Household Food Security in the United States in 2014 Webinar - ERS
September 9, 2015

Good afternoon everyone and welcome to our webinar Household Food Security in the United States in 2014, my name is Nancy McNiff and I will be your moderator. Our speaker today is Alisha Coleman-Jensen, Alisha is a Social Science Analyst with the Food Assistance Branch at the Economic Research Service US Department of Agriculture. Her research focuses on the measurements and determinants of food insecurity in the United States, she is the lead author of USDA's annual report on Household Food Security analyzing the prevalence and severity of food insecurity in US households. This report included changes in food insecurity from previous years, the prevalence of food insecurity by selected household characteristics and food insecurity among children. I think we're ready to start now Alisha so you can begin your presentation.

Thank you Nancy and welcome to all those of you who are listening in online. First I want to recognize my co-authors on the Annual Food Security Report Matt Rabbit and Christian Gregory of ERS and Anita Sang of USDA's Food and Nutrition Service. So the report released this morning describes the food security of US households during calendar year 2014 and it's based on USDA's most recent annual food security survey conducted in December 2014. The report provides information on how many US households had difficulty putting enough food on the table in 2014 and it reflects the extent which difficult economic conditions results in material hardship in US households. For those of you who haven't already looked at the report I'll skip to the bottom line now before we get too far. The percentage of US households that were food insecure remained essentially unchanged from 2013 to 2014 however food insecurity did decline from 2011 to 2014. Here's a brief overview of what we'll be talking about in the next few minutes, first I'm going to go into review food security statistics and trends for all households and then present statistics for the subset of households with children and we'll talk about the main findings and there in the report released today and then we'll touch on the Food Security Survey and then some factors related to recent trends in food insecurity. First statistics for all US households, in 2014 86 percent of US households were food secure, that's 124 million households and food secure here means that they have consistent access to adequate food for active healthy living for all household members throughout the year. So 14 percent of US households were insecure, that's 17.4 million households and we measure food insecurity at two levels of severity. So the overall food insecure households again was 14 percent and these household were unable at some time during the year to provide adequate quantity or quality of food for one or more household members due to a lack of resources. The more severe range of food insecurity is labeled very low food security. So we divide food insecure households into those with low and those with very low food security, 5.6 percent of US households experience the more severe range of food insecurity and that's 6.9 million households in 2014. In this subset of food insecure households reported that they had disruptions in normal eating patterns at time during the year and their food intake was reduced below levels they considered appropriate. So what that means is that people in these households were reporting that they were skipping meal and not eating enough because they didn't have enough money for food and again that 5.6 percent of households is represented by the red pie in the pie chart. This slide shows the definitions of food security and food insecurity is a household level economic and social condition while hunger is an individual level physiological condition that does not measure directly. Very low food security describe a severe range of food insecurity and that a condition that may lead to hunger. So again food insecure households were unable at some time during the year to provide adequate food for one or
more household member due to a lack of resources so you can think of these households as having difficulty putting enough food on the table for everyone in their household and households with very low food security had disrupted eating patterns and their food intake was reduced below levels they considered appropriate. Most households with very low food security reported that an adult in the household had been hungry at times but did not eat because there wasn’t enough money for food. Like many things food insecurity is a continuum, we can think of a range from, from fully secured to very low food security. As households might begin to experience difficulties they may worry about their food supply and stretch their budget, juggle items within their budget to try to get enough money for food. As situations worsen they might reduce the quality and variety of their diet relying on low cost foods to feed their families and as food insecurity becomes more severe we see reductions in food intake usually among adults first and in the most severe situations we see reduced food intake among children. This slide shows some examples of food security survey questions, in the survey we based, in the survey we include ten questions about food insecurity for the household as a whole and adults in the household and households with children are asked an additional eight items about children’s food insecurity and households must respond affirmatively to at least three items to be considered food insecure. So examples of these questions are the food that we bought just didn’t last and we didn’t have money to get more, with that often sometimes were never true for you in the last 12 months so all the questions reference the last 12 months and all the questions include a resource constraint so that people say that they couldn’t afford food or they didn’t have enough money for food so we’re not asking people about, for example, not eating enough because they’re dieting or fasting or some other reason like that, these questions are all stipulated on the fact that they couldn’t afford enough food for their family members and you can see more severe questions asked about not eating for a whole day because there wasn’t enough money for food. So now I want to turn to trends in food insecurity, 2014 is our 20th year of Food Security Statistics we’ve been measuring food insecurity in the US since 1995 and you can see that with the onset of the recession, food insecurity increased substantially from 2007 to 2008. In 2008 14.6 percent of US households were food insecure, in 2011 we saw a peak of 14.9 percent of households food insecure and we’ve seen a gradual decline since then down to 2014 where 14.0 percent of households were food insecure and just for your reference in 2007 before the recession 11.1 percent of households were food insecure and that, those statistics are represented by the blue line on the chart. Now looking at the red line which represents very low food security we also see that there was an increase in food insecurity with the onset of the recession and it’s been near that level since. It increased from 4.1 percent of US households in 2007 to 5.7 percent in 2008 and again in 2014 5.6 percent of US households experience very low food security. This slide shows statistics for households with children by food security status in 2014 now it become somewhat more complex when we talk about households with children because we consider food insecurity at the household level and then within that we consider food insecurity among adults and among children separately. So in 2014 80.8 percent of households with children were food secure but 19.2 percent were food insecure. Now that statistic refers to anyone in the household experiencing food insecurity and about half of those households only adults were food insecure and 9.8 percent of the households with children while in 9.4 percent of households there was food insecurity among children and adults. So in this group of households the quality or quantity of children’s diets was affected by food insecurity and as I mentioned earlier we include questions in the survey in which adults or parents in the households respond to food insecurity among their children where they report if their children are getting enough to eat. So we see again that 9.4 percent of households with children experience food insecurity among children where children were directly affected by food insecurity. We find that adults often shield children from experiencing very low food security that’s again the more severe range of food insecurity characterized by disrupted eating patterns and reduced intake but children along with adults experienced a very low food security in 1.1 percent of households with
children and that's that dark maroon portion of the pie chart and these 422,000 households parents reported that children were hungry, very low food security among children was essentially unchanged from 0.9 percent in 2013. In our annual Food Security Report we include statistics on food insecurity by household characteristics and some of the factors we look at are income, household composition, race, ethnicity, region and rural/urban residence and we found, find as you may expect that food insecurity is much higher for households with incomes below the poverty line and that food insecurity is higher for single mother households with children. Food insecurity also more prevalent among households headed by Black non-Hispanic adults and by Hispanic adults. The statistics presented in this chart do not control for income so some of the differences that we see across household composition and race ethnicity may be related, are related to differences in income among these groups and the red portion of the bars represents very, the prevalence of very low food security while the yellow portion represents low food security so the whole bar, the red and yellow portion represents food insecurity. This chart is similar to the previous one but shows food insecurity by rural/urban residence so metropolitan and principle cities refers to city, principle cities within metropolitan areas so central cities, metropolitan not in principle cities refers to suburban areas outside cities so these are still metropolitan but they're not the central city areas and then outside metropolitan areas refers to rural areas and these are all county classifications so this is the type of county in which the respondent lives and we see that food insecurity is higher in non-metropolitan counties, moderate and principle cities in lower and suburban areas, we also see that food insecurity tends to be higher in the south than in other regions. In table four and in table five in the annual report we prevent, present statistics on the prevalence of food insecurity for the states and we use three years of data for these state level estimates, we use three years of data averaging them to ensure that we have enough, a large enough sample for each state. Now in this map states shaded that lighter tan color have food insecurity rates that are below the US average so in terms of food insecurity these states are better off, states that are shaded gold have food insecurity that's near the US average and states shaded red have higher food insecurity that's above the US average so in terms of food insecurity these states are worse off as they have higher food insecurity rates and we see considerable variation in food insecurity from states to state, from state to state. The estimated prevalence of food insecurity in 2012 to 14 ranged from 8.4 percent in North Dakota to 22 percent in Mississippi and the estimated prevalence rates of very low food security ranged from 2.9 percent in North Dakota to 8.1 percent in Arkansas. There are a number of factors that may relate to interstate difference in food insecurity, one is the characteristics of households within the state, so for example states that have a higher proportion of low income households are more likely to have a higher food insecurity rate similarly states in which their population has lower education levels higher rates of disability or more unemployment are also related to higher food insecurity. The state level economy, economy, excuse me and policies also matter to state food insecurity rates and those factors are related to wages, cost of housing, participation in food assistance programs and things of that nature and I’ll jump in here and say that this graphic is on our website if, there’s a link at the end of the PowerPoint, a link to our topic page on the ERS website and if you go to our Key Specifics and Graphics page you can download this figure and some of the other figures from statistics from our annual report if you want to use them you can download them there. This chart, chart shows the prevalence of food insecurity by, by the length of time over which it is measured so as I mentioned before our annual Food Security Statistics refer to the last 12 months so if someone indicates that they experienced food insecurity at anytime in the year they would be considered food insecure but as you may suspect many house, most households are not constantly food insecure and some households were food insecure only early on in the year but not in the 30 days prior to the survey and again, so we also ask about food insecurity during the 30 days prior to the survey and our survey is conducted in mid December each year but this would refer this, these 30 day estimates would refer to mid November to mid December 2014 and in that 30 day period we found that 7.9 percent of US households were food insecure and 3.4 percent experienced
very low food security. We also estimate the daily prevalence of very low food security during a single
day and that is estimated to be between .7 and 1.1 percent of US households. I will note that the daily
prevalence rate is biased downward due to the emission of homeless people from the survey so the
current population survey in which the data is based is based on household addresses so people without
an address would not be included in the survey and we suspect that if we were able to include homeless
persons that the daily prevalence of food insecurity might, of very low food security, excuse me, might
be somewhat higher. In the survey we also ask about respondence use of federal food assistance
programs and this table shows the share of food insecure households that participated in one of the, in
one of USDA’s three largest food assistance programs. So the SNAP program is the Supplemental
Nutrition Assistance Program, it was formally known as Food Stamps, free or reduced price school lunch
is available for school age children who qualify and WIC is the special supplemental nutrition program
for Women Infants and Children so these are households with young children or pregnant or post
partum women and we found that 68 percent of food insecure households participate in one or more of
these food assistance programs and about 44 percent the largest percentage participated in SNAP. We
also ask about use of community food assistance programs and these refer to food pantries, food banks
and then emergency kitchens and soup kitchens. So the first line shows the percentage of all US
households who participated or used these services and 5.5 percent of all US households reported using
a food pantry, we see the, the percentage of users is much higher among those who experience food
insecurity over a quarter, 27 percent of food insecure households reported using a food pantry. The
percentage of households that used emergency kitchens is much lower, about three percent of food
insecure households use emergency kitchens or soup kitchens. This slide shows meeting weekly food
spending by food security status, and we found that in 2014 among all households the medium weekly
food spending, sort of the average food spending per person was $50.00 a week and food spending was
lower among food insecure households as you might expect, 37.5, $37.50, and when we take into
account estimated food need based on the household size and compositions of the age and gender of
the household members we found that the typical food secure household spends about 26 percent
more for food than the typical food insecure household. I’m going to turn now and talk a little bit about
the data that underlie these numbers. The US Census Bureau conducts the Food Security Surveys for
USDA’s Economic Research Service response to the survey and is conducted in December of each year.
In 2014 43,000 households were interviewed for the food security supplements and it was a
representative example of US civilian households and it is the source of employment and poverty
statistics so in addition to federal food security statistics it’s a source of other federal statistics as well
and the survey questions if you’re interested in seeing them are listed in the Food Security Report and
are also posted on the ERS website along with a lot of other food security information. I want to turn
now and talk about some economic conditions that might explain recent trends in food insecurity, if you
haven’t looked at the, at today’s USDA blog you might want to take a look. It talks about some of these
overall food insecurity numbers and what factors may be related to trends in food insecurity. Last year
ERS released a research examining the relationships between unemployment, inflation and food prices
and we found that declining unemployment was related to improvements in food insecurity but higher
inflation and increases in food prices offset the decline in employment, in unemployment and we’ve
found that to be true again this year that rising food prices may have been related to the slow
improvement in food insecurity. Inflation was 8.6 percent from 2010 to 2014 and food prices were up
10.5 percent so the increases in food prices were higher than inflation overall. Another factor that may
be related to transient food insecurity is that maximum SNAP allotments fell five percent in November
2013 so some of you may be aware that in April 2009 the ARRA, American Recovery and Reinvestment
Act or the Stimulus Bill temporarily increased SNAP benefit levels and from 2009 thru October 2013
those benefits were not adjusted for inflation they were held constant at the higher, higher level and in
November 2013 that, that didn’t, that benefit from the Stimulus Bill expired so SNAP benefits fell five
percent and we found with prior research that from 2009 thru 2011 when SNAP benefits were not, were not adjusted for inflation but food prices continued to increase the real value of SNAP benefits declined over that time and with that reduced, reduction in the buying power of SNAP we saw an increase or a worsening of food insecurity for households that rely on, relied on SNAP so there may be a factor affecting food security statistics in 2014 for SNAP recipient households. So in summary we see that the prevalence of food insecurity in 2014 was essentially unchanged from 2013 but is down from 2011 and food insecurity has been recovering slowly since the recession. This slide provides a link to our website for more information there are some graphics, there is our media resources page with some information on how to interpret statistics and there's my email and phone number if you have any questions and now I think Nancy is going to turn it over to questions so I'll turn it over to Nancy now.

Thank you very much Alisha, please enter any questions you may have now into the chat feature and I will relay them to Alisha. The first question I have is do you have any statistics on the specific numbers of individuals affected by food security versus the households?

Yes we do, if you have a food secured report handy those statistics are on table one A of the report and in 2014 48.1 million people lived in food insecure households and I will say that our food insecurity statistics are for the house, or at the household level so that within a food insecure household each household member maybe affected differently by the household food insecurity so these 48.1 million people living in food insecure households may not have all experienced food insecurity in the same way.

Okay, we have another question about...to what extent do these measures of food insecurity measure access to healthy foods if they do?

So we, all of these food security statistics are based on household responses to the questions in the Food Security Survey and some of the questions refer to for example we couldn't afford to eat balanced meals, we could, we relied only a few kinds of low cost food to feed our children so those types of questions that refer to the nutritional quality of the food in the household so those are based on self reports. We don't have a direct measure of for example, we don't ask about people's diets per say, to ask about the health of their food and we don't ask about when you talk about access some science people are referring to geographic access so we're not asking about food deserts or things like that we're, we're, we're really referring to economic access so being able to afford healthy food and enough health, and enough food for your family.
Okay, we have a question about food insecure households that are taking advantage of food assistance, you mentioned that 60 percent of them or so are taking advantage of food assistance, why aren't the rest doing the same? Do you have information as to why they're not taking advantage of it?

Sure, so some of those households may not be eligible so we know that food insecurity is certainly related to income but not all food insecure households are very low income so some households may not qualify for food assistance programs they may be above the income cut off and they may have other factors that are affecting their food insecurity like high cost in other areas or something like high medical expenses or something of that nature but they might not qualify for food assistance based on their income and some of those programs are there have to be children in the household so for example WIC and school lunch pro, and school meals programs are not available to all households there's specific households based on their structure and the age of the people in them and then some people may have difficulty accessing the programs, they may have difficulty signing up or they may just choose not to sign up for some other reason.

Okay, is there any data that's broken down to the state level that you have available for people?

We only publish overall state level statistics and this is because of the limitation of the sample size and we don't want to, we only want to publish statistics that we consider reliable and accurate so we have statistics overall at the state level and those are based on three years of data, we have to combine many more years of data for example to look at the state level estimates by household composition or race, ethnicity or something like that.

Okay, we have a question about sometimes the media and other groups can misreport food insecurity information, do you have any, anything on the website that helps people understand what the statistics actually mean?

We do, on our media resources page which is if you go to the Food Security in the US Topic page on the left hand bar you'll see a listing of different things you can click on and one is media resources and on that page we include a section called Getting it Right with some recommendations for how to interpret the statistics and what statistics really mean... and we're always available to answer questions that reporters or researchers or advocates or anyone has about the numbers we'd be happy to respond to questions.
Okay, here’s another question, has there been any shift in the geographic concentration of food insecurity over time, and any shifts between rural, urban and suburban balance, have you noticed any changes?

So this year that question is a little bit more difficult and without getting into too many technical details every 10 years or so after the Census, after the Decennial Census the rural urban classifications of counties changes so in 2013 the federal government redefined some counties so for example a county that may have been non-metropolitan is now defined as metropolitan based on the new Census data and those new classifications were first implemented in the Food Security Survey this year so our statistics on rural urban residence are not directly comparable to previous years because of that change in classification for some of the counties. So you have to be cautious interpreting statistics for metropolitan or non-metropolitan counties in 2014 to previous years. In 2014 we found that food insecurity rates were the highest in non-metropolitan areas and moderate in large cities and lowest in the suburbs. In general we find that food insecurity tends to be higher in non-metropolitan counties and in principle city counties and lower in suburban areas.

Okay, could you discuss state SNAP participation rates a little and how reliable they are and whether any correlations, are there any correlations with rates of food insecurity?

That is a little bit outside my area of expertise and I don’t want to get anything wrong. I would refer questions on state SNAP participation rates to the Food and Nutrition Service and if the person with that question wants to follow up with an email to Nancy or I we can get you in touch with someone who can better respond to that.

Okay, let’s see... are there any plans to increase the number of racial and ethnic groups included in the survey?

So the racial and ethnic classifications are somewhat limited by the, by the survey data. There are a lot more, we could go into a lot more detail on race ethnic groups, we’re limited, we’ve limited by the number of, of people within those groups. One thing that we’ve put up on our website this year to look at trends over time and food insecurity and very low food security by race and ethnic groups is we have an interactive data visualization and you can link to that from our data product page and I can send you a link to that if you’re looking for it and that will be updated with the 2014 statistics later today but we include graphics on trends over time from 2001 till 2014 and race ethnicity for food insecurity and very low food security and trends over time by household composition as well.
Okay, we have another question about children that are food insecure, how many children are currently food insecure based on your data? Is the statistic still one in five, is that even correct?

So...

(Indistinct) ... I don't know.

The one in five would more accurately refer to food insecure households for households with children and that statistic is in 2014 was that 19.2 percent of households with children were food insecure in 2014 and let me go back, let me pull up this slide again, bear with me for just one moment while I find it, I want to go back to the pie chart where I talked about food insecurity in households with children. So this 19.2 percent refers to households level food insecurity in households with children and as I mentioned in the survey we ask specifically about food insecurity among adult and food insecurity among children directly so for some of the children's questions we ask for example, we, we relied only on a few kind so low cost foods to feed our children because we were running out of money to buy food, was that often, sometimes or never true for you in the last 12 months, and there's eight questions that are related to food insecurity among children. So in these 9.4 percent of households that would more accurate, more accurately reflect food insecurity among children so if you were looking for a number for, for households with children where children were food insecure you can say about one in 10 households with children experienced food insecurity among those children. The one in, the one in five or 19.2 percent of households would more accurately, accurately reflect household food insecurity in which someone in the household was food insecure but in some of those households again only adults had food insecurity or reported food insecurity.

Okay, do you have any statistics on how urban farms or community gardens are being used to reduce food insecure neighborhoods?

That's an interesting question, these statistics refer to the household, we don't have statistics on, on neighbor food security as related to urban agriculture and so forth and the most disaggregated geographic, geographic estimates for the state level, we don't have estimates for it in certain geographic areas so I can't really comment on food insecurity in specific areas that have community gardens and, so, I would just end there that I just can't say in, in detail what, how urban gardens would affect specific communities just because I haven't done research in that area.
Okay, how do you measure the reason why the households are food insecure, is it just a small factor such as budgeting or is it some other reason?

So, so we base food insecurity status on 18 survey questions and these are just three examples of the survey questions that I have on this slide and we ask households the series of questions and then we base their food security status on how many questions they respond affirmatively to so an affirmative response would say that was often or sometimes true for them or yes they, for example, cut the size of their meals or skip meals and households that have three or more affirmative responses are classified as food insecure, households with zero or only one or two affirmative responses to food insecurity, food insecure conditions are classified as food secure so households have to affirm at least three items to be considered food insecure and then from there based on the number of items they affirm we classify them as having low food security or if they affirm more items very low food security and households with children are classified as having very low food security if they report eight or more of the 18 conditions and classify, excuse me, households without children are classified as having very low food security if they report five or more... six or more, excuse me, six or more food insecurity conditions. So households that respond affirmatively to three to five items if do not have children are classified as low food secure.

So I have a question about children with very low food security, did it increase from 1.0 to 1.2 percent and is this increase statistically significant?

So in 2013, let me flip to that page in my report, 0.9 percent of households had very low food security among children, 0.9 percent of households with children reported very low food security among children and in 2014 is was 1.1 percent and that change was not statistically significant so what we mean there is that, that could have resulted from sampling variation, we can't say that the change was statistically significant.

Is it possible to access the raw data?

Yes, so the Household Food Security Data, the Current Population Survey Food Security Supplement and as I mentioned that data is collected by Census and it's available for download from their website and they posted that data today so if, so you can analyze the raw survey data and there is directions on our website about how to find the data and access it and it's available free of charge anyone can download and use it, I do recommend taking a look at the technical documentation and there is technical documentation on our website and also available through the Census website.
Okay, I think that's all the questions we have, if anybody wants a copy of the PowerPoint presentation you can email myself at nmcniff@ers.usda.gov or you can email Alisha and we'll get the copy of the presentation to you. This webinar is being recorded and it will also be posted on the website, it may take a few days for that to happen however so it won't be real soon, it has to be captioned first before we put it up and thank you all for joining us, thank you Alisha and to everybody have a wonderful day.

Thank you.