Child and Youth Data Laboratory (CYDL) Report for Experiences of Albertan Youth Project

Key findings

This report is an overview of the socio-economic status of 680,043 Albertan youth in 2008/09. Pampalon et al.'s neighbourhood deprivation index¹ was used to determine the social and material environments in which youth lived. Six indicators were included in the index: percent without a high school diploma, the employment ratio, average income, percent of single parent families, percent of persons living alone, and percent of persons separated, divorced, or widowed.

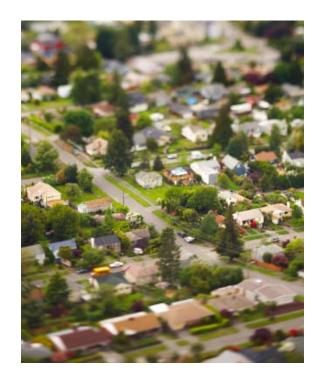
The report contains analyses of the relationships between socioeconomic status and age, gender, region of residence, educational achievement, mental health status, health service use, and interactions with Enterprise and Advanced Education, Human Services, and Justice and Solicitor General.

- The most socio-economically advantaged environments were experienced more often by youth who were younger, living in large urban centres, or achieving above educational expectations. Youth who pursued a post-secondary education were also more likely to live in higher socio-economic status neighbourhoods. The most socio-economically advantaged youth were less likely to visit emergency rooms or be hospitalized than youth living in the lowest socio-economic neighbourhoods.
- Youth facing challenges, such as receiving maltreatment-related intervention services, receiving Family Support for Children with Disabilities services, being charged with an offence, being involved with corrections, or receiving income support, were more likely to be living in low socio-economic neighbourhoods than youth not facing these challenges.



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Context

Due to increased access to resources, materials and experiences, high socio-economic status youth, in general, have better health, educational, and behavioural outcomes than low socio-economic status youth. ² Furthermore, neighbourhoods impact individuals; independent of individual or family health, education and income levels, youth in poorer neighbourhoods tend to have poorer outcomes than those in more advantaged neighbourhoods. ³

According to the Public Health Agency of Canada, increments in socio-economic status are associated with increments in health status⁴. Lower socio-economic status groups have health disparities with the rest of the population, ⁵ whereas higher socio-economic status groups have greater self-perceived health than the rest of the population. ³ Additionally, overall health service use is higher in low socio-economic groups, ⁵ while use of preventative services is more likely in higher socio-economic groups. ³

In addition to differences in health outcomes, previous research has shown that socio-economic status is associated with educational achievement, risk of maltreatment and corrections involvement. Low socio-economic status has been associated with lower grades and more school absences. ⁵ Youth from low income families are also less likely to attend university than those from high income families. ⁶ Approximately one third of substantiated child maltreatment investigations are from households receiving some form of social assistance. ⁷ Youth with higher socio-economic status are less likely to have corrections service involvement. ⁸

Despite the negative impacts of living in high-risk neighbourhoods, youth may experience positive outcomes (such as higher levels of academic performance) if they can form a bond with family and teachers, engage in extracurricular activities, and experience fewer adverse life events. 9

The project

The current project, **Experiences of Albertan Youth**, is focused on basic understanding of the experiences of Albertan youth within and across ministries, as they relate to key indicators (age, gender, socio-economic status, educational achievement, and mental health status). It is the first project in a planned series that will link and analyze administrative data on children and youth in Alberta to inform policy, programs, and research.

List of reports for the project

Socio-economic status of Albertan youth
Educational experiences of Albertan youth
Mental health status of Albertan youth
Family Support for Children with Disabilities services
received by Albertan youth
Maltreatment-related investigations among Albertan
youth

Maltreatment-related intervention services received by Albertan youth

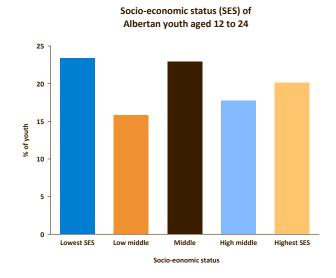
Physician visits by Albertan youth

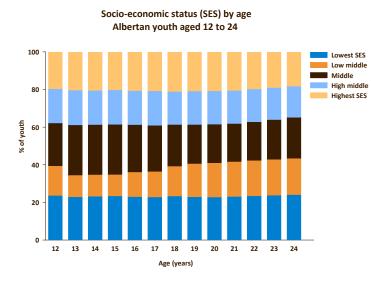
Emergency room visits by Albertan youth
Hospitalizations of Albertan youth
Offence charges among Albertan youth
Corrections involvement among Albertan youth
Post-secondary students in Alberta
Income support among Albertan youth
Educational experiences of Albertan youth with income
support activity
Least advantaged and most advantaged Albertan youth

Socio-economic status (Table 1)

This analysis considers the socio-economic status of youth (aged 12 to 24 years). Socio-economic status captures the social and material environments in which youth lived.

- 23% of Albertan youth lived in the most materially and socially deprived neighbourhoods; 20% lived in the most privileged socio-economic neighbourhoods.
- The low middle and high middle bars are slightly below the quintile mark, while the lowest SES and highest SES bars are slightly above the quintile mark. This is mainly because the original index quintiles were based on the total Albertan population; the study population represents only Albertan youth (aged 12 to 24 years).



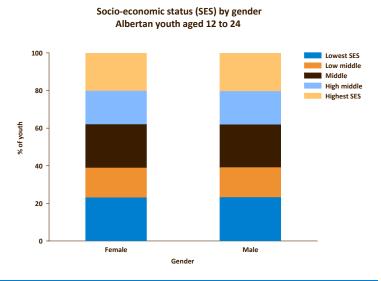


Age (Table 2)

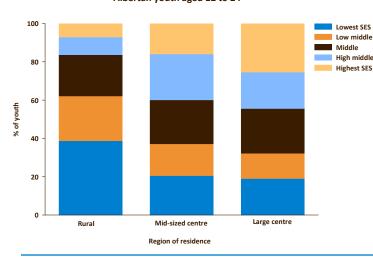
- Between the ages of 12 and 24, the percentages of youth living in the lowest and highest socioeconomic status neighbourhoods were similar.
 Across all ages, about 1 in 5 youth were consistently represented in each of these extreme ends of the socio-economic spectrum.
- The percentage of youth living in middle socioeconomic status neighbourhoods decreased slightly with age. Movement from the middle to low-middle range increased as youth got older, perhaps indicating a period of lower social and material status for youth transitioning into adulthood.

Gender (Table 3)

 Socio-economic status was similar for males and females. Approximately 20% of males and females were represented in both the lowest and highest socio-economic status neighbourhoods.



Socio-economic status (SES) by region of residence Albertan youth aged 12 to 24



Region of residence (Table 4)

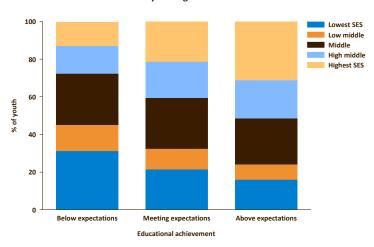
- Among youth living in rural regions, 62% were residing in the two lowest socio-economic status groups, compared to 37% of youth in mid-sized centres and 32% of youth living in large centres.
- Among youth living in the large centres of Edmonton and Calgary, 44% of youth were residing in the two most advantaged socioeconomic status groups, compared to 16% of youth living in rural regions.

Educational achievement (Table 5)

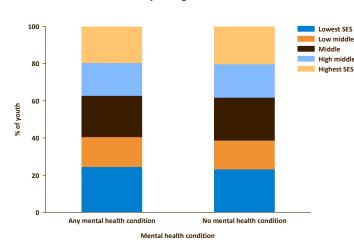
This analysis considers youth (aged 12 to 20 years) who were registered in Alberta's K-12 education system in 2008/09.

- Living in more advantaged socio-economic status neighbourhoods was associated with better educational performance.
- Among students achieving above expectations in school, 31% were living in the most materially and socially advantaged neighbourhoods, compared to considerably fewer youth (16%) in the lowest socio-economic status neighbourhoods.

Socio-economic status (SES) by educational achievement Albertan youth aged 12 to 20



Socio-economic status (SES) by mental health status Albertan youth aged 12 to 24



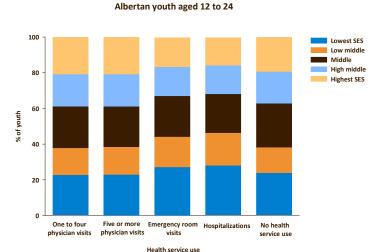
Mental health status (Table 6)

This analysis considers youth (aged 12 to 24 years) with a mental health condition in 2008/09. Mental health status refers to the presence or absence of a mental health condition. Mental health conditions are defined as receipt of services related to mental health conditions; that is, receipt of services is used here as a proxy for confirmed presence of a mental health condition. See *Definitions and Notes* (p.17).

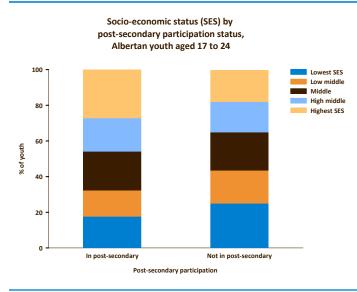
 The socio-economic distribution of youth who had a mental health condition did not differ greatly from youth who did not.

Health service use (Table 7)

- Among youth visiting emergency rooms, 27% were living in the most socio-economically deprived neighbourhoods, compared to 17% of youth living in the most privileged neighbourhoods.
- Among youth who were hospitalized, 28% were living in the lowest socio-economic status neighbourhoods, compared to 16% living in the highest.
- Frequency of physician visits varied little by socioeconomic status.



Socio-economic status (SES) by health service use



Post-secondary participation status (Table 8)

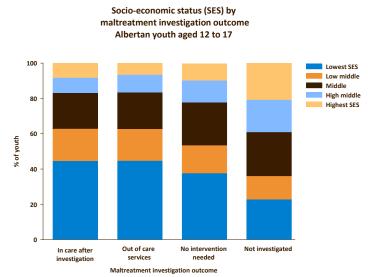
This analysis considers youth (aged 17 to 24 years) participating in the post-secondary education system in 2008/09.

- In general, youth living in the higher socioeconomic status neighbourhoods were more likely to be enrolled in post-secondary institutions than youth not enrolled.
- Among youth participating in the post-secondary education system, 27% were living in the highest socio-economic status neighbourhoods, compared with 18% in the lowest.

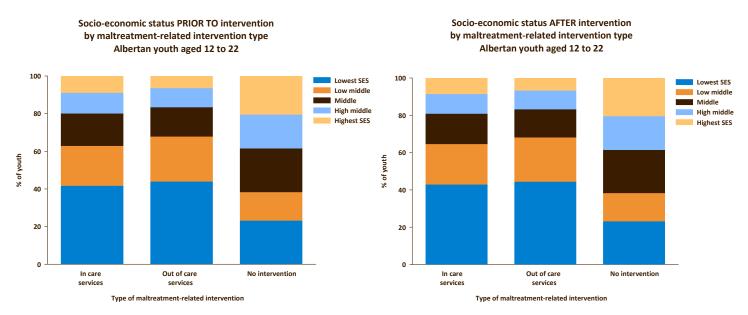
Maltreatment-related investigation outcome (Table 9)

This analysis considers the socio-economic status of youth (aged 12 to 17 years) who were the subject of a maltreatment-related investigation by Human Services in 2008/09. A maltreatment-related investigation occurs when there is a concern that the safety and well-being of a youth is threatened. See *Definitions and Notes* (p. 17).

 Regardless of the outcome, the socio-economic status of youth who were the subject of a maltreatment-related investigation was considerably lower than youth who were not investigated.

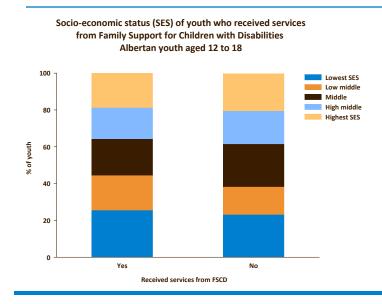


SES prior to and after maltreatment-related intervention (Tables 10 and 11)



This analysis considers youth (aged 12 to 22 years) who received a maltreatment-related intervention in 2008/09. Maltreatment-related interventions occur when the safety or well-being of a youth is threatened.

- The socio-economic status of youth who received a maltreatment-related intervention service did not vary greatly prior to and after intervention.
- Prior to and after an intervention service was received, more than 40% of these youth were living in the most socially and materially deprived neighbourhoods, compared to 23% of youth with no intervention.



Family Support for Children with Disabilities (Table 12)

This analysis considers the socio-economic status of youth (aged 12 to 18 years) who received services from Family Support for Children with Disabilities (FSCD) in 2008/09.

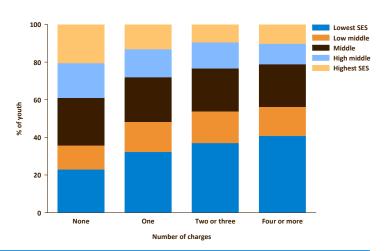
 The socio-economic status of youth who received services from FSCD was slightly different from those who did not receive such services, mainly in the low middle and middle quintiles.

Number of charges (Table 13)

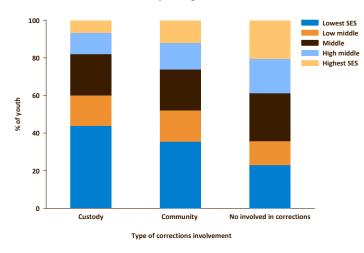
This analysis considers youth (aged 12 to 17 years) who were charged with an offence in 2008/09.

 Among youth who had four or more charges, 41% were living in the lowest socio-economic status neighbourhoods. This group was the least privileged materially and socially compared to youth receiving fewer or no charges.





Socio-economic status (SES) by type of corrections involvement Albertan youth aged 12 to 17



Type of corrections involvement (Table 14)

This analysis considers the socio-economic status of youth (aged 12 to 17 years) who were in custody (in which a sentence is served in a young offender facility) or with a community sentence or pre-trial supervision in 2008/09.

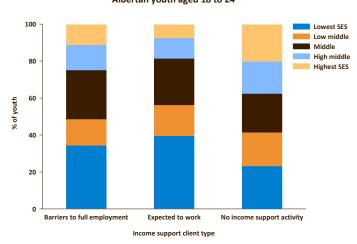
44% of youth in custody, 36% of youth with a community sentence or pre-trial supervision, and 23% of youth not involved in corrections were living in the lowest socio-economic status neighbourhoods; 7%, 12%, and 21% of these groups of youth, respectively, were living in the highest socio-economic status areas.

Any income support activity and client type (Table 15)

This analysis considers the socio-economic status of youth (aged 12 to 17 years) with any income support activity from Human Services during 2008/09. Client types include *expected to work* (clients looking for work or unable to work in the short term) and *barriers to full employment* (clients having difficulty finding work due to disabilities or other barriers).

 Whether they were expected to work or experienced barriers to full employment, youth with any income support activity were more socioeconomically disadvantaged than the general population of same age youth.

Socio-economic status (SES) by any income support activity and client type Albertan youth aged 18 to 24



Tables

Table 1. Number and percent of youth, socio-economic status (SES) of Albertan youth aged 12 to 24 years, 2008/09

	Socio-econ	nomic status
Number of youth	Lowest SES	158,827
	Low middle	107,706
	Middle	155,994
	High middle	120,665
	Highest SES	136,851
	Total	680,043
Percent of youth	Lowest SES	23.4
	Low middle	15.8
	Middle	22.9
	High middle	17.7
	Highest SES	20.1
	Total	100.0

Table 2. Number and percent of youth by socio-economic status (SES) and age in years, Albertan youth aged 12 to 24 years, 2008/09

	Socio-economic status							Age ir	n years						
		12	13	14	15	16	17	18	19	20	21	22	23	24	Total
Number of youth	Lowest SES	10,763	11,116	11,434	11,422	12,440	12,889	12,872	12,395	11,944	12,110	12,670	13,156	13,616	158,827
	Low middle	7,163	5,526	5,597	5,592	7,068	7,651	8,754	9,465	9,507	9,715	10,188	10,559	10,921	107,706
	Middle	10,292	12,848	12,990	12,985	13,533	13,778	12,163	11,147	10,712	10,567	11,079	11,624	12,276	155,994
	High middle	8,242	8,895	8,888	8,934	9,738	10,289	9,638	9,555	9,234	9,165	9,372	9,372	9,343	120,665
	Highest SES	8,871	9,782	10,003	9,822	11,091	11,667	11,558	11,178	10,812	10,710	10,618	10,466	10,273	136,851
	Total	45,331	48,167	48,912	48,755	53,870	56,274	54,985	53,740	52,209	52,267	53,927	55,177	56,429	680,043
Percent of youth	Lowest SES	23.7	23.1	23.4	23.4	23.1	22.9	23.4	23.1	22.9	23.2	23.5	23.8	24.1	23.4
	Low middle	15.8	11.5	11.4	11.5	13.1	13.6	15.9	17.6	18.2	18.6	18.9	19.1	19.4	15.8
	Middle	22.7	26.7	26.6	26.6	25.1	24.5	22.1	20.7	20.5	20.2	20.5	21.1	21.8	22.9
	High middle	18.2	18.5	18.2	18.3	18.1	18.3	17.5	17.8	17.7	17.5	17.4	17.0	16.6	17.7
	Highest SES	19.6	20.3	20.5	20.1	20.6	20.7	21.0	20.8	20.7	20.5	19.7	19.0	18.2	20.1
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Tables (continued)

Table 3. Number and percent of youth by socio-economic status (SES) and gender, Albertan youth aged

12 to 24 years, 2008/09								
	Socio-economic status		Gender					
		Female	Male	Total				
Number of youth	Lowest SES	78,124	80,700	158,824				
	Low middle	52,765	54,938	107,703				
	Middle	77,437	78,553	155,990				
	High middle	59,488	61,177	120,665				
	Highest SES	67,131	69,719	136,850				
	Total	334,945	345,087	680,032				
Percent of youth	Lowest SES	23.3	23.4	23.4				
	Low middle	15.8	15.9	15.8				
	Middle	23.1	22.8	22.9				
	High middle	17.8	17.7	17.7				
	Highest SES	20.0	20.2	20.1				
	Total	100.0	100.0	100.0				

Table 4. Number and percent of youth by socio-economic status (SES) and region of residence, Albertan youth aged 12 to 24 years. 2008/09

	Socio-economic status		Region of r	esidence	
		Rural	Mid-sized centre	Large centre	Total
Number of youth	Lowest SES	54,596	21,646	82,585	158,827
	Low middle	32,929	17,510	57,267	107,706
	Middle	30,432	24,152	101,410	155,994
	High middle	12,923	25,256	82,486	120,665
	Highest SES	9,949	16,747	110,155	136,851
	Total	140,829	105,311	433,903	680,043
Percent of youth	Lowest SES	38.8	20.6	19.0	23.4
	Low middle	23.4	16.6	13.2	15.8
	Middle	21.6	22.9	23.4	22.9
	High middle	9.2	24.0	19.0	17.7
	Highest SES	7.1	15.9	25.4	20.1
	Total	100.0	100.0	100.0	100.0

Tables (continued)

Table 5. Number and percent of youth by socio-economic status (SES) and educational achievement, Albertan youth aged 12 to

	Socio-economic status		Educational a	chievement	
		Below expectations	Meeting expectations	Above expectations	Total
Number of youth	Lowest SES	15,484	39,607	4,670	59,761
	Low middle	6,894	20,049	2,368	29,311
	Middle	13,486	49,706	7,126	70,318
	High middle	7,310	35,417	5,882	48,609
	Highest SES	6,374	39,046	9,065	54,485
	Total	49,548	183,825	29,111	262,484
Percent of youth	Lowest SES	31.3	21.5	16.0	22.8
	Low middle	13.9	10.9	8.1	11.2
	Middle	27.2	27.0	24.5	26.8
	High middle	14.8	19.3	20.2	18.5
	Highest SES	12.9	21.3	31.1	20.8
	Total	100.0	100.0	100.0	100.0

Table 6. Number and percent of youth by socio-economic status (SES) and mental health status, Albertan

youth aged 12 to 24 years, 2008/09

7	Socio-economic status		Mental health status	
		Any mental health	No mental health	Total
		condition	condition	Total
Number of youth	Lowest SES	16,083	126,202	142,285
	Low middle	10,429	84,415	94,844
	Middle	14,541	125,822	140,363
	High middle	11,499	97,266	108,765
	Highest SES	12,849	111,082	123,931
	Total	65,401	544,787	610,188
Percent of youth	Lowest SES	24.6	23.2	23.3
	Low middle	16.0	15.5	15.5
	Middle	22.2	23.1	23.0
	High middle	17.6	17.9	17.8
	Highest SES	19.7	20.4	20.3
	Total	100.0	100.0	100.0

Tables (continued)

Table 7. Number and percent of youth by socio-economic status (SES) and health service use, Albertan youth aged

12 to 24 years, 2008/09

	Socio-economic status		Health service use*						
		One to four	Five or more	Emergency	Hospitalization	No health			
		physician visits	physician visits	room visit	поѕрпандации	service use			
Number of youth	Lowest SES	72,079	38,990	43,187	6,547	14,523			
	Low middle	47,818	26,321	27,020	4,262	8,675			
	Middle	74,199	38,601	36,440	5,078	14,941			
	High middle	56,993	30,685	25,930	3,733	10,805			
	Highest SES	65,652	35,311	26,424	3,692	11,706			
	Total	316,741	169,908	159,001	23,312	60,650			
Percent of youth	Lowest SES	22.8	23.0	27.2	28.1	24.0			
	Low middle	15.1	15.5	17.0	18.3	14.3			
	Middle	23.4	22.7	22.9	21.8	24.6			
	High middle	18.0	18.1	16.3	16.0	17.8			
	Highest SES	20.7	20.8	16.6	15.8	19.3			
	Total	100.0	100.0	100.0	100.0	100.0			

^{*}Health service use categories are not mutually exclusive.

Table 8. Number and percent of youth by socio-economic status (SES) and post-secondary participation

status, Albertan youth aged 17 to 24 years, 2008/09

	Socio-economic status	Post	-secondary participation stat	tus
		In post-secondary	Not in post-secondary	Total
Number of youth	Lowest SES	16,909	84,743	101,652
	Low middle	14,102	62,658	76,760
	Middle	20,927	72,419	93,346
	High middle	17,986	57,982	75,968
	Highest SES	26,048	61,234	87,282
	Total	95,972	339,036	435,008
Percent of youth	Lowest SES	17.6	25.0	23.4
	Low middle	14.7	18.5	17.6
	Middle	21.8	21.4	21.5
	High middle	18.7	17.1	17.5
	Highest SES	27.1	18.1	20.1
	Total	100.0	100.0	100.0

Tables (continued)

Table 9. Number and percent of youth by socio-economic status and type of maltreatment-related investigation outcome,

Albertan youth aged 12 to 18 years, 2008/09

	Socio-economic status			Investigation outcom	e	
		In care after investigation	Out of care services	No intervention needed	Total	Not investigated
Number of youth	Lowest SES	331	537	1,966	2,834	80,102
	Low middle	135	216	825	1,176	46,175
	Middle	151	248	1,270	1,669	86,920
	High middle	63	120	653	836	63,788
	Highest SES	61	80	504	645	72,149
	Total	741	1,201	5,218	7,160	349,134
Percent of youth	Lowest SES	44.7	44.7	37.7	39.6	22.9
	Low middle	18.2	18.0	15.8	16.4	13.2
	Middle	20.4	20.7	24.3	23.3	24.9
	High middle	8.5	10.0	12.5	11.7	18.3
	Highest SES	8.2	6.7	9.7	9.0	20.7
	Total	100.0	100.0	100.0	100.0	100.0

Table 10. Number and percent of youth by socio-economic status prior to intervention and type of

maltreatment-related intervention, Albertan youth aged 12 to 22 years, 2008/09

	Socio-economic status		Maltreatment-rela	ted intervention	type
		In care services	Out of care services	Total	No intervention
Number of youth	Lowest SES	1,372	1,322	2,694	132,055
	Low middle	697	720	1,417	86,226
	Middle	566	468	1,034	132,094
	High middle	361	305	666	101,950
	Highest SES	290	191	481	116,112
	Total	3,286	3,006	6,292	568,437
Percent of youth	Lowest SES	41.8	44.0	42.8	23.2
	Low middle	21.2	24.0	22.5	15.2
	Middle	17.2	15.6	16.4	23.2
	High middle	11.0	10.1	10.6	17.9
	Highest SES	8.8	6.4	7.6	20.4
	Total	100.0	100.0	100.0	100.0

Tables (continued)

Table 11. Number and percent of youth socio-economic status after maltreatment-related intervention,

Albertan youth aged 12 to 22 years, 2008/09

	Socio-economic status		Maltreatment-relat	ed intervention	type
		In care services	Out of care services	Total	No intervention
Number of youth	Lowest SES	1,512	1,364	2,876	132,055
	Low middle	763	730	1,493	86,226
	Middle	573	462	1,035	132,094
	High middle	369	309	678	101,950
	Highest SES	300	203	503	116,112
	Total	3,517	3,068	6,585	568,437
Percent of youth	Lowest SES	43.0	44.5	43.7	23.2
	Low middle	21.7	23.8	22.7	15.2
	Middle	16.3	15.1	15.7	23.2
	High middle	10.5	10.1	10.3	17.9
	Highest SES	8.5	6.6	7.6	20.4
	Total	100.0	100.0	100.0	100.0

Table 12. Number and percent of youth by socio-economic status and receipt of services from Family

Support for Children with Disabilities (FSCD), Albertan youth aged 12 to 22 years, 2008/09

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	Socio-economic status	Re	eceiving services from FS	CD
		Yes	No	Total
Number of youth	Lowest SES	956	131,099	132,055
	Low middle	707	85,519	86,226
	Middle	739	131,355	131,094
	High middle	632	101,318	101,950
	Highest SES	695	115,417	116,112
	Total	3,729	564,708	568,437
Percent of youth	Lowest SES	25.6	23.2	23.2
	Low middle	19.0	15.1	15.2
	Middle	19.8	23.3	23.3
	High middle	16.9	17.9	17.9
	Highest SES	18.7	20.4	20.4
	Total	100.0	100.0	100.0

Tables (continued)

Table 13. Number and percent of youth by socio-economic status (SES) and number of offence charges, Albertan youth

aged 12 to 17 years, 2008/09

	Socio-economic status	Number of charges				
		One	Two or three	Four or more	Total	No charges
Number of youth	Lowest SES	782	612	661	2,055	68,009
	Low middle	386	279	250	915	37,682
	Middle	573	378	366	1,317	75,109
	High middle	361	229	176	766	54,220
	Highest SES	316	156	165	637	60,599
	Total	2,418	1,654	1,618	5,690	295,619
Percent of youth	Lowest SES	32.3	37.0	40.9	36.1	23.0
	Low middle	16.0	16.9	15.5	16.1	12.8
	Middle	23.7	22.8	22.6	23.1	25.4
	High middle	14.9	13.8	10.9	13.5	18.3
	Highest SES	13.1	9.4	10.2	11.2	20.5
	Total	100.0	100.0	100.0	100.0	100.0

Table 14. Number and percent of youth by socio-economic status (SES) and type of corrections

involvement, Albertan youth aged 12 to 17 years, 2008/09

	Socio-economic status	Tyoe of corrections involvement			
		Custody	Community	Any corrections involvement	Not involved in corrections
Number of youth	Lowest SES	399	1,713	1,752	68,312
	Low middle	148	800	819	37,778
	Middle	199	1,052	1,068	75,358
	High middle	103	678	697	54,289
	Highest SES	60	581	591	60,645
	Total	909	4,824	4,927	296,382
Percent of youth	Lowest SES	43.9	35.5	35.6	23.1
	Low middle	16.3	16.6	16.6	12.8
	Middle	21.9	21.8	21.7	25.4
	High middle	11.3	14.1	14.1	18.3
	Highest SES	6.6	12.0	12.0	20.5
	Total	100.0	100.0	100.0	100.0

Tables (continued)

Table 15. Number and percent of youth by socio-economic status (SES) and any income support activity

and client type, Albertan youth aged 18 to 24 years, 2008/09

	Socio-economic status	Income support client type			
		Barriers to full	Expected to	Total	No income
		employment	work	TOtal	support activity
Number of youth	Lowest SES	1,183	1,151	2,334	86,429
	Low middle	489	487	976	68,133
	Middle	915	729	1,644	77,924
	High middle	469	324	793	64,886
	Highest SES	386	217	603	75,012
	Total	3,442	2,908	6,350	372,384
Percent of youth	Lowest SES	34.4	39.6	36.8	23.2
	Low middle	14.2	16.7	15.4	18.3
	Middle	26.6	25.1	25.9	20.9
	High middle	13.6	11.1	12.5	17.4
	Highest SES	11.2	7.5	9.5	20.1
	Total	100.0	100.0	100.0	100.0

Definitions and Notes

- The study population for this project consisted of all Albertan youth who were registered with the Alberta Health Care Insurance Plan in 2008/09 or who received selected services from one or more of the participating ministries in 2008/09. "All Albertan youth" refers to this study population.
- The study year was fiscal year 2008/09. With the exception of Education and Enterprise and Advanced Education data, all data were for services provided between April 1, 2008 and March 31, 2009, with age determined on March 31, 2009.
 - Data for Enterprise and Advanced Education were for services provided between September 1, 2008 and June 30, 2009, with age determined on March 31, 2009.
 - Data for Education were for services provided to youth who were 12 to 19 years old on September 30, 2008. As a result, youth turning 12 between October 1, 2008 and March 31, 2009 were not included in the Education data but were included in other ministries' data. This resulted in the number of 12 year olds in the Education data being lower (approximately 50% lower) than that of 13 to 17 year olds.
 - Furthermore, although Education only provides services to youth who are under 20, the provision of services is defined by age at September 30. Youth who turned 20 between October 1, 2008 and March 31, 2009 were included in the Education data, resulting in the inclusion of 20 year olds in some analyses of Education data.
- Cross-ministry analyses included only youth that were linked across the relevant ministries. This means that not all youth in the project were represented in every analysis. As well, only youth with a value for a given indicator were included in analyses involving that indicator (i.e., missing values were excluded).
- Age, gender, and postal code (translated into Statistics Canada dissemination areas) were provided for each
 individual by each participating ministry. In the case of discrepancies between ministries, the most common
 value for an indicator was chosen. In the event of two or more most common values, the value for the
 indicator was chosen randomly from the most common values.
- Dissemination areas of residence were used by CYDL to determine **region of residence**. Urban areas included large centres with urban core populations greater than 100,000 (i.e., Edmonton and Calgary metropolitan areas) and mid-sized centres with urban cores greater than 10,000; all other areas were categorized as rural.
- Socio-economic status (SES) captures the social and material environments in which youth live. A youth was assigned a socio-economic status via an index based on the Statistics Canada dissemination area in which he or she resided¹. Six indicators were included in the index: percent without a high school diploma, the employment ratio, average income, percent of single families, percent of persons living alone, and percent of persons separated, divorced, or widowed. Socio-economic status values fell into five quintiles. In this report, "lowest socio-economic status" refers to the lowest quintile of socio-economic status, while "highest" refers to the highest quintile.
- Educational achievement was computed by Alberta Education using age, grade, school type, special education codes, provincial achievement test scores, home education status, number of high school credits earned, number of higher level courses taken, average grade in higher level courses, possession of an Alberta Education certificate or diploma, and Alexander Rutherford scholarship eligibility. Educational achievement was categorized as *above, meeting,* or *below expectations* for a student's age and grade. An educational achievement rating was not available for 12 to 14 year old youth without scores on provincial achievement tests, for youth in 'other' schools (accredited post-secondary institutions offering high school courses for credit to adults; most youth in these schools were between 18 and 20 years), and for home-schooled high school

Definitions and Notes (continued)

youth with no credits.

- Mental health status was defined by the presence or absence of mental health diagnosis codes in Alberta Healths' databases (Inpatient—Discharge Abstract Database, Ambulatory Care, and Practitioner Payments), or in the Family Support for Children with Disabilities Information System. Only youth who were registered with Alberta Health for the full fiscal year were included in the mental health analyses. Mental health service use is a proxy for presence of a mental health condition: Some youth with mental health conditions may not have accessed mental health services in Alberta during the year, and some mental health service use may have occurred for youth who did not in fact have mental health conditions.
 - Mental health conditions were grouped based on The Johns Hopkins ACG® Case-Mix System (version 8.2)
 ¹⁰. Mental health conditions were *mood/anxiety* (anxiety, depression, bipolar disorder, etc.), *behavioural* (attention-deficit disorder, regulatory disorder, mental or behavioural problems due to substance use, etc.), *neurodevelopmental* (autism, fetal alcohol spectrum disorder, cerebral palsy, etc.), or *schizophrenia/psychoses* (schizophrenia, psychosis, delusional disorder, etc.). Conditions were not mutually exclusive; a youth could have a diagnosis in more than one category.
- **Physician visits** reflect fee claims made by physicians when patients visit their offices. In this report, multiple claims by a given physician for a given patient on the same day were counted as a single visit.
- Emergency room visits refer to visits to emergency departments for assessment or treatment.
- Hospitalizations refer to admissions to hospital for assessment or treatment.
- Participation in **post-secondary** education refers to enrolment in a post-secondary institution in Alberta. Youth enrolled in apprenticeship programs were not included.
- Maltreatment-related investigations occur when there is a concern that the safety or well-being of a youth is threatened. Outcomes of investigation include *in care after investigation* (the youth is taken into care, and placed in a foster home, with family, in a group home, etc.), out of care services (the youth remains in the home and the family receives support services), and *no intervention needed*.
- Maltreatment-related interventions occur when the safety or well-being of a youth is threatened. Categories of
 intervention include in care services (the youth is taken into care, and placed in a foster home, with family, in a
 group home, etc.), and out of care services (the youth remains in the home and the family receives support
 services).
- Family Support for Children with Disabilities (FSCD) is a ministry of Human Services program that provides a range of supports and services to families that strengthen their ability to support and care for their child with a disability based on their needs.
- Youth with **offence charges** include those charged with criminal offences or administrative offences related to criminal offences (e.g., failure to appear in court, breach of probation, etc.). **Number of offences** in the study year was available, but individual incidents were not available. This means that youth charged with multiple offences may have had multiple charges in a single incident, or they may have been charged in multiple incidents.
- Youth with **corrections involvement** have appeared before the Court or a Justice of the Peace for an offence charge and have been remanded in custody or placed under pre-trial supervision in the community awaiting further court dates, or have been found guilty and sentenced to a community disposition (i.e. Fine, Probation, Community Service Work, Deferred Custody) and/or custody (in which the sentence is served in a young offender facility).
- **Income support** refers to financial benefits provided to individuals and couples who cannot meet their basic needs. The **client types** for income support clients are *expected to work* (clients who are looking for work, working, or unable to work in the short term) and *barriers to full employment* (clients who have difficulty working because of a chronic mental or physical health problem or because of multiple barriers to employment).

Data sources

Ministry	Database	Use in this report
Enterprise and Advanced Education	Learner Enrolment Reporting System (LERS)	Post-secondary education enrolment data
Education	Corporate Data Warehouse (CDW)	Primary and secondary education
Health	Inpatient – Discharge Abstract Database (DAD)	Hospitalization data
Health	Ambulatory Care (ACCS)	Emergency room visit data
Health	Practitioner Payments (SESE)	Physician visit data
Health	Alberta Health Care Insurance Plan Population Registry (AHCIP registry)	Population registry
Human Services	Child Youth Information Module (CYIM)	Maltreatment and intervention data
Human Services	Family Support for Children with Disabilities Information System (FSCDIS)	Family Supports for Children with Disabilities data
Human Services	Central Client Directory (CCD)	Income support data
Justice and Solicitor General	Justice Online Information Network (JOIN)	Offence data
Justice and Solicitor General	Alberta Community Offender Management System (ACOM)	Corrections data (community supervision)
Justice and Solicitor General	Correctional Offender Management Information System (CoMIS)	Corrections data (custody)

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The Child and Youth Data Laboratory

The **Child and Youth Data Laboratory** (CYDL) links and analyzes administrative data from child- and youth-serving ministries in the Government of Alberta. The ministries participate in research design and provide data elements that contribute to answering research questions.

The CYDL's research provides groundbreaking opportunities to understand relationships between critical factors in the lives of children and youth in Alberta. The research results can be used to inform policy and program development and evaluation, both within and across ministries, and to inspire further research.

The CYDL is managed by the **Alberta Centre for Child, Family and Community Research** (ACCFCR). The Centre has evolved over its eight year history as a public-sector, innovative resource for evidence. The Centre develops, supports and integrates research across sectors and disciplines to provide a strong, evidence-based foundation for identifying and promoting effective public policy and service delivery to improve the well-being of children, families, and communities in Alberta, Canada, and internationally.

Our partners

This project was carried out on behalf of six ministries of the Government of Alberta. Each ministry collaborated extensively with the CYDL on this project, and their dedication to the project is gratefully acknowledged:

Enterprise and Advanced Education
Education
Health
Human Services
Aboriginal Relations
Justice and Solicitor General

Suggested citation

Child and Youth Data Laboratory (2012). *Socio-economic status of Albertan youth.* Edmonton: Alberta Centre for Child, Family and Community Research.

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