## The disconnected population in Tennessee

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Most prior studies of the disconnected population have focused on those who have left the welfare rolls. While we contribute to this line of research with an analysis of a large sample of welfare leavers in Tennessee, ours is among a small number of studies to move beyond the narrow consideration of leavers to look at those who may be disconnected but who might never have been on public assistance. It is possible that many lower-income individuals who may be eligible for one or more assistance programs either choose not to participate in those programs, or are unaware of their existence. Also, given the highly targeted nature of most social safety net programs, some low-income individuals may be disconnected because they do not qualify for available assistance.

Our primary goal is to provide a closer look at the broader population of disconnected families who are surviving without work or public assistance. Because we use a representative statewide sample of survey data, we may make informative comparisons between the disconnected and non-disconnected members of the population. Much of the prior work has only been able to compare disconnected welfare leavers to non-disconnected welfare leavers.

### **Defining disconnection**

Because the concept of being disconnected is so broad that we do not believe it can be satisfactorily characterized by a single definition, we use two major data sources to consider five different definitions of the disconnected population. Using data from a longitudinal study of individuals who left Families First, Tennessee's Temporary Assistance for Needy Families (TANF) program, and are not working, we look at (1) the "TANF-disconnected," those who may be receiving assistance from various social programs other than TANF; (2) the "food-assisted-only," those who are receiving benefits from either the Supplemental Nutrition Assistance Program (SNAP, formerly Food Stamps) or from WIC (the federal supplemental nutrition program for Women, Infants, and Children); and (3) the "unassisted," those who are not receiving help from any major assistance or insurance pro-

gram. Using our second data source, the annual survey of Tennessee's public health insurance program (TennCare), our final two definitions of the disconnected population are (4) the "permanently health-disconnected," those who are unemployed, are single, or have an unemployed spouse, are not currently on Medicare or Medicaid, and have never been on TennCare; and (5) the "temporarily health-disconnected," who meet the other criteria of definition 4, but who may have been on TennCare in the past. Because the TennCare program is perhaps the most extensive public assistance program in the state, we believe that the last two definitions are particularly useful in considering Tennessee's disconnected population, since those on programs such as TANF or SNAP are nearly always also on TennCare, while those who are not on TennCare are not likely to be on other programs (with the possible exception of Unemployment Insurance).

#### **Disconnected TANF leavers**

Our first three measures of disconnectedness allow us to look at individuals who left TANF and are not working. As would be expected, the largest number of people are included in the broadest measure, the TANF-disconnected, which includes those receiving assistance from any social program other than TANF. We found just under 300 such individuals at the beginning of our sample period in 2002; this number rose to a high of over 500 in 2006, then fell slightly through the end of our sample period in 2008. Figure 1 shows each dis-

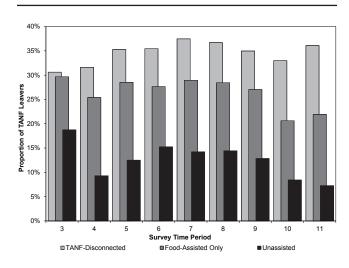


Figure 1. Disconnected as a percentage of TANF leavers.

**Notes**: The survey time periods begin in late 2002, and end in late 2008. Each survey wave was administered over a period of four to five months, and in most cases there were four to five months between survey waves. All individuals identified as disconnected had left TANF and were not working: the TANF-disconnected could be receiving assistance from social programs other than TANF; the food-assisted-only were receiving benefits only from SNAP or WIC; and the unassisted were not receiving help from any major assistance or insurance program.

**Source**: Authors' calculations from the Family Assistance Longitudinal Study.

connected population as a percentage of all TANF leavers, for each of the nine waves of survey data we used. Around a third of all leavers were TANF-disconnected, meaning that approximately two-thirds of all TANF leavers were connected to either public assistance or employment at any given point in the survey period. Using the second measure of disconnectedness, food-assisted-only, we find that between 21 and 29 percent of leavers received assistance only from SNAP or WIC. Finally, from 7 to 15 percent of leavers were unassisted and did not receive help from any major assistance or insurance program during the study period.

Figure 2 shows the probability of becoming disconnected.<sup>2</sup> Of those who were receiving TANF cash assistance in January 2001, nearly 10 percent were TANF-disconnected by our first survey time period in late 2002. By the end of our analysis period in late 2008, we estimate that nearly half of the survey sample became TANF-disconnected at least once. The probabilities of being food-assisted-only or unassisted are much lower.

#### The well-being of disconnected TANF leavers

The next component of our analysis of disconnected leavers involves a detailed look at their overall well-being as indicated by their responses to a wide array of outcome-oriented survey questions. Given the very small sample of those in our most restricted definition of disconnected leavers, we limit our discussion here to those who are disconnected according to the first two measures: the TANF-disconnected, who are neither working nor on TANF but who may be receiving assistance from other programs; and the food-assisted-only, who are neither working nor on any public assistance except

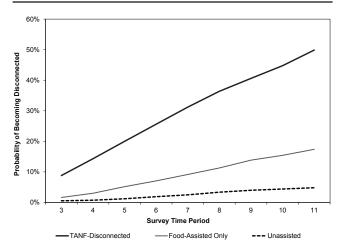


Figure 2. Probability of disconnectedness for TANF leavers.

**Notes**: The survey time periods begin in late 2002, and end in late 2008. Each survey wave was administered over a period of four to five months, and in most cases there were four to five months between survey waves. All individuals identified as disconnected had left TANF and were not working: the TANF-disconnected could be receiving assistance from social programs other than TANF; the food-assisted-only were receiving benefits only from SNAP or WIC; and the unassisted were not receiving help from any major assistance or insurance program.

**Source**: Authors' calculations from the Family Assistance Longitudinal Study.

for SNAP or WIC. As all survey respondents had been on TANF at some point in the past, these measures more closely resemble our temporarily disconnected population from the TennCare survey described in the next section.

Looking first at the reported reasons for leaving (or being asked to leave) TANF among the two disconnected groups, we found that about 40 to 45 percent of all disconnected leavers left the program for what could be viewed as positive reasons such as getting a job, receiving an increase in income, getting married, or moving in with friends or family. Nearly a third left as a result of non-compliance with program rules, reaching a time limit (or leaving prematurely in order to conserve benefit months for the future), or becoming ineligible as a result of moving or no longer having an age-eligible child in the home.

The vast majority of disconnected respondents in both groups report actively looking for a job. However, between 40 and 50 percent of the TANF-disconnected and about 30 to 50 percent of the food-assisted-only reported that it had been more than two years since they had last been employed. About one-quarter to one-third of those in either group had been employed within the past six months. Additionally, previous employment spells were generally short, with only about 30 to 40 percent reporting that they were employed in their last job for more than one year. These employment-related findings are surely related to the fact that such a large percentage of disconnected survey respondents have less than a high school education (33 to 54 percent).

A typical question about the disconnected is how they make ends meet. Prior research generally finds that the disconnected have access to a number of other income sources. We found that among the roughly 30 to 40 percent of disconnected respondents who are married, only about 50 to 60 percent of the TANF-disconnected have working spouses. The percentage with working spouses in the food-assisted-only group is much higher, typically above 70 percent and often above 80 percent. Incomes earned by these working spouses are fairly low among the TANF-disconnected, averaging between \$16,800 and \$22,200 per year; average spouse earnings are higher for the food-assisted-only.

About 10 to 25 percent in either group report that their children have earned some income within the last several months.<sup>3</sup> Average monthly income for these children typically amounted to less than \$300. Between one-quarter and one-half of the disconnected respondents reported receiving money from friends or relatives, with average monthly amounts generally falling between \$150 and \$200. Very few—typically less than five percent—reported receiving income from other sources such as pensions, annuities, survivor benefits, workers compensation, or veterans payments. Those who had income in these categories typically enjoyed relatively high average monthly amounts. In total, only about 50 to 60 percent of the TANF-disconnected and 40 to 50 percent of the food-assisted-only reported that they had enough money coming in to make ends meet.

Child care issues are often a significant barrier to employment for disconnected families. A significant minority of the disconnected respondents reported that they needed but could not afford child care at some point within the past several months. Larger percentages in each wave reported needing but being unable to find child care. Nearly half of the disconnected respondents reported that there was some sort of legal arrangement requiring child support payments, and those who received such payments reported amounts between \$200 and \$300 per month.

About half of the disconnected respondents report living in a house, with about 30 percent living in apartments and most of the remainder living in mobile homes or trailers. Very few were living in emergency shelters, homeless, or some other setting. Housing situations are far from permanent among the disconnected, with only about half reporting that they had lived in their current setting for more than two years. About 5 to 10 percent reported that they paid money to a friend or relative to live with them. Another 20 percent (up to 38 percent of the food-assisted-only) reported living rentfree with a friend or relative or in a shelter. Between 50 and 60 percent of the TANF-disconnected, and slightly smaller percentages of the food-assisted-only, reported paying rent (not including those who paid money to a friend or relative), and only about 10 to 15 percent reported that they owned their current home.

About 35 to 40 percent of the disconnected reported that their phones had been disconnected within the past several months as a result of being unable to pay the bill. A smaller percentage, typically 10 to 20 percent, reported that their electricity had been shut off for similar reasons. Similarly, about 10 to 20 percent reported having to move in with other people as a result of not being able to pay their mortgage, rent, or utility bills.

Despite the fact that both of our primary disconnected definitions in this section include those families who are on Food Stamps or SNAP, and the majority report that their children were currently getting free or reduced meals at school, food insecurity is a significant challenge for a significant minority in both groups. Roughly one-quarter to one-third of the disconnected respondents indicated that they were hungry and did not eat, cut the size of meals, or went to a food pantry or food bank within the past several months because they could not afford food.

More than three-quarters of the TANF-disconnected and more than half of the food-assisted-only reported that they were covered by some form of health insurance at the beginning of our analysis period, although these percentages fell somewhat over time. Administrative TennCare caseload reductions may have caused some of this decline in coverage. Virtually all respondents indicated that their children were covered by health insurance, presumably as a result of Tennessee's efforts to ensure that children are covered even when their parents are not. These relatively high coverage rates are not often observed in other studies of disconnected

populations and likely speak to Tennessee's relatively generous health coverage programs.<sup>4</sup> Self-assessed health status is quite low among the disconnected, with half or more reporting to be in poor or fair health and less than 20 percent reporting to be in very good or excellent health. Affordability and access to health care appear to be significant barriers for a sizeable share of the disconnected.

The above results reflect the general finding in the prior literature on disconnected welfare leavers that many are doing relatively well, but a significant minority continue to face significant barriers to employment and experience a variety of hardships.

# A broader view: The health-disconnected population in Tennessee

It is important to recognize the possibility that many disconnected individuals might never have participated in public assistance programs. Zedlewski provides some early evidence of the extent to which eligible non-participants are disconnected from assistance as well as employment.<sup>5</sup> We are able to consider the broader population of disconnected individuals in Tennessee by making use of the annual TennCare survey data described above.

Figure 3 provides an initial look at the size of the health-disconnected population in Tennessee as defined by our two TennCare survey measures; permanently and temporarily health-disconnected. Note that the permanently health-disconnected (who have never been on TennCare) are a subgroup of the temporarily health-disconnected (who are not currently on TennCare). The health-disconnected population remained below 150,000 between 1995 and 2005, with some fluctuations likely related to macroeconomic swings, but rose significantly in 2006 and thereafter. Patterns for the permanently health-disconnected population are similar to

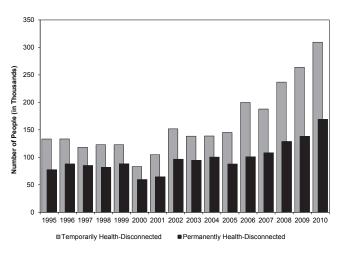


Figure 3. Tennessee's health-disconnected population.

**Note**: The temporarily health-disconnected were not on TennCare at the time of the survey, while the permanently health-disconnected had never been on TennCare.

Source: Authors' calculations from the annual TennCare survey.

those for the temporarily health-disconnected population. Since Tennessee's population remained relatively stable over our analysis period, looking at population trend reveals patterns that are very similar to the population numbers in Figure 3. The disconnected population hovered around 3 percent of the population until 2006, when the percentage began to rise to a 2010 value above 6 percent. The permanently health-disconnected subgroup appears to have grown more slowly, suggesting that the newly disconnected may have become so as a result of leaving TennCare.

To examine the extent to which these figures include those who would be considered as disconnected in the more traditional welfare-leaver sense, we identified TennCare survey respondents who were (a) female, (b) not married, (c) had at least one child, and (d) had total household income below \$10,000. In all but two years, fewer than 5 percent of the temporarily or permanently health-disconnected from the TennCare survey met these criteria. This translates in annual weighted terms to about 2,400 permanently disconnected and about 5,700 temporarily disconnected individuals who appear to be possibly eligible for TANF. Thus, roughly 90 percent of the health-disconnected from the TennCare survey would not be included in a more traditional leaver-oriented study of the disconnected.

Unlike the Families First survey, the TennCare survey data allow us to compare basic characteristics of the health-disconnected to those of the non-health-disconnected population. We find that health-disconnected individuals are about as likely to be female as connected individuals. As many as 40 percent of health-disconnected individuals in Tennessee are men; this group has been largely ignored in prior work. The health-disconnected are younger than connected individuals, likely as a result of our exclusion of those on Medicare from our definition of disconnected. The age profile of the health-disconnected population has changed slightly during our analysis period, with the proportion age 18 to 24 and age 45 to 64 increasing, while the proportion age 25 to 44 has fallen somewhat. In comparison, the age profile of the connected population has remained relatively stable over time.

Most health-disconnected adults—over 60 percent in each year—have no children, and are more likely to have no children than connected adults. Health-disconnected adults also appear to have fewer children in general than connected adults. Health-disconnected adults are frequently the only adults in their household, and they are also less likely than connected adults to be in two-adult households. However, they are generally more likely to be in households with more than two adults. While most health-disconnected adults in Tennessee are white, that population is disproportionately non-white compared to connected adults.

One theme evident in the TennCare survey data that was not observed in the Families First survey data is the gradual shift in the distribution of the health-disconnected population in Tennessee away from larger urban areas toward more rural settings. While only about 8 percent of the temporarily health-disconnected population lived in rural areas in 2000, the rural share grew to more than 25 percent by 2010. Given the tremendous growth in the health-disconnected population in recent years as shown in Figure 3, this shift is likely primarily the result of an increase in the rural health-disconnected population, rather than a decline in the urban health-disconnected population.

Finally, the health-disconnected population unsurprisingly tends to have much lower household income than the connected population. However, it is notable that a sizeable share of the health-disconnected population has total household income in the middle and upper ranges. This is evidence of the basic fact that being disconnected from employment and public assistance (broadly defined) does not necessarily imply a life in poverty.

## The health-disconnected population and socioeconomic conditions

We next look for possible relationships between health-disconnected status and local social and economic conditions. We assess whether any local industries have been particularly impacted by the recession, whether a large immigrant population exists that is ineligible for benefits, and whether there are other barriers to work or benefit access. We consider how these and other scenarios have affected levels of disconnectedness, if at all. Note that this analysis provides only suggestive evidence of possible determinants of fluctuations in the health-disconnected population, rather than establishing causality.

We find a strong positive correlation between the health-disconnected population and the Food Stamps or SNAP caseload. In contrast, health-disconnectedness and enrollment in TANF appear to be positively related during periods of recession (such as 2000 to 2002 and 2008 to 2010), but negatively related during periods of expansion (such as 2002 to 2006).

The health-disconnected population has moved proportionately with the share of the population age 65 and over. This is somewhat surprising, given that those over 65 are eligible for Medicare and thus not included in our definition of health-disconnected. The health-disconnected population appears to be negatively related to the share of the population age 18 and under, which has fallen somewhat alongside the recent growth in the health-disconnected population.

While one might expect growth in real (inflation-adjusted) Gross Domestic Product (GDP) to be accompanied by reductions in the disconnected population, we find just the opposite. Specifically, as the Tennessee economy has grown, so has the health-disconnected population. A more careful investigation of the time series data reveals an inverse relationship between real GDP and the health-disconnected population in the most recent years of the data. It is interesting that the health-disconnected population appears to be positively correlated with most industrial categories of real GDP. Notable exceptions include the mining and construc-

tion sectors; real GDP in these two sectors has declined substantially since about 2000 in Tennessee, while the health-disconnected population has grown.

Looking at employment, we see the expected positive correlations between the health-disconnected population and the unemployment rate. However, we also see a negative correlation between the labor force participation rate and the health-disconnected population. While in most years, job growth tends to correspond to reductions in the health-disconnected population, there are some areas in which employment tends to move inversely with the health-disconnected population. These include utilities, logging, mining, construction (as also seen with GDP), wholesale trade, information, and manufacturing.

Both the manufacturing and the mining, logging, and construction sectors have experienced net job losses since 1995, especially during the most recent years. It is certainly possible that the long-term decline of manufacturing in Tennessee has contributed to the gradual rise in the health-disconnected population, as displaced workers may have been reluctant to turn to (or are ineligible for) public assistance. At the same time, it is feasible that these and other health-disconnected individuals may have been protected by Unemployment Insurance (UI), especially given the extended benefits provided during the recent recession.

### **Summary and discussion**

Consistent with findings from earlier studies, the disconnected population in Tennessee is sizeable and appears to be growing. In what may be the first broad view of statewide disconnected status regardless of prior welfare participation, we find that as much as 6 percent of the state population may presently be surviving without benefit of public assistance or employment. Much of this growth appears to be happening in the more rural areas of Tennessee. This may be related to the shifting employment picture, away from industries such as manufacturing, mining, and construction, and toward the service sector. This raises a possibility that warrants future research, that a growing segment of the disconnected population are men, including married men, who may have been displaced during the recent recession and are having difficulty transitioning to other sectors of the workforce.

Additionally, the possibility certainly exists that major changes to the TennCare and Families First programs have contributed to this growth. Specifically, the TennCare caseload has been significantly reduced at least twice since the mid-1990s. Similarly, while Families First operated under a waiver from federal guidelines for its first 11 years, from 1996 through 2007, full conformity with federal guidelines (which themselves became more severe in 2006) began in 2007. The combination of these policy and administrative changes, along with these programs' long-standing focus on single mothers with children, has made it more difficult for needy Tennesseans to receive public assistance.

Despite our use of slightly more inclusive definitions of disconnected status, our in-depth analysis of a large sample of welfare leavers in Tennessee echoes several themes from the prior literature. First, a significant number of leavers experience spells in disconnected status, and many of those appear to be temporary. Second, the disconnected leavers often have access to other sources of income, such as from a spouse or partner, children, family, or friends. Third, the disconnected continue to experience significant economic hardships regarding access to resources such as health care, child care, and transportation. These issues represent barriers to employment and self-sufficiency that are not likely to be fully addressed by the present menu of public assistance programs.

The future for TennCare and Families First will likely involve ongoing binding budget constraints as both the federal and state governments grapple with long-run fiscal solvency issues. While Tennessee's fiscal house is in good shape compared with the federal and other state governments, the state's ability to provide TennCare and Families First benefits will necessarily be constrained by federal budgets, as both programs (like other Medicaid and TANF programs across the nation) rely heavily on federal funds for their operation. Federal health care reform has the potential to make health insurance and health care more accessible for disconnected families, but the Families First program may be ill-suited to serve the neediest disconnected families.

Other facets of the broader social safety net will increasingly be called upon to help reduce the disconnected population. For those who are able to work, certain education and retraining programs within community colleges or technical centers can assist in preparing them for new and different employment opportunities. For those with compelling barriers to employment such as child care, substance abuse, or mental health issues, a new menu of support programs will be required.

<sup>&</sup>lt;sup>1</sup>This article is a summary of a longer report prepared in June 2011 for the University of Kentucky Center for Poverty Research (UKCPR), *Off the Grid in Tennessee: Life without Employment or Public Assistance.* The University of Tennessee Center for Business and Economic Research has entered into a research partnership with the UKCPR in order to enhance understanding of local populations in need of assistance.

<sup>&</sup>lt;sup>2</sup>This analysis uses Kaplan-Meier estimates of the probability that a connected individual will become disconnected, given that they have not yet become disconnected.

<sup>&</sup>lt;sup>3</sup>Questions in the 3rd and 4th survey waves were generally asked about the previous six months, while those in later waves were asked about the previous nine months; this was because the number of months between survey waves increased over time.

<sup>&</sup>lt;sup>4</sup>For example, see R. G. Wood and A. Rangarajan, "What's Happening to TANF Leavers Who Are Not Employed?" *Issue Brief No. 6*, Washington, DC: Mathematica Policy Research, Inc., 2003. Available at http://www.mathematica-mpr.com/publications/PDFs/tanfleave.pdf.

<sup>&</sup>lt;sup>5</sup>S. R. Zedlewski, "Left Behind or Staying Away? Eligible Parents Who Remain Off TANF," *Assessing the New Federalism Series B, No. B-51*. Washington, DC: The Urban Institute, 2002. Available at http://www.urban.org/UploadedPDF/310571\_B51.pdf.