

3. PREVALENCE OF FOOD SECURITY

This chapter presents an overview of estimated food security prevalence for the 12-month periods ending in August 1998 and April 1999. Section A presents 1998 prevalence estimates for the total U.S. population and for subgroups of the population. Section B presents the same for 1999. In Section C we present national prevalence estimates of conditions, experiences, and behaviors as represented by the individual items in the food security scale. Food security and hunger prevalence rates for households with children are presented in Section D for 1998, Section E for 1999 and in Section F for 1995-1997. The final section (Section G) presents estimates of change in national household prevalence of food insecurity and hunger from 1995 to 1999.

Summary tables are included in the text of this chapter. Detailed tables of prevalence rates for each analytic category, along with tables of standard errors are found in chapter 4. It should be noted that chapter 4 includes two sets of tables for most 1998 and 1999 statistics, one based on data as collected and the second based on data adjusted for cross-year comparability to account for differences in screening procedures. The latter should be used for comparisons to statistics from 1995-1997. Each section below begins by identifying the relevant tables in Chapter 4 and then presents an overview of key findings.

A. Prevalence of Food Security, 1998

1. Relevant Detailed Tables

Tables A.1 and A.2 in chapter 4 present details on national prevalence of food security in 1998. Table A.1 presents statistics on household food security status, while table A.2 presents statistics on the number of adults by the food security status of the household. Statistics in both of these tables are based on data as collected. That is, the data were not adjusted to be comparable to 1995-1997. Standard errors for these statistics are reported in tables D.A.1 and D.A.2. Tables C.1 and C.2 in Chapter 4 present similar information but have been adjusted to be comparable to 1995-1997. The standard errors for these tables are reported in tables D.C.1 and D.C.2. Each table presents

statistics for various subgroups of the population categorized by household composition, race and Hispanic ethnicity, household income-to-poverty ratio, area of residence and census geographic region.

2. *Overview*

Prevalence of Food Security Among All Households

In 1998 approximately 91 million households in the United States, 88.2 percent of all households, were food secure throughout the entire year (Table 3.1). Approximately 175 million adults (88.8 percent of all adults) and 57 million children (80.1 percent of all children) lived in food secure households.

Conversely, household food security was not attained at all times in 1998 for approximately 12 million U.S. households (11.8 percent of all households), more than half of which were households with children (6.7 million). About 22 million adults and 14 million children lived in these food insecure households.

Included among households classified as food insecure are those classified as “food insecure with hunger”. Those that are food insecure with hunger had one or more household members who were hungry at some time during the year as a result of inadequate food supplies or resources for food. In 1998, 3.8 million households were classified as food insecure with hunger, 1.6 million being households with children. About 6.5 million adults (3.3 percent) and 3.4 million children (4.9 percent) lived in food insecure households with hunger.

TABLE 3.1 PREVALENCE OF FOOD SECURITY, INSECURITY AND HUNGER, 1998 and 1999

	Total		Food Secure		Food Insecure					
	1,000	1,000	%	<u>All</u>		<u>Without Hunger</u>		<u>With Hunger</u>		
	1,000	1,000	%	1,000	%	1,000	%	1,000	%	
All Households										
1998	103,309	91,121	88.2	12,188	11.8	8,353	8.1	3,835	3.7	
1999	104,684	94,154	89.9	10,529	10.1	7,420	7.1	3,109	3.0	
Adults, By the Food Security Status of the Households										
1998	197,084	174,964	88.8	22,120	11.2	15,632	7.9	6,488	3.3	
1999	198,901	179,960	90.5	18,941	9.5	13,869	7.0	5,072	2.5	
Children, By the Food Security Status of the Households										
1998	71,282,	57,225	80.2	14,027	19.9	10,658	15.0	3,369	4.9	
1999	71,417	59,342	83.1	12,074	17.0	9,368	13.1	2,707	3.9	

Source: Tabulations of Current Population Survey, Food Security Supplement data.

Prevalence of Food Security among Subgroups of the U.S. Population

While the food security prevalence rates were near the national average for many subgroups in the U.S., some groups experienced notably higher rates of food insecurity and hunger (Table 3.2 and Exhibit 3.1).

Table 3.2: Prevalence of Food Insecurity and Hunger Among Selected Subgroups with Rates Above the National Average, 1998

Population Subgroup	Food Insecurity	Hunger
Single-woman headed households with children	35.4%	10.6%
Black Households	24.3%	8.5%
Hispanic Households	25%	6.8%
Households below poverty	38%	13.6%

In 1998, households with children registered food insecurity at approximately twice the rate of households without children. Households living in central cities were more likely to experience food insecurity than households living in metropolitan areas outside the central city or in rural areas; 16.4% of households in central cities registered food insecurity compared to 9.3% of households in other metropolitan areas and 11.8% of households in rural areas. For several other subgroups, food insecurity and hunger were substantially lower than the national average rate (Table 3.3).

B. Prevalence of Food Security, 1999

1. Relevant Detailed Tables

Tables A.3 and A.4 in chapter 4 present details on national prevalence of food security in 1999. Table A.3 presents statistics on household food security status, while table A.4 presents statistics on the number of adults by the food security status of the household. Statistics in both tables are based on data as collected. That is, they have not been adjusted to be comparable to 1995-1997. Standard errors for these statistics are reported in tables D.A.3 and D.A.4. Tables C.3 and C.4 in Chapter 4 present similar

Exhibit 3.1
Prevalence of Food Insecurity for All Households and Selected Subgroups, 1998-1999

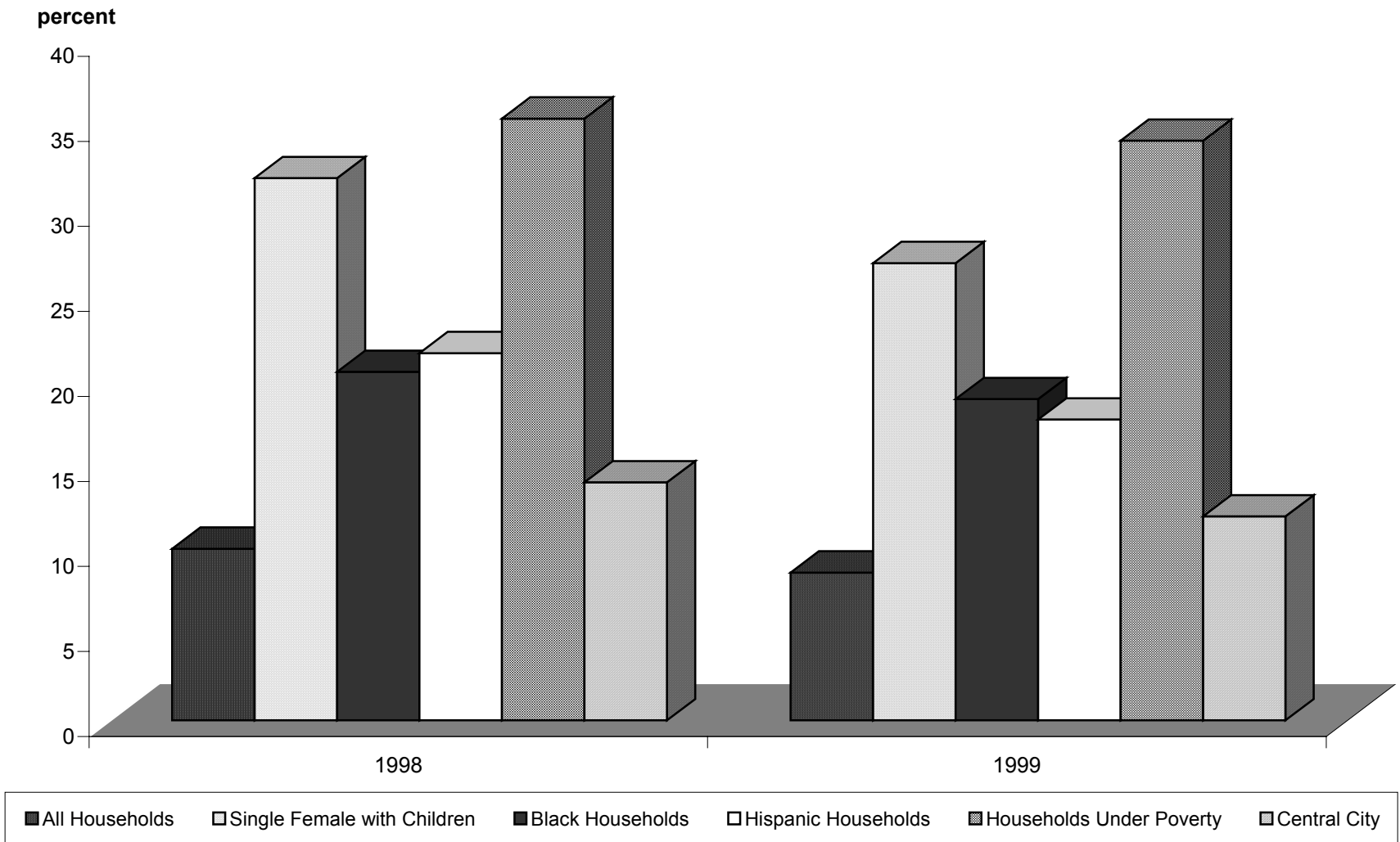


Table 3.3: Prevalence of Food Insecurity and Hunger Among Selected Subgroups with Rates Below the National Average, 1998

Population Subgroup	Food Insecurity	Hunger
All Households	11.8%	3.7%
Households with 2 adults and no children	6.3%	1.4%
Households in which elderly people live alone*	6.3%	2.1%
Households which include elderly people*	6.4%	1.9%
Households with income at or above 185% of the poverty line	5.2%	1.4 %
White, Non-Hispanic households	8.2%	2.6%

* *Elderly is defined as people 65 and older.*

information but have been adjusted to be comparable to 1995-1997. The standard errors for these tables are reported in tables D.C.3 and D.C.4. Each table presents statistics for various subgroups of the population categorized by household composition, race and Hispanic ethnicity, household income-to-poverty ratio, area of residence and census geographic region.

2. Overview

Prevalence of Food Security Among All Households

In 1999, 94 million U.S. households (89.9 percent of all households) were as food secure throughout the entire year (Table 3.1). Living in these food secure households were 180 million adults (90.5 percent of all adults) and 59 million children (83 percent of all children).

Food insecurity was registered by 10.5 million U.S. households (10.1 percent of all households), in 1999 again with slightly more than half being households with

children (5.6 million households). Living in these food insecure households were 18.9 million adults and 12.1 million children. In 1999, 3.1 million households were food insecure with hunger, with 1.3 million being households with children. Households classified as food insecure with hunger included 5.1 million adults and 2.7 million children.

Prevalence of Food Security among Subgroups of the U.S. Population

As in 1998, some subgroups in the U.S. experienced notably higher than average rates of food insecurity and food insecurity with hunger (Exhibit 3.1 and Table 3.4).

Table 3.4: Prevalence of Food Insecurity and Hunger Among Selected Subgroups with Rates Above the National Average, 1999

Population Subgroup	Food Insecurity	Hunger
Single-woman headed households with children	29.7%	8.1%
Black Households	21.3%	6.5%
Hispanic Households	20.8%	5.5%
Household below poverty	36.6%	12.2%

As in 1998, households with children registered food insecurity at approximately twice the rate of households without children. Households living in central cities were more likely to experience food insecurity than households living in metropolitan areas outside the central city or in rural areas. Households in central cities registered food insecurity at a rate of 13.9%, compared to households in other metropolitan areas (7.7%) and households in rural areas (10.1%).

For several other subgroups, food insecurity and hunger were substantially lower than the national average rate (Table 3.5):

Table 3.5: Prevalence of Food Insecurity and Hunger Among Selected Subgroups with Rates Below the National Average, 1999

Population Subgroup	Food Insecurity	Hunger
All Households	10.1%	3.0%
Households with 2 adults and no children	5.5%	1.0%
Households in which elderly people live alone *	6.3%	2.1%
Households which include elderly people *	5.9%	1.6%
Households with income at or above 185% of the poverty line	4.1%	1.0 %
White, Non-Hispanic households	7%	2.1%

* *Elderly is defined as people 65 and older.*

C. Prevalence of Conditions, Experiences and Behaviors Represented by the Items in the Food Security Scale (1998 and 1999)

1. Relevant Detailed Tables

As described in chapter 1, the items included in the food security scale vary with respect to the severity of the conditional experience, or behavior they describe. One result and evidence of this variation across a range of severity is seen in the proportion of households that affirm the various items (see tables A.5 – A.8 in Chapter 4 for detailed statistics and tables D.A.5-D.A.8 for the respective standard errors).

2. Overview

In 1998, 16.6 percent of all households reported worrying that food would run out before they got money to buy more. Less than one percent responded that adults in the household did not eat for a whole day in three or more months. Similarly in 1999, these two questions were affirmed by 14.7 and 0.7 percent of households respectively.

Items referring specifically to behaviors and experiences of children represent more severe household food insecurity than corresponding items asked about adults or about anyone in the household (Table A.6). In 1998, 13.9 percent of households with children reported that they couldn't afford to eat balanced meals, but only 9.6 percent reported that they couldn't feed their children balanced meals. Similarly, 3.2 percent of adult respondents in households with children reported that they had been hungry but didn't eat because they couldn't afford more food, compared to 1.2 percent who reported the same experience for children. In 1.4 percent of households, adults went a whole day without eating because there was not enough money for food, while this rarely occurred for children (0.1 percent).

D. Prevalence of Food Insecurity and Hunger among Households with Children, 1998

1. Relevant Detailed Tables

Tables B.1 and B.2 in chapter 4 present details on food security and hunger among households with children in 1998. Table B.1 presents statistics on household food security status, while table B.2 presents statistics on the number of children in households with food insecurity and hunger. Statistics in both tables are based on data as collected. That is, they have not been adjusted to be comparable to 1995-1997. The tables describe food insecurity and hunger using the categories described in Chapter 2: food insecure (all), food insecure without hunger, food insecure with hunger among adults but not children, and food insecure with hunger among adults and children. Each table presents statistics for various subgroups of the population, categorized by household composition, race and Hispanic ethnicity, household income-to-poverty ratio, area of residence and census geographic region. Standard errors are presented in tables D.B.1 and D.B.2. It is important to remember that the statistics presented on the number of children in households with hunger among children do not represent the total number of children in the United States who experienced hunger, but instead represent the number of children living in households in which one or more children were hungry. This reflects the fact that the questions asked of a respondent are worded to ask whether *any* child or children in the household experience specific food insecurity/hunger indicators, but not *which* children or *how many* of the children.

2. Overview

Prevalence of Food Insecurity and Hunger Among Households with Children, 1998

In 1998, 1.3 million households with children present were food insecure with hunger among adults but not children (Table 3.6). Approximately 331,000 households were food insecure with hunger among both adults and children. Approximately 716,000 children lived in these most severely food insecure households. Not all of these children experienced hunger, but either they or another child in the household did.

Food Insecurity and Hunger Among Subpopulations of Households with Children

In 1998, the groups experiencing notably higher rates of food insecurity and hunger among all households also registered higher rates among households with children (Table 3.7 and Exhibit 3.2).

Table 3.7: Prevalence of Food Insecurity and Hunger in Households with Children for Selected Subgroups with Rates Above the National Average, 1998

Population Subgroup	Food Insecurity (with or without hunger)	Hunger Among Adults but Not Children	Hunger Among Adults and Children
Single-woman headed households with children	35.4%	8.4%	2.2%
Black Households	30.9%	6.7%	1.7%
Hispanic Households	30.8%	5.4%	1.6%
Household below poverty	46.8%	11.0%	3.0%

TABLE 3.6 PREVALENCE OF FOOD SECURITY, INSECURITY AND HUNGER AMONG HOUSEHOLDS WITH CHILDREN, 1998 and 1999

	Total		Food Secure		Food Insecure				
	1,000	1,000	%	Without Hunger		With Hunger Among Adults but Not Children		With Hunger Among Adults and Children	
				1,000	%	1,000	%	1,000	%
All Households with Children									
1998	38,036	31,335	82.3	5,049	13.3	1,321	3.5	331	0.9
1999	37,885	32,291	85.2	4,340	11.5	1,035	2.7	219	0.6
Children, By the Food Security Status of the Households									
1998	71,282	57,225	80.2	10,658	15.0	2,653	3.9	716	1.0
1999	71,417	59,342	83.1	9,368	13.1	2,197	3.2	511	0.7

Source: Tabulations of Current Population Survey, Food Security Supplement data.

In 1998, households with children living in central cities were more likely to experience food insecurity than households with children living elsewhere. Almost one-fourth (24.5%) of households with children in central cities experienced food insecurity compared to 13.7% in other metropolitan areas and 19.0% in rural areas. Food insecurity among households with children was lower than the national average rate for households with income above 185% of the poverty line (7.1%) and White, Non-Hispanic households (12.4%).

E. Prevalence of Food Insecurity and Hunger Among Households with Children, 1999

1. Relevant Detailed Tables

Tables B.3 and B.4 in chapter 4 present details on food security and hunger among households with children in 1999. Table B.3 presents statistics on household food security status, while table B.4 presents statistics on the number of children in households with food insecurity and hunger. Statistics in both tables are based on data as collected. That is, they have not been adjusted to be comparable to 1995-1997. Standard errors are presented in tables D.B.3 and D.B.4.

2. Overview

Food Insecurity and Hunger Among All Households with Children

In 1999, about 1 million households with children were classified as food insecure with hunger among adults but not children and 219,000 households were food insecure with hunger among both adults and children. About 511,000 children lived in these 219,000 households.

Food Insecurity and Hunger Among Subpopulations of Households with Children

As in 1998, the groups experiencing notably higher rates of food insecurity and food insecurity with hunger among all households in 1999 also registered higher rates among households with children (Exhibit 3.2 and Table 3.8).

Table 3.8: Prevalence of Food Insecurity and Hunger in Households with Children for Selected Subgroups with Rates Above the National Average, 1999

Population Subgroup	Food Insecurity (with or without hunger)	Hunger Among Adults but Not Children	Hunger Among Adults and Children
Single-woman headed households with children	29.7%	6.7%	1.4%
Black Households	26.1%	5.0%	1.0%
Hispanic Households	29.7%	5.1%	1.0%
Household below poverty	42.9%	9.2%	1.9%

In 1999, households with children living in central cities were more likely to experience food insecurity than households with children living elsewhere. Households with children in central cities experienced food insecurity at a rate of 21%, compared to 11.5% in other metropolitan areas and 15.1% in rural areas.

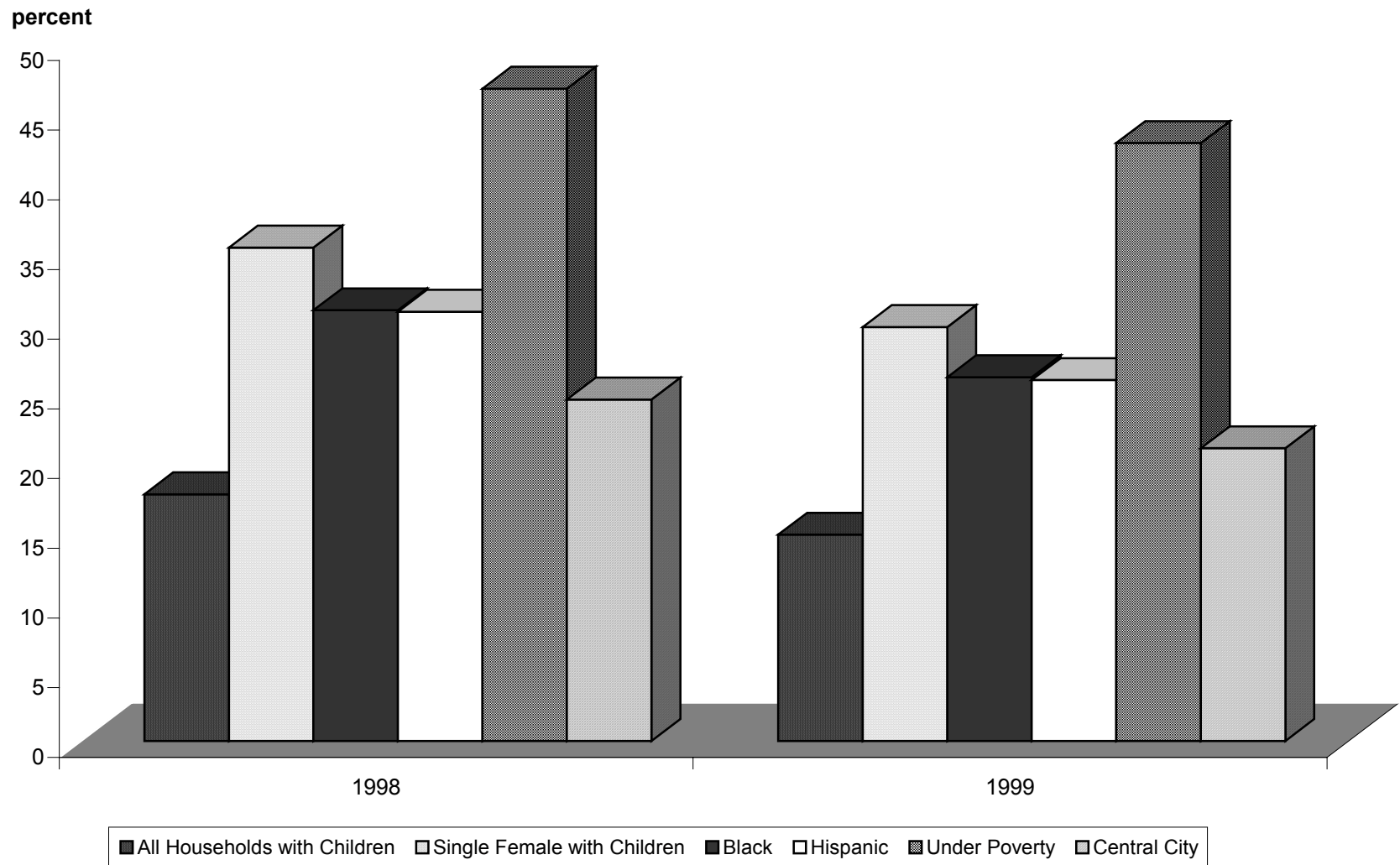
Food insecurity was lower than the national average rate among households with income above 185% of the poverty line (5.6%) and White, Non-Hispanic households (10.1%).

F. Prevalence of Food Insecurity with Hunger Among Households with Children, 1995-1997

1. Relevant Detailed Tables

Tables B.5 through B.10 in chapter 4 present details on hunger among children from 1995-1997. Tables B.5, B.6 and B.7 present statistics on the number of households with hunger among children for 1995, 1996 and 1997 respectively. Tables B.7, B.8 and B.9 present statistics on the numbers of children in those households for the same years. Statistics in both sets of tables are based on the children's hunger scale described in Chapter 2 and are based on data as collected. Prevalence rates of this most severe measured range of food insecurity are negligibly affected by screening differences across years. Thus, these statistics can be compared directly to those for 1998 and 1999 without

Exhibit 3.2
Prevalence of Food Insecurity Among All Households With Children and Selected Subgroups,
1998 and 1999



adjusting for differences in screening. Standard errors are presented in tables D.B.5-7 and D.B.8-10.

Prevalence of household-level food insecurity and of hunger were reported for these years in *Household Food Security in the United States, 1995-1998, Advance Report*. However, that report did not include statistics on the more severe category, hunger among adults and children.

2. Overview

In 1995, approximately one percent (415 thousand households) of all households with children were food insecure with hunger among children. Approximately 887,000 children lived in these most severely food insecure households. The prevalence rate was similar in 1996: one percent (379 thousand households) of all households with children were classified as food insecure with hunger among children. About 917,000 children lived in these households. In 1997, less than one percent (0.8 percent) of households with children (305 thousand households) were food insecure with hunger among children. This included 651,000 children. As described above in Section D, the corresponding statistics for 1998 and 1999 were 0.9 percent and 0.6 percent, including 716,000 and 511,000 children respectively.

G. Changes in Prevalence of Food Insecurity and Hunger Between 1995 and 1999

1. Relevant Detailed Tables

To understand how household food security and insecurity prevalence rates have changed since the scale was first developed in 1995, selected prevalence rates in 1998 and 1999 are compared to prevalence rates in earlier years. Because of possible seasonal fluctuations (see next section) we limit the detailed cross-year comparisons to two-year and four year periods. Comparing to two years prior avoids bias due to any seasonal fluctuations, since data were collected in spring and fall in alternating years. Tables C.5-C.10 in Chapter 4 present the changes in prevalence rates for all households and groups of households for each of these time intervals. To ensure comparability, statistics in the

tables are based on data that have been adjusted for differences in screening procedures across years.

2. *Overview*

Overall the proportion of households registering food insecurity and hunger declined from 1995-1999 (Exhibit 3.3). However, the declines were not consistent across the years. In fact, food insecurity increased by 1.4 percentage points between 1997 and 1998. This increase was offset by a decline of 1.4 percentage point between 1998 and 1999. Overall, there was a statistically significant (with 90% confidence) decrease of 1.6 percentage points between 1995 and 1999. It is likely that the deviation from a smooth downward trend across years reflects in part a seasonal component. Food security data collection occurred in April in 1995, 1997, and 1999 but occurred in September in 1996 and in August in 1998. The effect of survey season is explored in greater detail in *Household Food Security in the United States, 1998 and 1999: Technical Report* (Cohen, et. al., 2002).

Exhibit 3.4 presents trends in food insecurity for subpopulations of households. The subpopulation groups included in this exhibit registered higher rates of food insecurity than the national average. Prevalence of food insecurity for most of the groups followed a trend similar to that of all households, with somewhat larger year-to-year changes. The exception was low-income households. There were fewer low-income households in 1999 than in 1995 but the prevalence rate of food insecurity among them was the same or possibly somewhat higher in 1999 than in 1995. This is consistent with the assumption of a strong causal linkage between low income and food insecurity.

Between 1995 and 1999, for all households with children, the prevalence of food insecurity with hunger among children declined 0.5 percentage points (statistically significant at a 90% confidence level; Exhibit 3.5). Trends for selected subpopulations of households with children--the subgroups with higher food insecurity rates – are also presented in Exhibit 3.5. Most of the subpopulations registered statistically significant

declines in hunger rates from 1995 to 1999 ranging from 0.9 to 1.2 percentage points, with greater year-to-year fluctuations than those of all households as a group.

Exhibit 3.3
Prevalence of Household Food Insecurity and Hunger, 1995-1999

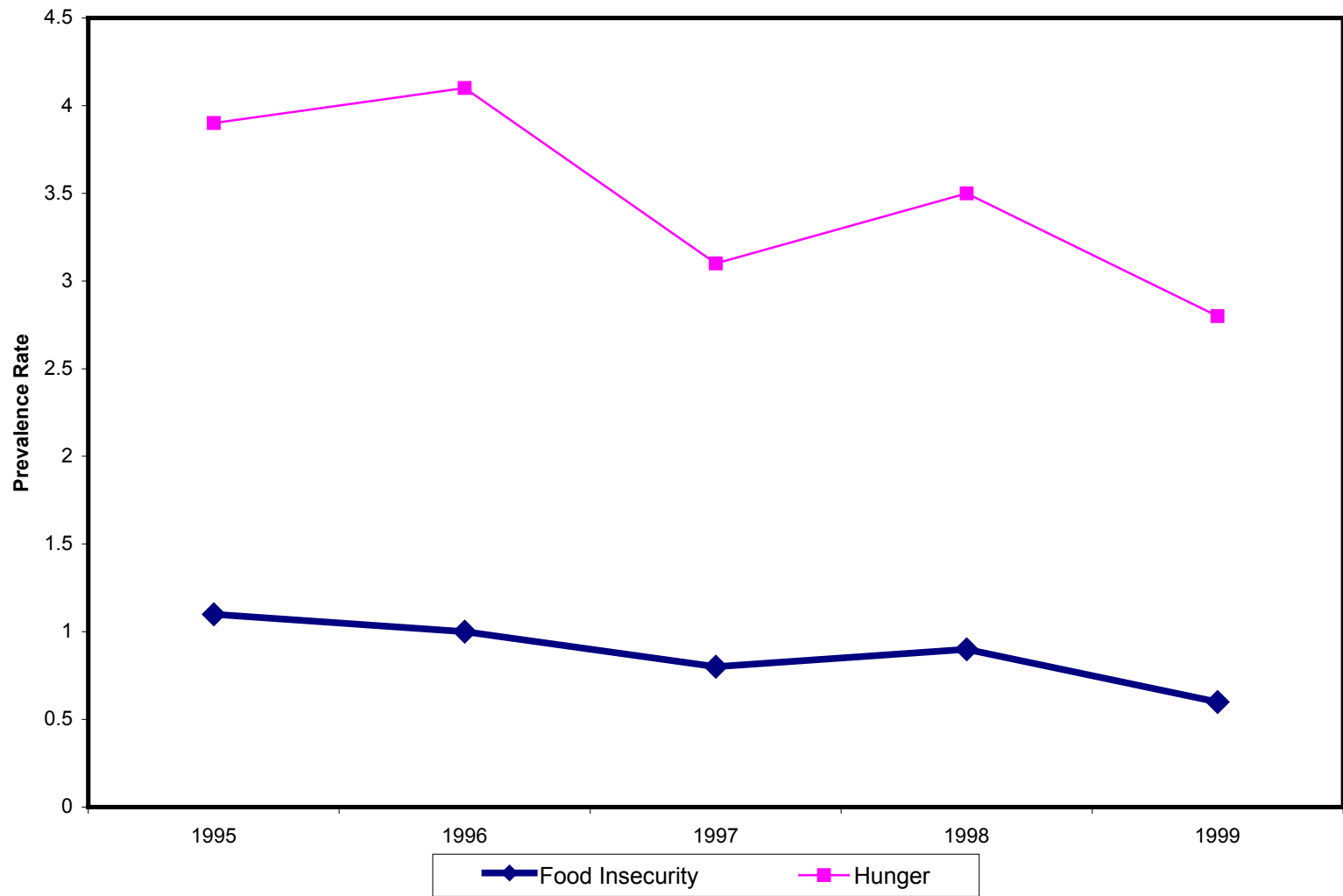


Exhibit 3.4
Prevalence of Household Food Insecurity, All Households and Selected Subpopulations,
1995-1999

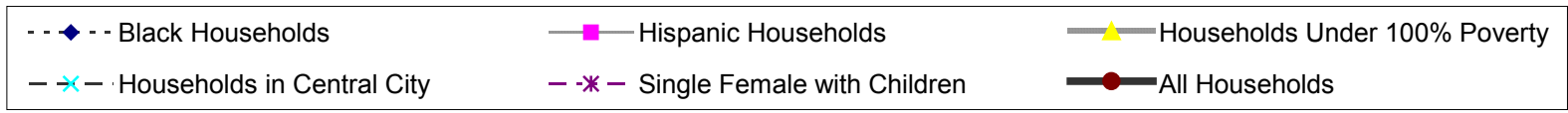
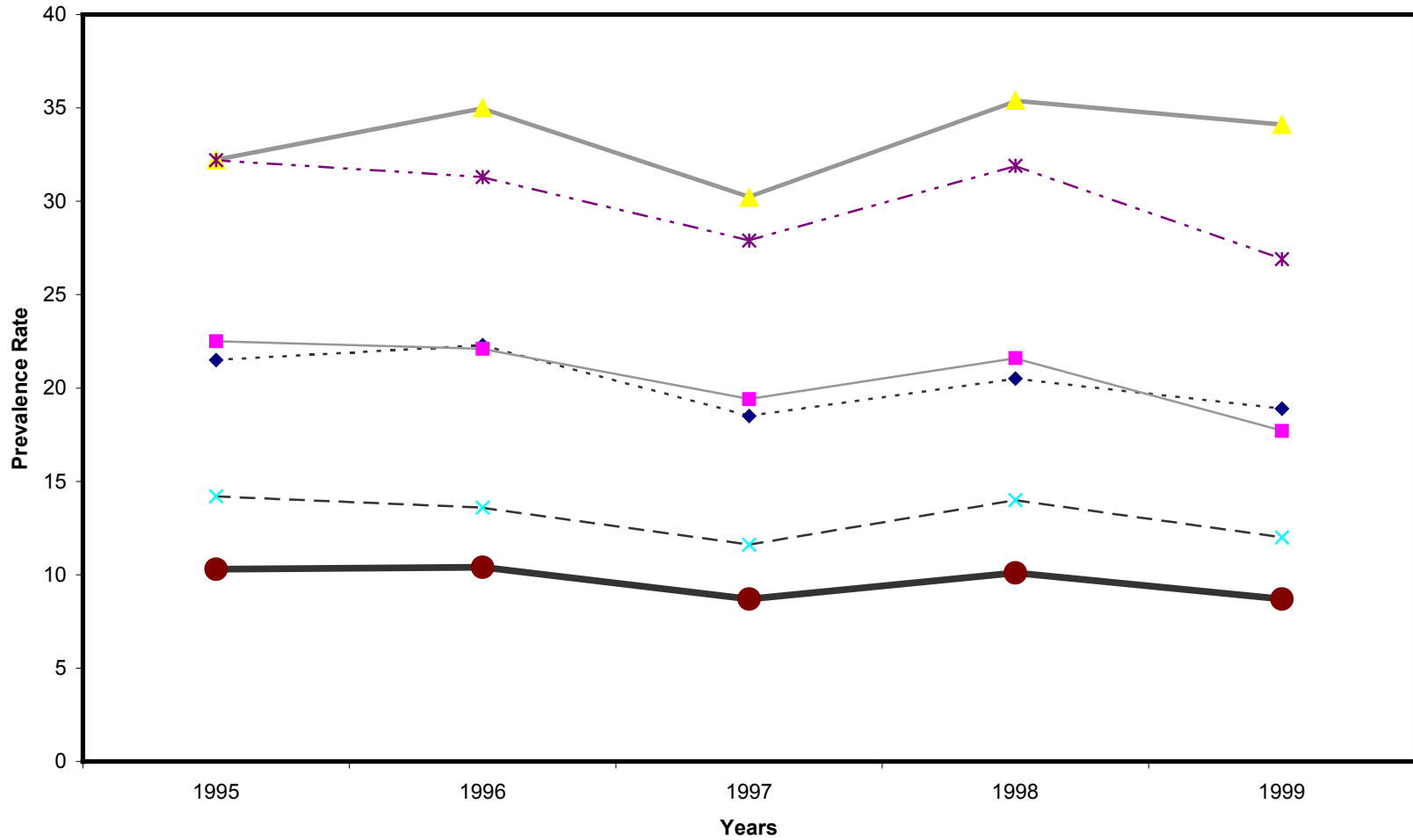


Exhibit 3.5
Prevalence of Food Insecurity with Hunger Among Children,
All Households with Children and Subpopulations, 1995-1999

