

Information For Providers ***On The California Hemoglobin Trait Follow-up Program***

In February of 1990 hemoglobinopathy screening for all infants born in California was added to the Statewide Newborn Screening Program. The laboratory test used to identify infants with hemoglobinopathies also identifies healthy infants who are hemoglobin trait carriers. (Please see table 1.) Carrier follow-up is provided to parents of infants identified with hemoglobin patterns FAS, FAC, and FAD. This follow-up is important because of the potential risk for couples who are both trait carriers to have a future child with a serious chronic disease.

**Table 1: Carrier Rate and Frequency For Hemoglobin Traits by Ethnicity
California Newborn Screening 1990 Through 2003**

Ethnicity	Sickle Cell Trait		Hb C Trait		Hb D Trait		Total		
	Carrier Rate	Number Identified	Carrier Rate	Number Identified	Carrier Rate	Number Identified	Carrier Rate	Trait Number	Number Screened
Black	1/15	38,975	1/52	11,510	1/1892	319	1/12	50,804	603,624
Native American	1/150	329	1/489	101	1/2148	23	1/109	453	49,395
Hispanic	1/203	17,507	1/1517	2349	1/1721	2070	1/162	21,926	3,562,582
Middle Eastern	1/478	149	1/5475	13	1/442	161	1/220	323	71,180
White	1/642	3785	1/2756	883	1/2554	953	1/433	5621	2,433,622
Asian Indian	1/652	95	1/4768	13	1/217	285	1/158	393	61,978
Filipino	1/879	201	1/4775	37	1/1985	89	1/540	327	176,682
Asian *	1/1315	216	1/6607	43	1/7891	36	1/963	295	284,090
Southeast Asian **	1/2365	78	1/14,200	13	1/4392	42	1/1387	133	184,451
Other ***	1/183	365	1/956	66	1/660	106	1/131	537	70,343
	1/122	61,700	1/499	15,028	1/1,836	4,084	1/93	80,812	7,497,929

*"Asian" includes Chinese, Japanese, Korean, Pacific Islander, and Other Asian

**"Southeast Asian " includes Cambodian, Hmong, Laotian, Thai, and Vietnamese

***Prior to June 1991 "Other" included Asian Indian and Middle Eastern

Some of the information provided by the California Hemoglobin Trait Follow-up Program includes:

- Which hemoglobin trait the baby's newborn screening test showed
- Accuracy of the test; baby does not need to be retested
- Difference between trait and disease
- How common the baby's trait and other traits are in various populations in California
- Traits can occur in anyone
- Inheritance patterns for traits, possibility for sickle cell disease in future children
- Free comprehensive trait testing for parents: (complete blood count and electrophoresis)

Please encourage parents to call the Newborn Screening Hemoglobin Trait toll free number to speak with a sickle cell counselor in English or Spanish at **(866) 954-2229**.

Families that are Kaiser members can call:

Kaiser North

Kaiser Oakland: (510) 752-6298

Kaiser San Francisco: (415) 833-2998

Kaiser Sacramento: (916) 614-4075

Kaiser San Jose: (408) 972-3300

Kaiser South

Southern California Kaiser Sickle Cell

Hemoglobinopathy Center: (800) 734-5155