3,318	20
	Westshore UPCC	2,462														
Vancouver Island HA Total		37,016	2,883	742	3,625	2,883	632	3,515	1,028	5	1,279	1,284	3,692	4,799	4,720	33

HA/HSDA	Treating Hosp	ED Visits	Surgery							Medical				Med/Surg		Gen Ped Beds
			Day Care Procs	Inpt Procs	Total Procs	Day Care Visits	Inpt Visits	Total Visits	Total Days	Day Care Visits	Inpt Visits	Total Visits	Total Days	Total Visits	Total Days	
Northern HA																
Northeast	Chetwynd General Hosp	678														
	Dawson Creek and Dist Hosp	1,671	93	8	101	93	8	101	14	20	24	44	39	145	53	
	Fort Nelson General Hosp	379									6	6	24	6	24	
	Fort St. John General Hosp	2,412	116		116	116		116	0	39	52	91	180	207	180	
	Hudson's Hope Htlh Ctre	18														
	Tumbler Ridge Htlh Ctre	162														
Northern Interior	Fraser Lake Htlh Ctre	782														
	G.R. Baker Memorial Hosp	1,455	193	2	195	193	3	196	8		8	8	12	204	20	
	Lakes District Hosp and Htlh Ctr	920									1	1	3	1	3	
	Mackenzie And District Hosp	558														
	McBride and District Hosp	175									2	2	2	2	2	
	St. John Hosp	1,009	152	5	157	152	3	155	3	22	16	38	35	193	38	
	Stuart Lake Hosp	458									1	1	2	1	2	
	The Univ Hosp of N BC	3,713	355	55	410	354	59	413	127	4	295	299	845	712	972	12
Northwest	Valemount Htlh Ctre	466														
	Atlin Htlh Ctre	249														
	Bulkley Valley District Hosp	1,234	40	4	44	40	4	44	4	4	35	39	50	83	54	
	Haida Gwaii Hosp & Htlh Ctre	200									4	4	7	4	7	
	Houston Htlh Ctre	350														
	Kitimat General Hosp	1,893	94	2	96	94	2	96	2	3	8	11	15	107	17	
	Mills Memorial Hosp	1,886	202	13	215	202	15	217	33	2	86	88	171	305	204	
	Northern Haida Gwaii Hosp & Htlh Ctre	265														
	Prince Rupert Regional Hosp	1,517	78	9	87	78	9	87	15		18	18	23	105	38	
	Stewart General Hosp	232														
	Stikine Htlh Ctre	160														
	Wrinch Memorial Hosp	618	49		49	49		49			3	3	4	52	4	
Northern HA Total		23,462	1,372	98	1,470	1,371	103	1,474	206	94	559	653	1,412	2,127	1,618	12
Provincial Health Services Authority																
PHSA	B.C. Cancer Agency															
	B.C. Children's Hosp	29,509	4,849	3,012	7,861	4,844	2,007	6,851	7,757	893	2,954	3,847	19,474	10,698	27,231	97
	B.C. Women's Hosp		8	338	346	8		8			249	249	357	257	357	
PHSA Total		29,509	4,857	3,350	8,207	4,852	2,007	6,859	7,757	893	3,203	4,096	19,831	10,955	27,588	97
Grand Total		226,730	13,243	5,723	18,966	13,222	4,285	17,507	11,540	1,099	8,643	9,742	33,344	27,249	44,884	250

Appendix 2: Map of Pediatric ED Visits in BC



Appendix 3: Total ED & Estimated Pediatric ED Visits by Hospital

1. Total ED visits (pediatrics and adult) were based on 2020/21 HAMIS data.
2. Sites that submitted National Ambulatory Care Report System (NACRS) data in 2020/21 are highlighted in yellow.
3. Sites that do not have inpatient beds are highlighted in grey.
4. Pediatric ED visits were based on 2020/21 NACRS data for children ages 0 to 16.9 years in sites where NACRS data was available. NACRS data was available for 30/109 EDs in B.C., representing 28% of sites and 63% of total ED visits.
5. Where NACRS data was not available, 11% of total ED visits was utilized to estimate the number of pediatric visits.

HSDA	Hosp Name	2020/2021 ED Visits (Pediatrics & Adult)	% of Prov ED Visits	Est % Pediatric Visits	Est Pediatric Visits/Yr	% of Prov Pediatric ED Visits
Interior Health Authority						
East Kootenay	Creston Valley Hospital	12,113	0.6%	11%	1,332	0.6%
	East Kootenay Regional Hospital	19,433	0.9%	11%	2,138	0.9%
	Elk Valley Hospital	9,917	0.5%	11%	1,091	0.5%
	Elkford Health Centre	637	0.0%	11%	70	0.0%
	Golden and District Hospital	8,331	0.4%	11%	916	0.4%
	Invermere and District Hospital	9,990	0.5%	11%	1,099	0.5%
	Sparwood Health Centre	3,500	0.2%	11%	385	0.2%
Kootenay Boundary	Arrow Lakes Hospital	3,856	0.2%	11%	424	0.2%
	Boundary Hospital	10,079	0.5%	11%	1,109	0.5%
	Castlegar & District Comm Hlth Ctre/Castlegar UPCC	12,293	0.6%	11%	1,352	0.6%
	Edgewood Health Centre	1,670	0.1%	11%	184	0.1%
	Kootenay Boundary Regional Hospital	13,495	0.6%	11%	1,484	0.7%
	Kootenay Lake Hospital	12,246	0.6%	11%	1,347	0.6%
	Slocan Community Health Centre	2,171	0.1%	11%	239	0.1%
	Victorian Community Health Centre of Kaslo	1,490	0.1%	11%	164	0.1%
Okanagan	Kelowna General Hospital	72,514	3.4%	9%	6,497	2.9%
	Orchard Medical Urgent and Primary Care Centre	36,696	1.7%	11%	4,037	1.8%
	Penticton Regional Hospital	33,432	1.6%	11%	3,678	1.6%
	Princeton General Hospital	5,296	0.2%	11%	583	0.3%
	South Okanagan General Hospital	13,563	0.6%	11%	1,492	0.7%
	South Similkameen Health Centre	2,888	0.1%	11%	318	0.1%
	Vernon Jubilee Hospital	44,446	2.1%	11%	4,889	2.2%
	Vernon Urgent Primary Care Centre	21,746	1.0%	11%	2,392	1.1%
	West Kelowna UPCC	8,208	0.4%	11%	903	0.4%
Thompson Cariboo Shuswap	100 Mile District General Hospital	12,494	0.6%	11%	1,374	0.6%
	Alexis Creek Health Centre	811	0.0%	11%	89	0.0%
	Ashcroft and District General Hospital	1,864	0.1%	11%	205	0.1%
	Barriere Health Centre	1,235	0.1%	11%	136	0.1%
	Blue River Health Centre	173	0.0%	11%	19	0.0%
	Cariboo Memorial Hospital	15,600	0.7%	11%	1,716	0.8%
	Chase and District Health Centre	3,262	0.2%	11%	359	0.2%
	Dr. Helmcken Memorial Hospital	2,741	0.1%	11%	302	0.1%
	Kamloops Urgent Family Care Centre	26,796	1.2%	11%	2,948	1.3%
	Lillooet Hospital and Health Centre	5,242	0.2%	11%	577	0.3%
	Nicola Valley Hospital and Health Centre	11,158	0.5%	11%	1,227	0.5%
	Queen Victoria Hospital	7,849	0.4%	11%	863	0.4%
	Royal Inland Hospital	64,199	3.0%	9%	5,946	2.6%
	Shuswap Lake General Hospital	19,356	0.9%	11%	2,129	0.9%
	St. Bartholomew's Health Centre	1,527	0.1%	11%	168	0.1%
Total, IH		534,317	24.9%	11%	56,179	24.8%

HSDA	Hosp Name	2020/2021 ED Visits (Pediatrics & Adult)	% of Prov ED Visits	Est % Pediatric Visits	Est Pediatric Visits/Yr	% of Prov Pediatric ED Visits
Fraser Health Authority						
Fraser East	Abbotsford Regional Hospital and Cancer Centre	62,434	2.9%	11%	6,810	3.0%
	Chilliwack General Hospital	53,881	2.5%	11%	5,805	2.6%
	Fraser Canyon Hospital	10,452	0.5%	10%	1,042	0.5%
	Mission Memorial Hospital	18,248	0.8%	10%	1,907	0.8%
Fraser North	Burnaby Hospital	62,168	2.9%	5%	3,191	1.4%
	Eagle Ridge Hospital and Health Care Centre	42,965	2.0%	9%	4,029	1.8%
	Ridge Meadows Hospital and Health Care Centre	38,352	1.8%	11%	4,127	1.8%
	Royal Columbian Hospital	65,923	3.1%	8%	5,051	2.2%
Fraser South	Delta Hospital	25,939	1.2%	6%	1,453	0.6%
	Langley Memorial Hospital	41,240	1.9%	9%	3,649	1.6%
	Peace Arch District Hospital	44,003	2.0%	7%	2,899	1.3%
	Surrey Memorial Hospital	137,351	6.4%	17%	22,755	10.0%
Total, FH		602,956	28.0%	10%	62,718	27.7%
Vancouver Coastal Health Authority						
North Shore / Coast Garibaldi	Bella Coola General Hospital	3,423	0.2%	11%	377	0.10%
	Lions Gate Hospital	51,095	2.4%	8%	4,267	1.9%
	Pemberton Health Centre	5,919	0.3%	11%	651	0.3%
	Powell River General Hospital	16,453	0.8%	11%	1,810	0.8%
	R.W. Large Memorial Hospital	2,897	0.1%	11%	319	0.1%
	Sechelt Hospital	15,533	0.7%	11%	1,709	0.8%
	Squamish General Hospital	15,946	0.7%	11%	1,754	0.8%
	Whistler Health Centre	15,295	0.7%	11%	1,682	0.7%
Richmond	Richmond Hospital	43,537	2.0%	7%	3,128	1.4%
Vancouver	Mount St. Joseph Hospital	26,985	1.3%	2%	540	0.2%
	St. Paul's Hospital	70,828	3.3%	1%	537	0.2%
	U.B.C. Health Sciences Centre	18,591	0.9%	5%	1,006	0.4%
	Vancouver General Hospital	79,774	3.7%	0%	66	0.0%
Total, VCH		366,276	17.0%	5%	17,845	7.9%
Island Health Authority						
Central Vancouver Island	Bamfield Health Centre	1,875	0.1%	11%	206	0.1%
	Chemainus Health Care Centre	8,252	0.4%	11%	908	0.4%
	Cowichan District Hospital	28,462	1.3%	9%	2,553	1.1%
	Ladysmith Community Health Centre	13,963	0.6%	11%	1,536	0.7%
	Nanaimo Regional General Hospital	59,491	2.8%	8%	4,951	2.2%
	Oceanside Health Centre	25,413	1.2%	11%	2,795	1.2%
	Tofino General Hospital	6,023	0.3%	11%	663	0.3%
	West Coast General Hospital	19,765	0.9%	8%	1,554	0.7%
North Vancouver Island	Cormorant Island Health Centre	1,293	0.1%	11%	142	0.1%
	Gold River Health Centre	2,831	0.1%	11%	311	0.1%
	Kyuquot Health Centre	1,709	0.1%	11%	188	0.1%
	North Island Hospital, Campbell River & District	22,734	1.1%	9%	2,007	0.9%
	North Island Hospital, Comox Valley	31,563	1.5%	9%	2,755	1.2%
	Port Alice Health Centre	978	0.0%	11%	108	0.0%
	Port Hardy Hospital	6,610	0.3%	11%	727	0.3%
	Port McNeill and District Hospital	4,035	0.2%	11%	444	0.2%
	St. Joseph's General Hospital		0.0%	11%	0	0.0%
	Tahsis Health Centre	2,661	0.1%	11%	293	0.1%

HSDA	Hosp Name	2020/2021 ED Visits (Pediatrics & Adult)	% of Prov ED Visits	Est % Pediatric Visits	Est Pediatric Visits/Yr	% of Prov Pediatric ED Visits
South Vancouver Island	Lady Minto/Gulf Islands Hospital	8,882	0.4%	11%	977	0.4%
	Royal Jubilee Hospital	52,652	2.4%	3%	1,534	0.7%
	Saanich Peninsula Hospital	21,795	1.0%	7%	1,544	0.7%
	Victoria General Hospital	55,047	2.6%	15%	8,359	3.7%
	Westshore Urgent Primary Care Centre	22,378	1.0%	11%	2,462	1.1%
Total, Island HA		398,412	18.5%	9%	37,017	16.3%
Northern Health Authority						
Northeast	Chetwynd General Hospital	6,164	0.3%	11%	678	0.3%
	Dawson Creek And District Hospital	15,193	0.7%	11%	1,671	0.7%
	Fort Nelson General Hospital	3,449	0.2%	11%	379	0.2%
	Fort St. John General Hospital	21,924	1.0%	11%	2,412	1.1%
	Hudson's Hope Health Centre	162	0.0%	11%	18	0.0%
	Tumbler Ridge Health Centre	1,471	0.1%	11%	162	0.1%
Northern Interior	Fraser Lake Health Centre	7,113	0.3%	11%	782	0.3%
	GR Baker Memorial Hospital	13,228	0.6%	11%	1,455	0.6%
	Lakes District Hospital and Health Centre	8,364	0.4%	11%	920	0.4%
	Mackenzie and District Hospital	5,069	0.2%	11%	558	0.2%
	McBride and District Hospital	1,595	0.1%	11%	175	0.1%
	St. John Hospital	9,175	0.4%	11%	1,009	0.4%
	Stuart Lake Hospital	4,161	0.2%	11%	458	0.2%
	The University Hospital of Northern British Columbia	38,004	1.8%	10%	3,713	1.6%
Northwest	Valemount Health Centre	4,237	0.2%	11%	466	0.2%
	Atlin Health Centre	2,260	0.1%	11%	249	0.1%
	Bulkley Valley District Hospital	11,222	0.5%	11%	1,234	0.5%
	Haida Gwaii Hospital and Health Centre	1,819	0.1%	11%	200	0.1%
	Houston Health Centre	3,179	0.1%	11%	350	0.2%
	Kitimat General Hospital	17,213	0.8%	11%	1,893	0.8%
	Mills Memorial Hospital	17,148	0.8%	11%	1,886	0.8%
	Northern Haida Gwaii Hospital and Health Centre	2,413	0.1%	11%	265	0.1%
	Prince Rupert Regional Hospital	13,794	0.6%	11%	1,517	0.7%
	Stewart General Hospital	2,113	0.1%	11%	232	0.1%
	Stikine Health Centre	1,454	0.1%	11%	160	0.1%
	Wrinch Memorial Hospital	5,620	0.3%	11%	618	0.3%
Total, NH		217,544	10.1%	11%	23,462	10.3%
PHSA	BC Children's Hospital	30,396	1.4%	97%	29,509	13.0%
Total, PHSA		30,396	1.4%	97%	29,509	13.0%
GRAND TOTAL		2,149,901	100%	11%	226,730	100.0%

Appendix 4: HA Operated & Contracted Child & Youth Inpatient Beds in BC

Sites are listed in alphabetical order within each HA.

HA	Hospital	General Pediatric Beds	Pediatric Observation Beds	Ped ICU Beds ²	Child & Youth MH Beds	Youth SU Beds ^{3,4}	Total Ped Beds	NICU Beds
IHA ⁵	A New Tomorrow (Kamloops)					8 ⁶	8	
	Bridge Youth Rec House (Kelowna)					14 ⁷	14	
	East Kootenay (Cranbrook)	2					2	
	Kelowna General	10			8		18	12
	Kootenay Boundary (Trail)	4					4	
	Penticton	4					4	
	Phoenix Centre (Kamloops)					5 ⁸	5	
	Royal Inland (Kamloops)	9			2		11	8
	Vernon	5					5	
FHA	Abbotsford Regional	12					12	10
	Burnaby						0	6
	Chilliwack General		4				4	
	Creekside Withdrawal Mgt Ctre (Surrey)					6	6	
	Langley Memorial	8					8	4
	Last Door Recovery Centre (N West)					4	4	
	Maple Ridge Treatment Centre					4 ⁹	4	
	Ridge Meadows		4				4	
	Royal Columbian	12					12	24
	Surrey Memorial	16			20		36	32
	Traverse (Chilliwack)					20	20	
VCHA	Carlile Centre (N Van)				10 ¹⁰		10	
	Lions Gate	10					10	6
	Peak House (Van)					8	8	
	Richmond		3 ¹¹				3	6
	St Paul's						0	9
	Young Bears Lodge (Van)					5	5	

² Beds have capacity for invasive monitoring, inotropic drugs, and mechanical ventilation.

³ Excludes beds in home-based settings and supportive recovery beds.

⁴ Substance use beds are funded by the HA but operated by an external agency. Exceptions: Creekside (Surrey) and Nechako (Prince George) are funded & operated by the HA.

⁵ Excludes Recovery Range (Fort Steele), ages 19 – 24 yrs.

⁶ Facility-based treatment, ages 12 – 18 yrs.

⁷ 14 beds: 4 withdrawal management & 10 facility treatment, ages 12 – 18 yrs.

⁸ Withdrawal management, ages 12 – 24 yrs.

⁹ Ages 18 – 24 yrs.

¹⁰ Concurrent disorders, 13 – 18 yrs old.

¹¹ 3 funded beds (5 physical beds) staffed by 1 RN 24/7.

HA	Hospital	General Pediatric Beds	Pediatric Observation Beds	Ped ICU Beds ¹²	Child & Youth MH Beds	Youth SU Beds ^{13, 14}	Total Ped Beds	NICU Beds
Island HA	Campbell River	3					3	
	Comox Valley	3					3	
	Cowichan District (Duncan)	4					4	
	Ledger House (Victoria)				14 ¹⁵		14	
	Nanaimo Regional	8					8	9
	Victoria General	20 (24) ¹⁶		5			25	22
	Victoria Youth Empowerment Society Specialized Youth Detox					5 ¹⁷	5	
NHA	Nechako Centre (Prince George)					8 ¹⁸	8	
	University Hosp of Northern B.C.	12 ¹⁹			6 ²⁰		18	9
PHSA	B.C. Children's Hospital	97		22	54 ²¹		173	
	B.C. Women's						0	60
TOTAL		239	11	27	114	87	478	217

Source: Survey of CHBC Regional Coordinators, March 2023.

Note: Several hospitals in BC do not have dedicated pediatric beds but admit children to beds on adult inpatient units. These hospitals are not included on the list above.

¹² Beds have capacity for invasive monitoring, inotropic drugs, and mechanical ventilation.

¹³ Excludes beds in home-based settings and supportive recovery beds.

¹⁴ Substance use beds are funded by the HA but operated by an external agency. Exceptions: Creekside (Surrey) and Nechako (Prince George) are funded & operated by the HA.

¹⁵ 14 beds: 5 child, 6 youth & 3 special care (assessment/stabilization) beds.

¹⁶ Planned seasonal increase to 24 beds Oct-April. 4 beds available with increased safety and monitoring for mental health.

¹⁷ Short-term residential withdrawal management program, ages 13-18

¹⁸ Includes 1 detox bed.

¹⁹ 4 beds have the capacity for more intensive monitoring, up to and including continuous cardiorespiratory monitoring.

²⁰ 2 beds for planned admissions and 4 for crisis stabilization.

²¹ Includes 14 beds at Looking Glass (up to age 24), a residential eating disorders program operated by PHSA (BC Mental Health & Substance Use Services and BCCH) in collaboration with the Looking Glass Foundation.