

Early Childhood Indicator Report



State of Hawai‘i



Last updated: 05/29/2015

Acknowledgements

This report would not have been possible without the support of the following individuals and agencies:

Audit, Quality Control and Research Office (AQCRO), Hawai'i State Department of Human Services

Javzandulam Azuma

Ryan Barsatan

Marianne Berry

Lana Crabbe

Donald Hayes, Hawai'i State Department of Health

Emily Ishikawa

Keith Kameoka, Hawai'i State Department of Education

Keiko Nitta, Hawai'i State Department of Health

Ann Pobutsky

Kazufumi Taira

James Tanabe, Hawai'i State Department of Human Services

Christina Tydeman, Hawai'i State Department of Education

Brenda Watanabe, PATCH

Thomas Yokota

Deborah Zysman, Good Beginning Alliance

Introduction

The first years of life are critical for lifelong well-being. The prenatal period through age five is a time marked by rapid and significant brain development. A body of research highlights the pathways by which positive relationships and enriching experiences promote healthy brain development and set the stage for lifelong learning, health, and overall well-being. Research also documents how adverse experiences and environments can weaken this foundation, and how the trajectory of even the most vulnerable children can be strengthened with appropriate interventions during the early years (Lipina & Colombo, 2009; National Research Council and Institute of Medicine, 2000; National Scientific Council on the Developing Child, 2007).

In the U.S., state and federal governments have made investments in supporting early childhood service initiatives that promote positive development and improve health outcomes for children during infancy and early childhood.¹ Many states have subsequently identified indicators for monitoring program performance and child outcomes related to early childhood systems (Johnson, Theberge, & Knitzer, 2008).

For example, in our 2008 Hawai'i Early Childhood Comprehensive System indicator report (prepared in collaboration with the Hawai'i Department of Health, DOH), we introduced a set of indicators to monitor DOH's progress toward achieving the goals identified in its federally-funded Early Childhood Comprehensive System (ECCS) grant (He, Yuen, Nitta, & Ripke, 2008).

In this snapshot report we provide a more comprehensive set of indicators that may be applicable to other early childhood initiatives throughout the state that ensure a solid foundation for Hawai'i's young children, prenatal to age five. The indicators are scalable to be tracked over time and across geographic breakdowns and important socioeconomic categories. In addition, this report includes new early childhood indicators that will

be available through the Center on the Family online Data Center for longer-term tracking.

Indicators are organized into a framework that follows the overarching vision identified in our earlier work, i.e. that Hawai'i's children will be safe, healthy, and ready to succeed (He et al., 2008). Indicators represent a mix of risk and protective factors at the individual, family, and community levels, as well as child outcomes. Indicators were selected based on a review of indicator frameworks used in other states to track and monitor progress as well as broader frameworks that address early childhood development and well-being. Indicators were also selected based on the following criteria:

- Relevance – measures a concept or issue that is clearly relevant to early childhood development and outcomes;
- Validity – accurately reflects or assesses the specific concept or issue that is being measured;
- Acceptability – can be easily understood or accepted by a variety of audiences; and,
- Consistency – is comparable across time and geographic locations.

This report consists of four sections. ***Basic Demographic Profile*** contains the characteristics of young children in Hawai'i, including age, sex, sex-ratio, ethnicity, county of residence, living arrangements, language and place of birth. ***Safe, Nurturing and Supportive Environments*** presents indicators of safety, family financial self-sufficiency, permanent homes, and healthy family and community environments. ***Health*** includes maternal and child health indicators and indicators of access to preventive and regular health care. ***Ready to Succeed*** presents indicators of school readiness, access to affordable and quality early childhood programs and services, and learning proficiency in elementary school. This report presents analysis of the latest available data, which are mostly for year 2012. In order to illustrate where the state stands on these indicators, two benchmarks are presented for comparison: (1) U.S. data are presented for the year 2012; and, (2) state data are presented for the years 2008 and 2012. However, when data are not available for a specific year, data for the closest available year are provided and noted in the table footnotes (i.e. 2007 or 2009 in place of 2008 or 2011 in place of 2012).²

¹ For example, see the U.S. Department of Health and Human Services' Early Childhood Programs at <http://mchb.hrsa.gov/programs/earlychildhood/index.html>.

² Confidence intervals (CI) at a 90% confidence level are presented along with the estimates, except for population data or population estimates which are not derived totally from probability sampling survey data. The 90% confidence level is used because of the small sample sizes of most of the Hawai'i data included in the report. It is considered to be a significant difference, when there is no overlap in CI or a difference of 2% or more for population-based percentages.



Basic Demographic Profile

Table 1. Resident Population Under Age 6 in Hawai‘i: 2012

AGE DISTRIBUTION	MALE		FEMALE		TOTAL		MALE-TO-FEMALE SEX RATIO
	Number	Percent	Number	Percent	Number	Percent	
Under Age 1	9,438	51%	9,038	49%	18,476	17%	1.04
Age 1	9,752	52%	9,064	48%	18,816	17%	1.08
Age 2	9,101	51%	8,690	49%	17,791	17%	1.05
Age 3	9,095	52%	8,544	48%	17,639	16%	1.06
Age 4	9,090	51%	8,638	49%	17,728	16%	1.05
Age 5	9,045	52%	8,294	48%	17,339	16%	1.09
Total	55,521	52%	52,268	48%	107,789	100%	1.06

Data Source: National Center for Health Statistics. 2014. Vintage 2013 bridged-race population estimates, United States, July 1st resident population by state, county, age, sex, bridged-race, and Hispanic origin.

Table 2. Characteristics of Resident Population Under Age 6 in Hawai‘i: 2012

CHARACTERISTICS		NUMBER	PERCENT	CI (90%)	SOURCE(S)
Total		107,789	100.0%	(NA)	34
By Sex	Male	55,521	51.5%	(NA)	34
	Female	52,268	48.5%	(NA)	34
By Race	One race	59,284	55.0%	(53.4-56.5)	44
	White alone	18,971	17.6%	(16.5-18.8)	44
	Black alone	1,832	1.7%	(1.3-2.2)	44
	Chinese alone	1,940	1.8%	(1.4-2.3)	44
	Filipino alone	10,994	10.2%	(9.3-11.1)	44
	Japanese alone	3,557	3.3%	(2.8-3.9)	44
	Korean alone	755	0.7%	(0.5-1.1)	44
	Other Asian and Asian combinations	5,066	4.7%	(4.1-5.4)	44
	Other Pacific Islander alone	7,006	6.5%	(5.8-7.3)	44
	Native Hawaiian alone	7,222	6.7%	(6.0-7.5)	44
	Some other race alone	1,725	1.6%	(1.2-2.0)	44

Table 2. Characteristics of Resident Population Under Age 6 in Hawai‘i: 2012 (continued)

CHARACTERISTICS		NUMBER	PERCENT	CI (90%)	SOURCE(S)
By Race	Two or more races	48,505	45.0%	(43.5-46.6)	44
	<i>Native Hawaiian in combination with one or more other races</i>	16,384	15.2%	(14.1-16.3)	44
	<i>Other two or more races</i>	32,121	29.8%	(28.5-31.3)	44
By County of Residence	Hawai‘i County	14,382	13.3%	(NA)	34
	Honolulu City & County	76,009	70.5%	(NA)	34
	Kaua‘i County	5,309	4.9%	(NA)	34
	Maui County	12,089	11.2%	(NA)	34
By Living Arrangement	In group quarters	314	0.3%	(0.1-0.5)	44, 52
	In households	104,358	99.7%	(99.5-99.9)	44, 52
	<i>In married-couple family households</i>	73,148	70.1%	(68.7-71.1)	44, 52
	<i>In male householder, no wife present, family households</i>	7,846	7.5%	(6.8-8.2)	44, 52
	<i>In female householder, no husband present, family households</i>	22,885	21.9%	(20.8-23.0)	44, 52
By Language & Nativity	Foreign-born	4,204	3.9%	(3.4-4.6)	34, 44
	Living in a linguistically isolated family	6,176	4.7%	(4.1-5.4)	34, 44

See Appendix 2 for data sources. Confidence intervals at the 90% confidence level are presented in parentheses.

During 2008-2012, there was an increase of 4% in the total population of children under the age of six in Hawai‘i. Table 1 displays this population’s composition by age and gender. Table 2 provides additional data to describe the population of young children. Over half (55%) were identified as being of one primary race and 45% as two or more races. The percentage of young children who were Native Hawaiian and part-Hawaiian

(i.e., Native Hawaiian in combination with one or more other races) is 21.9%. In terms of geographical distribution, the majority (70.5%) of this young population lived in the City and County of Honolulu, with 13.3% in Hawai‘i County, 11.2% in Maui County, and 4.9% in Kaua‘i County. Most children lived in married-couple households (70.1%), while the rest lived in female- (21.9%) or male-headed households (7.5%). Nearly 4% of young children were foreign born and 5.9% lived in a linguistically isolated family (i.e., a household in which no person 14 years old and over speaks only English, and no person who speaks a language other than English speaks English “very well”).



Safe, Nurturing and Supportive Environments

Children are more likely to thrive when they live in safe, nurturing and supportive environments. Risk factors such as exposure to child maltreatment, poverty, unstable housing, and neighborhood crime and violence are associated with a host of adverse short and long-term outcomes for children. Child maltreatment, for example, can result in physical injuries, poor mental health, and cognitive delays, as well as problems later in life, such as substance abuse, sexual promiscuity, and violence in adulthood (Chalk, Gibbons, & Scarupa, 2002; Genius & Violato, 2001; Lo & Cheng, 2007; Maughan & Moore, 2010; Min, Farkas, Minnes, & Singer, 2007). Another substantial body of research links growing up in poverty with lower academic achievement and educational attainment, and with health, behavioral and emotional problems (Annie E. Casey Foundation, 2009c; Sell, Zlotnik, Noonan, & Rubin, 2010). The environment in which children live also impacts their physical and mental health. Overcrowded households are not only an indicator of housing instability; parents in overcrowded households tend to be less responsive to their young children which, in turn, strains the parent-child relationship and affects healthy development (Evans, 2006). Parenting styles can also be affected by the chronic stress of living in dangerous or rundown neighborhoods (Glaster, 2014).



DESIRED OUTCOMES	INDICATORS	HAWAII 2008		HAWAII 2012		US 2012	SOURCE(S)
		ESTIMATE	RATE	ESTIMATE	RATE		
Children are safe from intentional injuries and abuse or neglect	Child abuse and neglect per 1,000	799	7.72	677	6.28	13.10 ▲	26, 27, 34, 62
Families are financially self-sufficient	Living in poverty	11,687	11.8% (9.3-14.3%)	17,622	17.6% ↑ (14.4-20.8%)	25.3% ▲ (25.0-25.6%)	34, 46, 56
	Living in extreme poverty	5,684	5.7% (4.4-7.0%)	9,573	9.6% ↑ (8.5-10.7%)	11.8% ▲ (11.7-11.9%)	34, 46, 56
	No parent in the labor force	8,180	8.2% (8.2-8.2%)	9,642	9.3% ↑ (8.5-10.2%)	9.5% (9.5-9.5%)	34, 47, 57
	Received SNAP	17,480	16.9%	30,360	28.2% ↑	31.3% ▲ (31.2-31.5%)	30, 34, 45
	Received TANF [§]	7,040	6.9%	8,659	8.0%	NA	31, 34
Children have permanent homes	In foster care per 1,000	1,389	13.43	985	9.14 ↓	6.33 ▼	28, 34, 63
	Elementary school transfer	10,340	12.1%	7,879	8.8% ↓	NA	11, 12, 15

Safe, Nurturing, and Supportive Environment (continued)

DESIRED OUTCOMES	INDICATORS	HAWAII 2008		HAWAII 2012		US 2012	SOURCE(S)
		ESTIMATE	RATE	ESTIMATE	RATE		
Children live in nurturing environments: Family level	Having a healthy mother*§	68,580	67.7% (63.1-72.3%)	63,110	62.3% (57.7-66.9%)	61.3% (60.2-62.4%)	3, 4, 34
	Having a healthy father*§	71,417	70.5% (65.6-75.4%)	66,858	66.0% (61.3-70.7%)	66.0% (64.9-67.1%)	3, 4, 34
	Living in overcrowded dwellings	31,459	31.0% (29.2-32.8%)	35,939	33.8% (32.0-35.6%)	16.8% ▼ (16.7-16.9%)	34, 43, 44
	Living in food insecure homes	22,383	22.6% (21.9-23.3%)	22,785	21.1% ↓ (20.4-21.8%)	16.5% ▼ (16.4-16.6%)	34, 60
	Living with a smoker*§	26,642	26.3% (22.0-30.6%)	29,377	29.0% (24.8-33.2%)	23.0% ▼ (22.1-23.9%)	3, 4, 34
	Families read to them daily*§	60,476	59.7% (52.0-67.4%)	53,848	53.6% (49.0-58.2%)	47.8% ▼ (46.8-48.8%)	3, 4, 34
	With multiple risk factors	2,209	2.1% (2.1-2.2%)	2,901	2.7% ↑ (2.3-3.1%)	11.4% ▲ (11.4-11.4%)	34, 43, 44
Children live in nurturing environments: Community level	Living in a neighborhood with basic amenities*§	63,414	62.6% (58.0-67.2%)	65,541	64.7% (60.2-69.2%)	55.2% ▼ (54.1-56.3%)	3, 4, 34
	Living in a rundown neighborhood*§	23,502	23.2% (19.1-27.3%)	18,741	18.5% (14.9-22.1%)	16.6% (15.8-17.4%)	3, 4, 34
	Living in a supportive neighborhood*§	85,092	84.0% (80.4-87.6%)	87,726	86.6% (83.5-89.7%)	79.0% ▼ (78.1-79.9%)	3, 4, 34
	Living in a safe neighborhood*§	84,687	83.6% (80.3-86.9%)	89,651	88.5% (85.9-91.1%)	85.8% (85.0-86.6%)	3, 4, 34
	Living in high poverty areas	2,557	2.5% (2.1-3.0%)	5,926	5.6% ↑ (5.0-6.2%)	14.1% ▲ (14.0-14.1%)	34, 49, 50, 53, 54, 55

See Appendix 1 for indicator definitions and Appendix 2 for data sources. Confidence intervals at the 90% confidence level are presented in parentheses. Data year 2008 and 2012, except where noted as follows: § = 2007; * = 2011 or 2011/12. ↑↓ = a significant increase or decrease in Hawai'i from 2008 to 2012 and ▲▼ = a U.S. rate or percentage is significantly higher/lower than that of Hawai'i in 2012.

Findings by Desired Outcome:

- **Children are safe from intentional injuries and abuse or neglect.** The rate of child abuse and neglect declined from 7.72 per 1,000 children aged 0-5 in 2008 to 6.28 in 2012. Hawai'i's rate was lower than the U.S. rate of 13.10 in 2012.
- **Families are financially self-sufficient.** Between 2008 and 2012, Hawai'i experienced noticeable increases in the proportion of young children (1) in poverty (from 11.8% to 17.6%), (2) in extreme poverty (from 5.7% to 9.6%), and (3) having no parent in the labor force (from 8.2% to 9.3%). These trends are likely due to the economic downturn, which began in 2007 and technically ended in 2009 but continued to affect families with children for years following the recession. As a result, Hawai'i also saw a large increase in the proportion of young children who received SNAP during the period examined (from 16.9% to 28.2%). The share of young children living in these financially challenged households, however, was still lower in Hawai'i than the U.S.
- **Children have permanent homes.** The state saw a decrease in the shares of young children in foster care (from 13.4 to 9.14 per 1,000 children aged 0-5) and public elementary school children who transferred schools within a year (from 12.1% to 8.8%) dur-

ing the period examined. Both of these indicators are used here as measures of permanency and housing stability. Hawai'i had a higher rate of young children in foster care (9.14 per 1,000 children aged 0-5) than the U.S. (6.3 per 1,000 children aged 0-5).

- ***Children live in nurturing environments: Family level.*** Most of the family environment indicators remained unchanged between 2008 and 2012. There was a slight reduction in the proportion of young children living in food insecure homes (from 22.6% to 21.1%) and a slight increase (from 2.1% to 2.7%) in the proportion of young children living in a family having three or more risk factors (i.e., living under 200% poverty level, living with a single parent, living in a language isolated home, living with a parent lacking a high school diploma, and living with an unemployed parent). The state's young children fared better than those across the U.S. on some indicators but not others. For example, the state had a greater share of young children whose family members read to them daily (53.6% vs. 47.8%) and a smaller share living in a family with multiple risk factors (2.7% vs. 11.4%). However, the state had a much higher percentage of young children living in overcrowded households (more than double at 33.8% vs. 16.8%), along with higher percentages in food insecure homes (21.1% vs. 16.5%), and with family members who smoke at home (29.0% vs. 23.0%). Hawai'i and the U.S. had similar shares of young children with healthy parents (i.e., in excellent or very good physical and emotional health).
- ***Children live in nurturing environments: Community level.*** During the period examined, all community environment indicators remained unchanged in the state, except for the share of young children living in high poverty areas (from 2.5% to 5.6%). The state's young children fared better than those across the U.S. overall on some measures of nurturing environments at the community level. Hawai'i had a larger share of (1) young children living in neighborhoods with basic amenities – e.g., a park, sidewalks, a library, etc. – (64.7% vs. 55.2%), and (2) living in supportive neighborhoods – e.g., where neighbors help each other out, etc. – (86.6% vs. 79%). The state and the U.S. had similar shares of young children living in rundown neighborhoods and in safe neighborhoods. While the share of young children living in high poverty areas is smaller in Hawai'i than in the U.S. (5.6% vs. 14.1%), that rate more than doubled in the state between 2008 and 2012.

Health

Women who have access to adequate health care before, during, and after childbirth have healthier children (Annie E. Casey Foundation, 2009a). Many experts point to evidence that prenatal care may come too late (usually sometime after the first three months of a pregnancy) to prevent a number of serious child health problems and stress that prevention efforts need to begin well before conception, especially for those mothers at greatest risk of poor pregnancy outcomes (Annie E. Casey Foundation, 2009b). Attention is now paid to better primary health care for women in their childbearing years (ages 15-44) in order to complement prenatal care and promote better outcomes for children. Research shows that breastfeeding provides numerous health benefits and lowers a child's risk of obesity, type 2 diabetes, and asthma. Infants and children who receive preventive and regular health care thrive and develop into healthy adults. Access to quality health care is critical for the early detection, appropriate intervention and treatment of physical health as well as developmental and behavioral issues (Rossin-Slater & Brellochs, 2012).

DESIRED OUTCOMES	INDICATORS	HAWAII 2008		HAWAII 2012		US 2012	SOURCE(S)
		ESTIMATE	RATE	ESTIMATE	RATE		
Expectant mothers have adequate prenatal care and preparation for parenthood	Born to a mother who received late or no prenatal care	18,746	18.1%	17,560	16.3% ↓	27.5% ▲	1, 24, 34
	Born to a mother who smoked during the last trimester of pregnancy *	8,963	8.7% (8.2-9.1%)	8,600	8.1% (7.5-8.6%)	NA	21, 34
	Born to a mother who drank alcohol during the last trimester of pregnancy *	5,799	5.6% (5.6-5.6%)	6,958	6.5% ↑ (6.0-7.0%)	NA	19, 34
	Born to a mother who used illegal drugs during the last trimester of pregnancy *	2,788	2.7% (2.4-3.0%)	3,008	2.8% (2.5-3.1%)	NA	20, 34

Health (continued)

DESIRED OUT-COMES	INDICATORS	HAWAII 2008		HAWAII 2012		NA	SOURCE(S)
		ESTIMATE	RATE	ESTIMATE	RATE	RATE	
Children are born healthy	Births covered by health insurance *	102,287	98.9% (97.8-100.0%)	105,264	98.8% (97.5-100.0%)	NA	18, 34
	Preterm births	12,792	12.4%	13,378	12.4%	12.1% ▼	1, 34
	Born low birth weight	8,407	8.1%	8,838	8.2%	8.1% ▼	1, 34
	Participating in WIC	30,804	35.1%	32,161	35.6%	37.2% ▲	7, 32, 34
	Ever breastfed	86,105	85.3% (81.8-88.8%)	89,651	88.5% (85.7-91.3%)	79.2% ▼ (78.4-80.0%)	3, 34
	Breastfed at six months of age *	57,094	54.1%	61,634	57.8% ↑	46.0% ▼	33, 34
Children are healthy	With excellent or very good health *§	88,739	87.6% (84.4-90.8%)	92,284	91.1% (88.3-93.9%)	85.9% ▼ (85.1-86.7%)	3, 4, 34
	With excellent or very good oral health *§	82,357	81.3% (77.1-85.5%)	79,622	78.6% (74.1-83.1%)	78.5% (77.4-79.6%)	3, 4, 34
	At moderate or high risk of development or behavioral problems *§	27,959	27.6% (23.2-32.0%)	31,403	31.0% (26.6-35.4%)	26.2% (25.2-27.2%)	3, 4, 34
	Overweight and obese among vulnerable children aged 2-4 *	NA	NA	17,789	21.5%	30.4% ▲	2, 34
	With special health care needs ‡	8,408	8.3% (7.2-9.4%)	8,205	8.1% (6.8-9.4%)	9.3% (9.0-9.6%)	5, 6, 34
	Experienced a developmental delay or physical impairment	3,955	3.8%	3,937	3.7%	NA	22, 34
Children have access to health care	No health insurance coverage †	2,384	2.3% (0.7-3.9%)	2,983	2.8% (2.3-3.3%)	6.0% ▲ (5.9-6.0%)	34, 51, 58
	Lacking consistent insurance coverage *§	8,712	8.6% (5.6-11.6%)	5,166	5.1% (3.2-7.0%)	10.9% ▲ (10.1-11.7%)	3, 4, 34
	Received Med-QUEST *	41,409	40.0%	50,319	47.2% ↑	NA	8, 34
Children have access to health care (continued)	Had a medical home *§	64,528	63.7% (59.0-68.5%)	65,339	64.5% (60.0-69.0%)	58.2% ▼ (57.1-59.3%)	3, 4, 34
	Those with special health care needs had a medical home †‡	42,445	41.9% (33.9-49.9%)	46,801	46.2% (37.1-55.3%)	44.2% (42.5-45.9%)	5, 6, 34
Children receive preventive health care	Fully immunized by age 2	73,876	71.4% (67.3-75.5%)	79,450	73.7% (69.8-77.6%)	72.0% (71.2-72.8%)	34, 35, 36
	Had preventive medical visits *§	96,235	95.0% (92.8-97.2%)	92,284	91.1% (88.3-93.9%)	89.7% (89.0-90.4%)	3, 4, 34
	Had preventive dental visits *§	69,391	68.5% (63.7-73.3%)	70,404	69.5% (64.8-74.2%)	54.3% ▼ (53.2-55.4%)	3, 4, 34
	Received a standardized developmental screening *§	27,554	27.2% (22.3-32.1%)	39,406	38.9% ↑ (33.8-44.0%)	30.8% ▼ (29.7-31.9%)	3, 4, 34
	Received early intervention services	5,199	4.9%	4,976	4.6%	2.8% ▼	16, 17, 34, 61

See Appendix 1 for indicator definitions and Appendix 2 for data sources. Confidence intervals at the 90% confidence level are presented in parentheses. Data are for years 2008 and 2012, except where noted as follows: § = 2007, † = 2009/2010, ‡ = 2010, and * = 2011 or 2011/12. ↑↓ = a significant increase or decrease in Hawai'i from 2008 to 2012 and ▲▼ = a U.S. rate or percentage is significantly higher/lower than that of Hawai'i in 2012.

Findings by Desired Outcome:

- **Expectant mothers have adequate prenatal care and preparation for parenthood.** The proportion of children born to mothers who received late or no prenatal care decreased in Hawai'i from 18.1% in 2008 to 16.3% in 2012, a share lower than the U.S. rate of 27.5%. The percentage of children born to mothers who smoked or used illegal drugs in the last trimester of pregnancy remained about the same during the period examined. There was a statistically significant (albeit small) increase in the percentage of mothers who reported drinking alcohol during the last trimester of pregnancy (from 5.6% to 6.5%).
- **Children are born healthy.** Almost all births in Hawai'i were covered by health insurance during the period examined, and most indicators of healthy births were stable over time. Breastfeeding at six months increased over time (54.1% vs. 57.8%). The percentage of children ever breastfed was larger in Hawai'i than the U.S. (88.5% vs. 79.2%), as was the percentage of children breastfed at six months of age (57.8% vs. 46.0%). Hawai'i and the U.S. had similar shares of children born preterm or with a low birth weight, as well as similar percentages of children participating in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).
- **Children are healthy.** Indicators of child health status remained statistically stable from 2008 to 2012. A small proportion (under 4%) of children experienced a developmental delay or physical impairment during the period examined. Compared to the U.S., Hawai'i had a higher share of young children considered to be in excellent or very good health (91.9% vs. 85.9%) and fewer vulnerable children (i.e., those participating in WIC) who were overweight or obese (21.5% vs. 30.4%). The state and the U.S. had similar shares of young children with special health care needs; at moderate or high risk of developmental or behavioral problems, and with good or excellent oral health. (31.0% vs. 26.2%).
- **Children have access to health care.** Compared to the U.S., Hawai'i had a larger proportion of young children covered by health insurance (97.2% vs. 94%) and with consistent year round coverage (94.9% vs. 89.1%). Med-QUEST, which provides eligible low-income children access to health and medical coverage through a managed care plan, has been critical in sustaining the state's high health insurance coverage. The program was particularly essential during the recent economic downturn as evidenced by the increase in young children served during the period examined (from 40.0% to 47.2%). Compared to the U.S., the state also had a greater share of young children with a medical home (i.e., comprehensive and continuous medical care, 64.5% vs. 58.2%), while both had similar proportions of young children with special health care needs that have a medical home (46.2% and 44.2%).
- **Children receive preventive health care.** Between 2008 and 2012, there was an increase in the percentage of children who received a standardized developmental screening (from 27.2% to 38.9%), with the state having a larger share of children screened compared to the U.S. (38.9% vs. 30.8%). Hawai'i also had higher proportions of young children who received early intervention services than the U.S. (4.6% vs. 2.8%) in 2012, and more children who had at least one preventive dental visit within the year (69.5% vs. 54.3%). The state and the U.S. had similar proportions of young children that were fully immunized by age two and that had preventive medical visits.



Ready to Succeed

The importance of early childhood experiences on the brain has been well documented (National Research Council and Institute of Medicine, 2000). Children experience better cognitive, social, and physical development outcomes when their early environments and relationships are nurturing, safe, and stimulating. School readiness is not only dependent on the family context, but also on the context and quality of child care arrangements preceding school entry (Daily, Burkhauser, & Halle, 2010). For working families, finding child care that is both affordable and of quality may be challenging. Early childhood care providers and teachers that have knowledge of child development and know how to deliver effective instruction tend to provide the very environments and relationships that can advance child development and promote better outcomes for children (National Research Council and Institute of Medicine, 2000).

DESIRED OUTCOMES	INDICATORS	2008	2012	SOURCE(S)
Families have access to affordable early childhood programs and services	Annual cost of center-based care:			
	<i>Infants</i>	\$11,268	\$12,780 ↑	38, 40
	<i>Toddlers of ages 1-2</i>	\$9,876	\$11,688 ↑	38, 40
	<i>Preschoolers of ages 3-4</i>	\$6,504	\$7,764 ↑	38, 40
	Annual cost for licensed family child care homes:			
	<i>Infants</i>	\$6,744	\$7,476 ↑	38, 40
	<i>Toddlers of ages 1-2</i>	\$6,684	\$7,416 ↑	38, 40
	<i>Preschoolers of ages 3-4</i>	\$6,624	\$7,284 ↑	38, 40
	Median household income	\$67,214	\$66,259 ↓	48, 59
	Median family income	\$78,659	\$77,447 ↓	48, 59
	Young children who received publicly-funded child care subsidies:			
	<i>Infants</i>	NA	5.7%	29
	<i>Toddlers of ages 1-2</i>	NA	11.3%	29
	<i>Preschoolers of ages 3-4</i>	NA	14.7%	29
Children have access to quality early childhood education programs	Total capacity of licensed child care facilities	24,361	26,451 ↑	39, 42
	<i>Ratio to population aged under 6</i>	0.24 : 1	0.25 : 1	34, 39, 42
	Desired capacity of licensed child care facilities	22,839	24,888 ↑	39, 42
	<i>Ratio to population aged under 6</i>	0.22 : 1	0.23 : 1	34, 39, 42
	Children enrolled in licensed child care facilities	21,465 (20.8%)	22,165 ↑ (21.0%)	34, 39, 42
	Qualification of center-based infant/toddler caregivers:			
	<i>With an associate's degree or higher</i>	61.3%	59.2%	41
	<i>With an associate's degree or higher in EC/ECE/ECD</i>	30.8%	35.1%	41
	<i>With a BA or higher</i>	32.6%	29.8%	41
	<i>With a BA or higher in EC/ECE/ECD</i>	9.2%	10.7%	41

DESIRED OUTCOMES	INDICATORS	2008	2012	SOURCE(S)
Children have access to quality early childhood education programs (continued)	Qualification of center-based preschool teachers:			
	With an associate's degree or higher	77.6%	77.6%	41
	With an associate's degree or higher in EC/ECE/ECD	39.3%	40.9%	41
	With a BA or higher	50.7%	52.0%	41
Children are ready to succeed in school	With a BA or higher in EC/ECE/ECD	19.0%	20.7%	41
	Kindergarten classes displaying ready-for-school characteristics	8.4%	8.1%	9, 10
	Schools providing transition-to-kindergarten services	25.7%	33.0% ↑	9, 10
Schools Performance: Overarching Measures	Kindergarteners enrolled in special education programs	6.0%	6.0%	9, 10
	Proficiency on the Hawai'i State Assessment (HSA) in Reading: 4th Grade	61.7%	73.0% ↑	14
	Proficiency on the Hawai'i State Assessment (HSA) in Math: 4th Grade	50.3%	65.2% ↑	13

See Appendix 1 for indicator definitions and Appendix 2 for data sources. ↑↓= a significant increase or decrease in Hawai'i from 2008 to 2012.

Findings by Desired Outcome:

- **Families have access to affordable early childhood programs and services.** The average annual cost of child care at licensed centers for infants, toddlers, and preschoolers in 2012 was \$12,780, \$11,688, and \$7,764, respectively; these fees represented 19.3%, 17.6%, and 11.7% of the median family income for the same calendar year. Family child care homes averaged \$7,476, \$7,416, and \$7,284 for the three age groups respectively, representing about 11% of the median family income. The average cost of care at licensed centers increased by over \$1,500 (13%) for infants, \$1,800 (18%) for toddlers, and \$1,200 (19%) for preschoolers during the period examined, and the cost of home-based facilities increased by over \$600 (10%) for all young children. Over the same period in which child care costs increased, Hawai'i's annual median family income dropped by 1.5% from \$78,759 to \$77,447, thus increasing the burden of child care fees. In 2012, 5.7% of infants, 11.3% of toddlers, and 14.7% of preschoolers received publicly-funded child care subsidies.
- **Children have access to quality early childhood education programs.** One in five children under age six were enrolled in licensed child care facilities and this percentage remained essentially unchanged between the two points in time. There was an increase of nearly 2,100 slots statewide; however, the number of young children enrolled in these licensed care facilities increased only slightly, by 700. As a result, the ratio of children enrolled to the total capacity of center-based facilities dropped slightly from 94% to 89%. The proportion of center-based infant and toddler caregivers with an associate degree or higher in fields related to early childhood increased during the period examined, however, the share with a BA in related fields showed little change. The proportion of the preschool workforce with degrees in related fields remained stable between the two points in time, and was somewhat larger than the share of caregivers serving infants and toddlers.
- **Children are ready to succeed in school.** From 2008 to 2012, there were no significant changes in (1) the percentage of kindergarten classes with three-quarters of students who are school-ready and (2) the percentage of kindergarten students enrolled in special education programs. A third of public elementary schools provided transition-to-kindergarten services in 2012, up from 25.7%.
- **School Performance: Overarching Measures.** The Hawai'i Standard Assessment (HSA) proficiency level was used provisionally as a proxy to measure both of the effort and outcome that the state devoted to enhance early learning. The two HSA indicators show that Hawai'i made impressive gains in the proportions of public school 4th graders who were reading proficient (from 61.7% to 73.0%) and math proficient (from 50.3% to 65.2%).

Discussion and Recommendations

As of the year 2012, Hawai‘i, compared to the U.S., fared better in: adequate prenatal care; safe, nurturing, and supportive community environments; medical homes; and comprehensive/consistent insurance coverage. Hawai‘i also did better in providing prevention programs and maternal and child care services. Continuous efforts shall be made to maintain and expand what have been achieved. As state agencies, non-profit and community organizations, families, and parents of Hawai‘i’s young children work together to evolve existing health, social service and education programs toward a comprehensive early childhood system, the following areas deserve more attention:

- Hawai‘i saw more young children living in families with financial and material constraints (e.g., in overcrowded housing, food insecure homes) due to the high cost of living. However, coverage of state public assistance programs serving vulnerable young children may not be in proportion to the client size and changing needs. Therefore, it is very important for the state to continue to strengthen its public assistance and service programs. In the meantime, in addition to programs for financial education, Individual Development Account, and Federal Earned Income Tax Credit (EITC) outreach, the state should also develop more encompassing policies and programs that address the needs of working families who are not eligible for public assistance but are still struggling to make ends meet.
- The rapid increase of young children living in extreme poverty is of especial concern and raises the question of a possible increase in socioeconomic disparities.
- More efforts are needed to reduce pregnant women’s use of alcohol and drugs during pregnancy, the proportion of young children exposed to smoking at home, and childhood obesity. Each of these indicators are associated with potential lifelong negative health impacts and high but completely preventable health care costs.
- Early learning activities in the home, such as family members reading to young children, need to be encouraged in an effort to promote school readiness. Efforts should also be made to expand access to affordable quality child care services.
- The share of young children enrolled in licensed child care facilities remains at about one-fifth. The majority of Hawai‘i’s young children (especially those in vulnerable families) are cared for by their parents or by kith and kin child care providers. The provision of rich learning experiences and responsive and stimulating adult-child interaction is associated with better child outcomes, whether that care is provided by parents, relatives, babysitters, or professional providers. Thus, in addition to offering professional development and quality enhancements to center-based staff, attention should be given to reaching and supporting at-home parents and family and neighbor care providers.
- Finally, there are currently no systematic child assessments in preschool or kindergarten except for the Hawai‘i State School Readiness Assessment Survey (HSSRA), which is completed by kindergarten teachers. To better inform policymaking and program design, it is very important to have in place adequate capacity to collect and track data on children’s readiness to learn and early learning outcomes.



³ For example, Hawai‘i’s share of young children served by WIC was not only less but changed little despite of a significant increase of young children in poverty during the recent economic downturn.

⁴ Hawai‘i State Department of Human Services. 2014. Unduplicated counts of children receiving child care public subsidies for State Fiscal Years 2008, 2012, and 2013. Unpublished raw data.

Bibliography

- Annie E. Casey Foundation. 2009a. Preventing low birthweight. Retrieved May 15, 2014 from <http://www.aecf.org/m/resourcedoc/AECF-KCPreventingLowBirthweight-2009.pdf>
- Annie E. Casey Foundation. 2009b. Reducing infant mortality. Retrieved May 15, 2014 from <http://www.aecf.org/m/resourcedoc/AECF-KCReducingInfantMortality-2009.pdf>
- Annie E. Casey Foundation. 2009c. Reducing the child poverty rate. Retrieved May 15, 2014 from <http://www.aecf.org/m/resourcedoc/AECF-KCReducingchildpoverty-2009.pdf>
- Centers for Disease Control and Prevention. 2010. Why is preconception care a public health concern? Retrieved May 15, 2014 from <http://www.cdc.gov/ncbddd/preconception/whypreconception.htm>
- Chalk, R., Gibbons, A., & Scarupa, H. J. 2002. The multiple dimensions of child abuse and neglect: New insights into an old problem. Washington, DC: Child Trends.
- Daily, S., Burkhauser, M., & Halle, T. 2010. A review of school readiness practices in the states: Early learning guidelines and assessments. Washington, DC: Child Trends.
- Evans, G. W. 2006. Child development and the physical environment. *Annual Review of Psychology*, 57, 423-451.
- Genius, M. L., & Violato, C. 2001. A meta-analysis of the published research on the effects of child sexual abuse. *The Journal of Psychology*, 135(1), 17-36.
- Glaster, G. (2014). How neighborhoods affect health, well-being, and young people's futures. Chicago, IL: MacArthur Foundation.
- Hawai'i State Executive Office on Early Learning. 2013. EOEL background. Retrieved May 15, 2014 from <http://earlylearning.hawaii.gov/about-us/eoel-background>.
- He, S.J., Yuen, S., Nitta, K., Ripke, M. 2008. ECCS—Hawai‘i’s early childhood comprehensive system. Honolulu, HI: University of Hawai‘i.
- Johnson, K., Theberge, S., & Knitzer, J. 2008. Short Take No. 7: State indicators for early childhood. New York, NY: Columbia University, Mailman School of Public Health.
- Levi, J., Cimons, M., & Johnson, K. 2008. Healthy women, healthy babies. Washington, DC: Trust for America’s Health.
- Lipina, S. J., & Colombo, J. A. 2009. Poverty and brain development during childhood: An approach from cognitive psychology and neuroscience. Washington, DC: American Psychological Association.
- Lo, C. C., & Cheng, T. C. 2007. The impact of childhood maltreatment on young adults' substance abuse. *American Journal of Drug & Alcohol Abuse*, 33(1), 139-146.
- Maughan, D., & Moore, S. C. 2010. Dimensions of child neglect: An exploration of parental neglect and its relationship with delinquency. *Child Welfare*, 89(4), 47-66.
- Min, M., Farkas, K., Minnes, S., & Singer, L. T. 2007. Impact of childhood abuse and neglect on substance abuse and psychological distress in adulthood. *Journal of Traumatic Stress*, 20(5), 833-844.
- National Research Council and Institute of Medicine. 2000. From neurons to neighborhoods: The science of early childhood development. Washington, DC: National Academy Press.
- National Scientific Council on the Developing Child. 2007. The timing and quality of early experiences combine to shape brain architecture: Working paper #5. National Scientific Council on the Developing Child. Retrieved from Center on the Developing Child - Harvard University. Retrieved May 15, 2014 from <http://developingchild.harvard.edu>.
- Rossin-Slater, M., & Brellochs, C. 2012. Preconception health and health care and early childhood comprehensive systems: Opportunities for collaboration. New York, NY: Columbia University, Mailman School of Public Health.
- Sell, K., Zlotnik, S., Noonan, K., & Rubin, D. 2010. The effect of the recession on child well-being. Retrieved May 15, 2014 from <http://firstfocus.net/resources/report/effect-recession-child-well>.

Appendix 1: Definition of Indicators

DOMAIN	INDICATOR	DEFINITION	SOURCE(S)
SAFE AND SUPPORTIVE ENVIRONMENTS	Child abuse and neglect per 1,000	Number and rate per 1,000 of confirmed and unduplicated reports of child abuse and neglect among children of ages 0-5	26, 27, 34, 62
	Living in poverty	Number and percentage of children of ages 0-5 living below 100% of the Federal Poverty Level	34, 46, 56
	Living in extreme poverty	Number and percentage of children of ages 0-5 living below 50% of the Federal Poverty Level	34, 46, 56
	No parent in the labor force	Number and percentage of own children of ages 0-5 living with resident parents who are not in the labor force.	34, 47, 57
	Received SNAP	Number and percentage of children under 6 who received SNAP in the month of June	30, 34, 45
	Received TANF	Number and percentage of children under 6 who received TANF in the month of June	31, 34
	In foster care per 1,000	Number and rate per 1,000 of children in foster care among children of ages 0-5	28, 34, 63
	Elementary school transfer	Number and percentage of HDOE public regular elementary school students who do not enroll in the same school throughout an entire school year	11, 12, 15
	Having a healthy mother	Number and percentage of children of ages 0-5 having a resident mother in excellent or very good physical and emotional health	3, 4, 34
	Having a healthy father	Number and percentage of children of ages 0-5 having a resident father in excellent or very good physical and emotional health	3, 4, 34
	Living in overcrowded dwellings	Number and percentage of children of ages 0-5 living in a family dwelling with a person-to-bedroom ratio greater than 1	34, 43, 44
	Living in food insecure homes	Number and percentage of children of ages 0-5 living in a household which is measured as "Low Food Security" or "Very Low Food Security" on a 12-month household food security scale	34, 60
	Living with a smoker	Number and percentage of children of ages 0-5 living in households where someone smokes	3, 4, 34
	Families read to them daily	Number and percentage of children of ages 0-5 having one or more family members read to them everyday	3, 4, 34
	With multiple risk factors	Number and percentage of children of ages 0-5 living in a family with three or more of the following risk factors: under 200% poverty level, living with a lone parent, living in a language isolated home, living with a parent without a high school diploma, and living with an unemployed parent	34, 43, 44
	Living in a neighborhood with basic amenities	Number and percentage of children of ages 0-5 living in neighborhoods with a park, sidewalks, a library, and a community center	3, 4, 34
	Living in a rundown neighborhood	Number and percentage of children of ages 0-5 living in neighborhoods with poorly kept or rundown housing	3, 4, 34
	Living in a supportive neighborhood	Number and percentage of children of ages 0-5 living in a supportive neighborhood as defined by the following characteristics: people in neighborhood helping each other out, people watching out for each other's children in the neighborhood, can count on people in neighborhood, and availability of trustable adults to help children when needed	3, 4, 34
	Living in a safe neighborhood	Number and percentage of children of ages 0-5 living in neighborhoods that are usually or always safe	3, 4, 34
	Living in high poverty areas	Number and percentage of children of ages 0-5 living in 2010 Census Tracts of which 30% or more of the residents are under 100% poverty level	34, 49, 50, 53, 54, 55

Appendix 1: Definition of Indicators (continued)

DOMAIN	INDICATOR	DEFINITION	SOURCE(S)
HEALTH	Born to a mother who received late or no prenatal care	Number and percentage of children of ages 0-5 born to mothers who received late (i.e., no prenatal care in the first trimester) or no prenatal care	1, 24, 34
	Born to a mother who smoked during the last trimester of pregnancy	Number and percentage of children of ages 0-5 born to mothers who reported smoking during the last 3 months of pregnancy	21, 34
	Born to a mother who drank alcohol during the last trimester of pregnancy	Number and percentage of children of ages 0-5 born to mothers who reported drinking alcohol during the last 3 months of pregnancy	19, 34
	Born to a mother who used illegal drugs during the last trimester of pregnancy	Number and percentage of children of ages 0-5 born to mothers who reported using illegal drugs during the last 3 months of pregnancy	20, 34
	Births covered by health insurance	Number and percentage of children of ages 0-5 whose births were covered by health insurance	18, 34
	Preterm births	Number and percentage of preterm births (less than 37 weeks gestation) among children of ages 0-5	1, 34
	Born low birth weight	Number and percentage of low birth weight babies (born less than 5.5 pounds or 2,499 grams) among children of ages 0-5	1, 34
	Participating in WIC	Percent of children of ages 0-4 participating in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)	7, 32, 34
	Ever breastfed	Number and percentage of children of ages 0-5 ever breastfed	3, 34
	Breastfed at six months of age	Number and percentage of children of ages 0-5 breastfed at six months of age	33, 34
	With excellent or very good health	Number and percentage of children of ages 0-5 in excellent or very good health	3, 4, 34
	With excellent or very good oral health	Number and percentage of children of ages 1-5 with excellent or very good oral health	3, 4, 34
	At moderate or high risk of development or behavioral problems	Number and percentage of children of ages 4 months to 5 years determined to be at moderate or high risk based on parents' specific concerns for developmental, behavioral, or social delays	3, 4, 34
	Overweight and obese among vulnerable children aged 2-4	Number and percentage of vulnerable children of ages 2-4 participating in WIC with a BMI at or above the 85th percentile (overweight and obese)	2, 34
	With special health care needs	Number and percentage of children of ages 0-5 having special health care needs	5, 6, 34
	Experienced a developmental delay or physical impairment	Number and percentage of children of ages 0-5 who experienced a developmental delay or physical impairment under age 2	22, 34
	No health insurance coverage	Number and percentage of children who are not covered by any health insurance among children of ages 0-5	34, 51, 58
	Lacking consistent insurance coverage	Number and percentage of children of ages 0-5 lacking consistent insurance coverage	3, 4, 34
	Received Med-QUEST	Monthly average number and percentage of children of ages 0-5 receiving Med-QUEST	8, 34

Appendix 1: Definition of Indicators (continued)

DOMAIN	INDICATOR	DEFINITION	SOURCE(S)
HEALTH <i>(Continued)</i>	Had a medical home	Number and percentage of children of ages 0-5 whose health care met the medical home criteria: (1) personal doctor or nurse, (2) usual source for sick and well care, (3) family-centered care, (4) problems getting needed referrals, and (5) effective care coordination when needed. To qualify as having a medical home, children must meet the criteria for adequate care on the first three components: personal doctor or nurse, usual source for care, and family-centered care. Any children who needed referrals or care coordination must also meet criteria for those components in order to qualify as having a medical home.	3, 4, 34
	Those with special health care needs had a medical home	Number and percentage of children of ages 0-5 with special health care needs (CSHCN) who receive coordinated, ongoing, comprehensive care within a medical home	5, 6, 34
	Fully immunized by age 2	Number and percentage of children who were fully immunized (i.e., 4:3:1:3:3:1) by age 2 among children of ages 0-5	34, 35, 36
	Had preventive medical visits	Number and percentage of children of ages 0-5 with one or more preventive medical visits in previous year	3, 4, 34
	Had preventive dental visits	Number and percentage of children of ages 1-5 with one or more preventive dental visits in previous year	3, 4, 34
	Received a standardized developmental screening	Number and percentage of children of ages 10 months to 5 years who received a standardized screening for developmental or behavioral problems	3, 4, 34
	Received early intervention services	Number and percentage of children of ages 0-5 receiving Early Intervention Services (EIS) before age 3	16, 17, 34, 61
READY TO SUCCEED	Annual cost of center-based care: infants	Average annual cost of center-based care for infants, dollar values unadjusted	38, 40
	Annual cost of center-based care: toddlers of ages 1-2	Average annual cost of center-based care for toddlers of ages 1-2, dollar values unadjusted	38, 40
	Annual cost of center-based care: preschoolers of ages 3-4	Average annual cost of center-based care for preschoolers of ages 3-4, dollar values unadjusted	38, 40
	Annual cost for licensed family child care homes: infants	Average annual cost for licensed family child care homes: infants, dollar values unadjusted	38, 40
	Annual cost for licensed family child care homes: toddlers of ages 1-2	Average annual cost for licensed family child care homes: toddlers of ages 1-2, dollar values unadjusted	38, 40
	Annual cost for licensed family child care homes: preschoolers of ages 3-4	Average annual cost for licensed family child care homes: preschoolers of ages 3-4, dollar values unadjusted	38, 40
	Median household income	Median household income in the past 12 months	48, 59
	Median family income	Median family household income in the past 12 months	48, 59
	Young children who received publicly-funded child care subsidies: infants	Percentage of infants who received publicly-funded child care subsidies based on the unduplicated recipient counts by age from the State Department of Human Services	29
	Young children who received publicly-funded child care subsidies: toddlers of ages 1-2	Percentage of toddlers of ages 1-2 who received publicly-funded child care subsidies based on the unduplicated recipient counts by age from the State Department of Human Services	29
	Young children who received publicly-funded child care subsidies: preschoolers of ages 3-4	Percentage of preschoolers of ages 3-4 who received publicly funded child care subsidies based on the unduplicated recipient counts by age from the State Department of Human Services	29

Appendix 1: Definition of Indicators (continued)

DOMAIN	INDICATOR	DEFINITION	SOURCE(S)
READY TO SUCCEED <i>(Continued)</i>	Total capacity of licensed child care facilities	Total capacity of licensed child care facilities for children under the age of six	39, 42
	Ratio of total capacity of licensed child care facilities to population aged under 6	Ratio of total capacity of licensed child care facilities to the total population of children under age six	34, 39, 42
	Desired capacity of licensed child care facilities	Licensed child care facilities' desired capacity for children under the age of six	39, 42
	Ratio of desired capacity of licensed child care facilities to population aged under 6	Ratio of desired capacity of licensed child care facilities to the total population of children under age six	34, 39, 42
	Children enrolled in licensed child care facilities	Number and percentage of children under the age of six enrolled in licensed child care facilities, including family homes, group homes, infant/toddler centers, and preschools	34, 39, 42
	Center-based caregivers with an associate's degree or higher	Average percentage of lead caregivers and caregivers at infant/toddler care centers having an associate's degree or higher	41
	Center-based caregivers with an associate's degree or higher in EC/ECE/ECD	Average percentage of lead caregivers and caregivers at infant/toddler care centers having an associate's degree or higher in early childhood, early childhood education, and/or child development	41
	Center-based caregivers with a BA or higher	Average percentage of lead caregivers and caregivers at infant/toddler care centers having a bachelor's degree or higher	41
	Center-based caregivers with a BA degree or higher in EC/ECE/ECD	Average percentage of lead caregivers and caregivers at infant/toddler care centers having an bachelor's degree or higher in early childhood, early childhood education, and/or child development	41
	Preschool teachers having an associate's degree or higher	Average percentage of center-based preschool teachers and assistant teachers having an associate's degree or higher	41
	Preschool teachers with an associate's degree or higher in EC/ECE/ECD	Average percentage of center-based preschool teachers and assistant teachers with an associate's degree or higher in early childhood, early childhood education, and/or early child development	41
	Preschool teachers with a BA or higher	Average percentage of center-based preschool teachers and assistant teachers having a bachelor's degree or higher	41
	Preschool teachers with a BA degree or higher in EC/ECE/ECD	Average percentage of center-based preschool teachers and assistant teachers with a bachelor's degree or higher in early childhood, early childhood education, and/or child development	41
	Kindergarten classes ready-for-school	Percent of the DOE kindergarten classes assessed by their teachers in the Hawai'i State School Readiness Assessment Survey as having at least three-quarters of their entering students consistently displaying the skills and characteristics for success in school life	9, 10
	Schools providing transition-to-kindergarten services	Percentage of the public elementary schools providing transition to kindergarten activities for entering students	9, 10
	Kindergarteners enrolled in special education programs	Percentage of kindergarteners enrolled in special education programs based on the State Department of Education official enrollment in the Fall semester	9, 10
	Proficiency on the Hawai'i State Assessment in Reading: 4th Grade	Percentage of all public school 4th grade participants in the Hawai'i State Assessment in Reading who met or exceeded the proficiency standard	14
	Proficiency on the Hawai'i State Assessment in Math: 4th Grade	Percentage of all public school 4th grade participants in the Hawai'i State Assessment in Math who met or exceeded the proficiency standard	13

Appendix 2: Data Sources

NO	DATA SOURCE
1	Center for Disease Control and Prevention. 2014. Natality Online Databases Report: 2007-2013. Retrieved from: http://wonder.cdc.gov/nativity.html
2	Center for Disease Control and Prevention. 2014. Pediatric Nutrition Surveillance System (PedNSS) 2011 Data Tables: Table 6D National Comparison of Growth and Anemia Indicators by Contributor Children Aged < 5 Years. Retrieved from: http://www.cdc.gov/pednss/pednss_tables/pdf/national_table6.pdf
3	Child and Adolescent Health Measurement Initiative. nd. 2007 NSCH National Chartbook Profile for Hawai'i vs. Nationwide. Retrieved from: http://childhealthdata.org/browse/snapshots/nsch-profiles?rpt=16&geo=13
4	Child and Adolescent Health Measurement Initiative. nd. 2011/2012 NSCH National Chartbook Profile for Hawai'i vs. Nationwide. Retrieved from: http://childhealthdata.org/
5	Child and Adolescent Health Measurement Initiative. nd. National Survey of Children with Special Health Care Needs NS-CSHCN 2009/10. Data query from: the Child and Adolescent Health Measurement Initiative, Data Resource Center for Child and Adolescent Health website. Retrieved from: http://www.childhealthdata.org/
6	Child and Adolescent Health Measurement Initiative. nd. National Survey of Children with Special Health Care Needs. NS-CSHCN 2005/06. Data query from: the Child and Adolescent Health Measurement Initiative, Data Resource Center for Child and Adolescent Health website. Retrieved from: http://childhealthdata.org/browse/snapshots/cshcn-profiles?rpt=3&geo=13
7	Connor, P., S. Bartlett, M. Mendelson, K. Condon, J. Sutcliffe, et al. 2010. WIC Participant and Program Characteristics 2008. Retrieved from: http://www.fns.usda.gov/sites/default/files/pc2008_o.pdf
8	Hawai'i Covering Kids. nd. Med-QUEST Enrollment Data by Month from: December, 1999 to May 2012. Unpublished raw data.
9	Hawai'i State Department of Education and Good Beginnings Alliance. 2009. Hawai'i State School Readiness Assessment, School Year 2008-2009. Retrieved from: http://arch.k12.hi.us/PDFs/hssra/2009/State-999-State.pdf
10	Hawai'i State Department of Education and Good Beginnings Alliance. 2013. Hawai'i State School Readiness Assessment, School Year 2012-2013. Retrieved from: http://arch.k12.hi.us/PDFs/hssra/2013/State-999-State.pdf
11	Hawai'i State Department of Education. 2008. School-by-school and Grade-by-grade Enrollment Counts: School Year 2007-08. Retrieved from: https://lilinote.k12.hi.us/STATE/COMM/DOEPRESS.NSF/a1d7af052e94dd120a2561f7000ao37c/116169a4f3485c210a2573400077ef7b/Body/o.29FA?OpenElement&FieldElemFormat=gif
12	Hawai'i State Department of Education. 2011. Official 2011-12 Public and Charter School Enrollment by District/School. Retrieved from: https://lilinote.k12.hi.us/STATE/COMM/DOEPRESS.NSF/a1d7af052e94dd120a2561f7000ao37c/81c3aa4a36044f930a257927007ab8d5/Body/o.183C?OpenElement&FieldElemFormat=gif
13	Hawai'i State Department of Education. 2014. Hawai'i State Assessment Accountability Math Proficiency Rates by Grade and Proficiency Level: School Year 2002-2013. Retrieved from: http://adc.hidoe.us/#/proficiency
14	Hawai'i State Department of Education. 2014. Hawai'i State Assessment Accountability Reading Proficiency Rates by Grade and Proficiency Level: School Year 2002-2013. Retrieved from: http://adc.hidoe.us/#/proficiency
15	Hawai'i State Department of Education. nd. School Status and Improvement Reports (SSIR), School Year 2007-2012. Retrieved from: http://arch.k12.hi.us/school/ssir/ssir.html
16	Hawai'i State Department of Health. 2013. Early Intervention Services Performance Report: Performance Period July 2012-December 2012. Retrieved from: http://hidoereports.k12.hi.us/Felix/Documents/S07%20Performance%20Report%20Department%20of%20Health%20-%20Early%20Intervention%20Services.pdf
17	Hawai'i State Department of Health. 2013. Early Intervention Services Performance Report: Performance Report, Performance Period January 2012-June 2012. Retrieved from: http://hidoereports.k12.hi.us/Felix/Documents/S06%20Performance%20Report%20Department%20of%20Health%20-%20Early%20Intervention%20Services.pdf
18	Hawai'i State Department of Health. 2013. Pregnancy Risk Assessment Monitoring System (PRAMS) Health Indicator Report: Coverage for Delivery for the State of Hawai'i, for the Years 2000 to 2011. Retrieved from: http://www.hhdw.org/cms/uploads/Data%20Source_%20PRAMS/PRAMS_Prenatal%20Care_IND_00002.pdf

Appendix 2: Data Sources (continued)

NO	DATA SOURCE
19	Hawai'i State Department of Health. 2013. Pregnancy Risk Assessment Monitoring System (PRAMS) Health Indicator Report: Drinking Alcohol during the Last 3 Months of Pregnancy for the State of Hawai'i for the Years 2000 to 2011. Retrieved from: http://www.hhdw.org/cms/uploads/Data%20Source_%20PRAMS/PRAMS_Alcohol_IND_00003.pdf
20	Hawai'i State Department of Health. 2013. Pregnancy Risk Assessment Monitoring System (PRAMS) Health Indicator Report: Illicit Drug Use in Pregnancy for the State of Hawai'i for the Years 2000 to 2011. Retrieved from: http://www.hhdw.org/cms/uploads/Data%20Source_%20PRAMS/PRAMS_Illegal%20Drugs_IND_00002.pdf .
21	Hawai'i State Department of Health. 2013. Pregnancy Risk Assessment Monitoring System (PRAMS) Health Indicator Report: Smoking during the Last 3 Months of Pregnancy for the State of Hawai'i for the Years 2000 to 2011. Retrieved from: http://www.hhdw.org/cms/uploads/Data%20Source_%20PRAMS/PRAMS_Tobacco_IND_00006.pdf
22	Hawai'i State Department of Health. 2014. Number of Children Aged 0-2 with an IFSP on Dec. 1 of Years 2009-2012. Unpublished raw data.
23	Hawai'i State Department of Health. 2014. Office of Health Status Monitoring (OHSM) Vital Statistics Report: Live Births in Hawai'i by Birth Weight for the Years 2000 to 2012. Retrieved from: http://www.hhdw.org/cms/uploads/Data%20Source_%20Vitals/Vital%20Statistics_Live%20Births%20in%20Hawaii_IND_00015.pdf
24	Hawai'i State Department of Health. 2014. Office of Health Status Monitoring (OHSM) Vital Statistics Report: Live Births in Hawai'i by Prenatal Care for the Years 2000 to 2012. Retrieved from: http://www.hhdw.org/cms/uploads/Data%20Source_%20Vitals/Vital%20Statistics_Live%20Births%20in%20Hawaii_IND_PNC.pdf
25	Hawai'i State Department of Health. 2014. Office of Health Status Monitoring (OHSM) Vital Statistics Report: Preterm Births in Hawai'i for the Years 2000 to 2012. Retrieved from: http://www.hhdw.org/cms/uploads/Data%20Source_%20Vitals/Vital%20Statistics_Live%20Births%20in%20Hawaii_IND_Preterm%20births.pdf
26	Hawai'i State Department of Human Services. 2009. A Statistical Report on Child Abuse and Neglect in Hawai'i: 2008. Retrieved from: http://humanservices.hawaii.gov/wp-content/uploads/2013/01/2008-CAN-report.pdf
27	Hawai'i State Department of Human Services. 2013. A Statistical Report on Child Abuse and Neglect in Hawai'i: 2012. Retrieved from: http://humanservices.hawaii.gov/wp-content/uploads/2013/06/Child-Abuse-and-Neglect-Report-for-20121.pdf
28	Hawai'i State Department of Human Services. 2014. Department of Human Services Databook. Retrieved from: http://humanservices.hawaii.gov/wp-content/uploads/2014/01/DHS-Databook_Jan2014_FINAL.pdf
29	Hawai'i State Department of Human Services. 2014. Unduplicated Counts of Children Receiving Child Care Public Subsidies for State Fiscal Years 2008, 2012, and 2013. Unpublished raw data.
30	Hawai'i State Department of Human Services. 2014. Unduplicated Counts of Children under the Age of Six Receiving SNAP in the Month of June for Years 2000 to 2012. Unpublished raw data.
31	Hawai'i State Department of Human Services. 2014. Unduplicated Counts of Children under the Age of Six Receiving TANF in the Month of June for Years 2000 to 2012. Unpublished raw data.
32	Johnson, B., Thorn, B., McGill, B., Suchman, A., Mendelson, M., Patlan, K.L., Freeman, B., Gotlieb, R., & Connor, P. 2013. WIC Participant and Program Characteristics 2012. Retrieved from: http://www.fns.usda.gov/sites/default/files/WICPC2012.pdf
33	National Center for Chronic Disease Prevention and Health Promotion. 2007-2014. Breastfeeding Report Card United States 2007-2014. Retrieved from: http://www.cdc.gov/breastfeeding/data/reportcard.htm
34	National Center for Health Statistics. 2014. Vintage 2013 Bridged-Race Postcensal Population Estimates for April 1, 2010, July 1, 2010 - July 1, 2013, by Year, County, Single-Year of Age (0 to 85+ years), Bridged-Race, Hispanic Origin, and Sex. Retrieved from: http://www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2013

Appendix 2: Data Sources (continued)

NO	DATA SOURCE
35	National Center for Immunization and Respiratory Diseases. 2010. National Immunization Survey (NIS) Table Data for 2010: Table 9. Estimated Vaccination Coverage with Individual Vaccines and Selected Vaccination Series by 24 Months of Age by State and Selected Area. Retrieved from: http://www2a.cdc.gov/ncip/coverage/nis/CountNIS.asp?fmt=v&rpt=tab09_24mo_iap.xlsx&qtr=Q1/2010-Q4/2010
36	National Center for Immunization and Respiratory Diseases. 2014. National Immunization Survey (NIS) Table Data for 2013: Table 9. Estimated Vaccination Coverage with Individual Vaccines and Selected Vaccination Series by 24 Months of Age by State and Selected Area. Retrieved from: http://www2a.cdc.gov/ncip/coverage/nis/CountNIS.asp?fmt=v&rpt=tab09_24mo_iap_2013.xlsx&qtr=Q1/2013-Q4/2013
37	National Survey of Child Health, 2007. Child health insurance coverage. Retrieved from: http://www.childhealthdata.org/browse/survey/results?q=246&r=1
38	PATCH. 2008. Report on Average Full-time Monthly Rates by Age and Facility Type as of June 2008 (FY 2007-2008). Unpublished raw data.
39	PATCH. 2008. Report on Facility and Capacities as of June 2008.
40	PATCH. 2013. PATCH 2012 Annual Review. Retrieved from: http://patchhawaii.org/files/content/about_patch/history/2012_PATCH_Annual%20Report_WEB-1.pdf
41	PATCH. 2014. Monthly Extracts of Licensed Child Care Givers' Qualifications from: the Hawai'i CANOE Registry for Years 2008 and 2012. Unpublished raw data.
42	PATCH. 2014. Resource and Referral Report for Fiscal Year 2012.
43	Ruggles, S., J. T. Alexander, K. Genadek, R. Goeken, M. B. Schroeder, and M. Sobek. 2012. Integrated Public Use Microdata Series: American Community Survey 2005-2007 Sample. Minneapolis: University of Minnesota.
44	Ruggles, S., J. T. Alexander, K. Genadek, R. Goeken, M. B. Schroeder, and M. Sobek. 2012. Integrated Public Use Microdata Series: Version American Community Survey 2010-2012 Sample. Minneapolis: University of Minnesota.
45	Ruggles, S., J. T. Alexander, K. Genadek, R. Goeken, M. B. Schroeder, and M. Sobek. 2012. Integrated Public Use Microdata Series: Version American Community Survey 2012 1-Year Sample. Minneapolis: University of Minnesota.
46	U.S. Census Bureau. 2009. American Community Survey 2006-2008 3-Year Estimates, Table B17024: Age by Ratio of Income to Poverty Level in the Past 12 Months. Retrieved from: http://factfinder.census.gov/bkmk/table/1.0/en/ACS/08_3YR/B17024/0100000US15l0400000US15l0400000US15.05000
47	U.S. Census Bureau. 2009. American Community Survey 2006-2008 3-Year Estimates, Table B23008: Age of Own Children Under 18 Years in Families and Subfamilies by Living Arrangements by Employment Status of Parents. Retrieved from: http://factfinder2.census.gov
48	U.S. Census Bureau. 2009. American Community Survey 2008 1-Year Estimates, Table S1903, retrieved from http://factfinder.census.gov/bkmk/table/1.0/en/ACS/08_1YR/S1903/0400000US15
49	U.S. Census Bureau. 2010. American Community Survey 2005-2009 5-Year Estimates, Table B09001: Population Under 18 Years by Age for State of Hawai'i. Retrieved from: http://factfinder2.census.gov/bkmk/table/1.0/en/ACS/09_5YR/B09001/0400000US15
50	U.S. Census Bureau. 2010. American Community Survey 2005-2009 5-Year Estimates, Table B17001: Poverty Status in the Past 12 Months by Sex by Age for State of Hawai'i. Retrieved from: http://factfinder.census.gov/bkmk/table/1.0/en/ACS/09_5YR/B17001/0400000US15

Appendix 2: Data Sources (continued)

NO	DATA SOURCE
51	U.S. Census Bureau. 2011. American Community Survey 2008-2010 3-Year Estimates, Table B27001: Health Insurance Coverage Status by Sex by Age. Retrieved from: http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_3YR_B27001&prodType=table
52	U.S. Census Bureau. 2013. 2012 American community Survey 3-Year Estimates, Table S0901: Children Characteristics. Retrieved from http://factfinder2.census.gov/bkmk/table/1.0/en/ACS/12_3YR/S0901/0400000US15
53	U.S. Census Bureau. 2013. American Community Survey 2008-2012 5-Year Estimates, Table B09001: Population Under 18 Years by Age for State of Hawai'i. Retrieved from: http://factfinder2.census.gov/bkmk/table/1.0/en/ACS/12_5YR/B09001/0400000US15
54	U.S. Census Bureau. 2013. American Community Survey 2008-2012 5-Year Estimates, Table B17001: Poverty Status in the Past 12 Months by Sex by Age for State of Hawai'i. Retrieved from: http://factfinder2.census.gov/bkmk/table/1.0/en/ACS/12_5YR/B17001/0400000US15
55	U.S. Census Bureau. 2013. American Community Survey 2008-2012 5-Year Summary File. Retrieved from: http://www2.census.gov/acs2012_5yr/summaryfile
56	U.S. Census Bureau. 2013. American Community Survey 2010-2012 3-Year Estimates, Table B17024: Age by Ratio of Income to Poverty Level in the Past 12 Months. Retrieved from: http://factfinder.census.gov/bkmk/table/1.0/en/ACS/12_3YR/B17024/0100000US10400000US15l0400000US15.05000
57	U.S. Census Bureau. 2013. American Community Survey 2010-2012 3-Year Estimates, Table B23008: Age of Own Children Under 18 Years in Families and Subfamilies by Living Arrangements by Employment Status of Parents. Retrieved from: http://factfinder.census.gov/bkmk/table/1.0/en/ACS/12_3YR/B23008/0400000US15
58	U.S. Census Bureau. 2013. American Community Survey 2010-2012 3-Year Estimates, Table B27001: Health Insurance Coverage Status by Sex by Age. Retrieved from: http://factfinder2.census.gov/bkmk/table/1.0/en/ACS/12_3YR/B27001/0400000US15
59	U.S. Census Bureau. 2013. American Community Survey 2012 1-Year Estimates, Table S1903, retrieved from http://factfinder.census.gov/bkmk/table/1.0/en/ACS/12_1YR/S1903/0400000US15
60	U.S. Census Bureau. 2013. Current Population Survey Food Security Supplement for Years 2000 to 2012. Retrieved from: http://www.nber.org/data/current-population-survey-data.html
61	U.S. Department of Education. 2013. 2012 IDEA Part C Child Count and Settings. Retrieved from: https://inventory.data.gov/dataset/2012-idea-part-c-child-count-and-settings
62	U.S. Department of Health and Human Services. 2013. Child Maltreatment 2012. Retrieved from http://www.acf.hhs.gov/programs/cb/resource/child-maltreatment-2012
63	U.S. Department of Health and Human Services. 2013. The AFCARS Report No. 20. Retrieved from: http://www.acf.hhs.gov/sites/default/files/cb/afcarsreport20.pdf

Related Publications from the Center on the Family

A RUNNING START
ENSURING QUALITY IN THE EXECUTIVE OFFICE ON EARLY LEARNING PRE-KINDERGARTEN PROGRAM

Recent legislative initiatives to establish a state-supported pre-kindergarten program are exciting opportunities to provide significant improvements to our state's early learning system. It is important for us to seize these opportunities and commit to doing what is best for our children. We must work together to ensure that our efforts result and make a difference in the lives of our young kids. The Executive Office on Early Learning Pre-Kindergarten Program will provide quality early learning experiences in safe, secure, well-qualified classrooms and provide the foundation for a vibrant preschool system.

Strong learning programs promote school readiness and can show lasting effects on school achievement, social well-being, and even economic outcomes. However, only those programs designed and evaluated rigorously can demonstrate the impact gap between advantaged and at-risk children.¹ To maximize potential child outcomes, we must continue to support research and evaluate current research in education science. We should also take advantage of the many opportunities available to learn from others with the strongest track record of success in providing public pre-kindergarten. Below is a list of research-based recommendations for implementing a good program.

Steps to quality in pre-k:

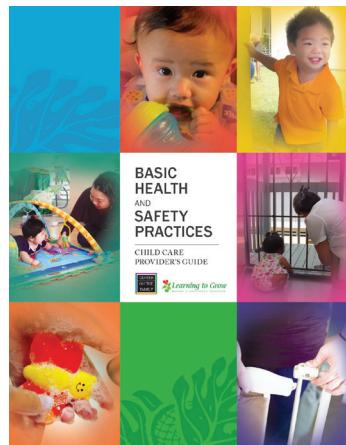
- Set the stage with structural requirements:
- Provide a safe environment for young children with excellent learning environments:
- Use developmentally-appropriate, evidence-based curriculum and instruction:
- Design the instructional program around those areas of development that are most critical for later learning, namely socio-emotional competencies, language, literacy, numeracy, higher-order thinking, and approaches to learning.
- Individual/teacher play, a balance of teacher-to-child, child-to-child, and child-to-environment interactions, and group vs. individual settings.
- Provide a variety of age-appropriate content areas, i.e., language, literacy, math, science, social studies, music, art, and movement instruction.
- Provide opportunities for children to explore and have ongoing adult support children can relate to.
- Have teachers use self-observation and curriculum-based assessment to inform teaching strategies and individualized instruction.
- Align the instructional program with the Hawaii Early Learning and Development Standards.

Provide high-quality teacher-child interactions

Give teacher-child interaction the deserved attention:

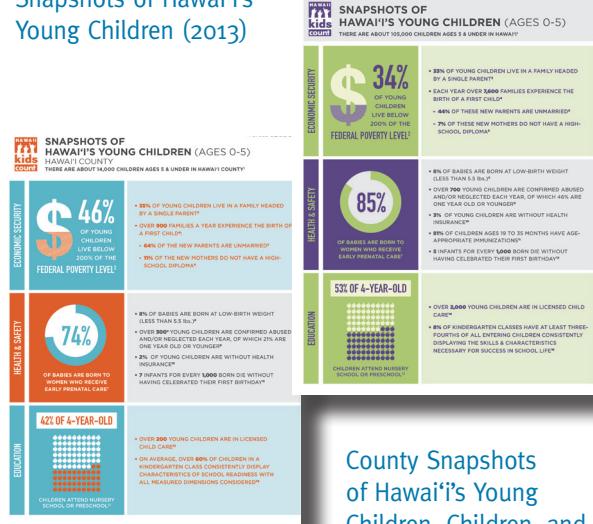
- Provide a high frequency of rich language use, strategic questioning, and warm responsiveness to children.

A Running Start: Ensuring Quality in the Executive Office on Early Learning Pre-Kindergarten Program (2015)



Basic Health and Safety Practices: Child Care Provider's Guide (2014)

Snapshots of Hawai'i's Young Children (2013)



County Snapshots of Hawai'i's Young Children, Children, and Teens (2013)

Choosing Child Care booklet (2011)

Learning to Grow

This booklet was produced by University of Hawaii at Manoa, College of Tropical Agriculture and Human Resources, Department of Human Services, and the State of Hawaii Department of Human Services.

Choosing Quality Child Care

Learning to Grow booklet table of contents:

- How can I prepare my child? 5
- What are the best ways to work with child's care provider? 6
- Worksheet 7
- Referral Worksheet 7
- Sample Interview Questions Worksheet 8
- Observation Worksheet 11
- Health and Safety Checklist 12
- Resources inside back cover

Where can I get more information?

PATCH is Hawaii's statewide child care resource and referral agency. PATCH's mission is to support and improve the quality and availability of care for the young people of Hawaii!

(866) 836-1988 (Oahu)
 (866) 941-3169 (East Hawaii)
 (866) 322-3998 (West Hawaii)
 (866) 242-0320 (Maui)
 (866) 242-0321 (Kauai)
 (866) 486-4465 (Molokai) and Lanai
 Email: patch@patchhawaii.org

The Parent Line is a free statewide confidential telephone line which offers support and information to parents and other caregivers. The staff will help you problem-solve parenting challenges and child and adolescent behavioral and developmental issues.

(866) 526-1222 (Oahu)
 1-800-816-1222 (Neighbor Islands, toll-free)

Prepared for the Learning to Grow project
 Center on the Family, University of Hawaii at Manoa, and the State of Hawaii Department of Human Services

Choosing Quality Child Care

The care that children receive during their early years shapes the way they learn, think, and behave for the rest of their lives.

Whether they are cared for by their family members, professional child care providers, or family friends, children thrive when they are nurtured in a safe, healthy environment.

All publications are available for download on the Center on the Family website:
www.uhfamily.hawaii.edu.



SUGGESTED CITATION

He, S.J., Stern, I.R., & DeBaryshe, B. (2015).
Early Childhood Indicator Report: State of Hawai'i. Honolulu, HI:
University of Hawai'i, Center on the Family.

FOR MORE INFORMATION, PLEASE CONTACT:

Center on the Family, CTAHR, University of Hawai'i – Mānoa,
2515 Campus Road, Miller 103
Honolulu, HI 96822, (808) 956-4132.

Hawai'i KIDS COUNT is funded by the Annie E. Casey Foundation.
We thank them for their support, and we acknowledge that
the findings and conclusions presented in this report are those
of the authors alone and do not necessarily reflect the opinions
of the Foundation.