November 8, 2011

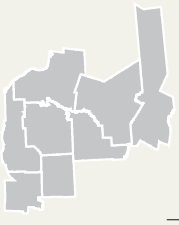
Speaking of Health in Central New York
DISCUSSIONS ON TOPICS THAT MATTER

# Resilience to the Rescue!

## Conquering Kids' Trauma


**FIGURE 1**

Nearly two-thirds of children in Central New York will experience at least one traumatic event.



**Total Children in CNY Under Age 18**

**260,260**

**Estimated number that will have...**

**...at least 1 traumatic experience during their childhood.**

**166,300**

**...multiple, 3 or more traumatic experiences.**

**57,300**

Source: 2005-09 American Community Survey and Centers for Disease Control and Prevention.

> "Children across the country and of every race, ethnicity and socioeconomic background are experiencing trauma at staggeringly high rates, and the effects of this trauma can span a lifetime."
>
> - Sargent Shriver National Center on Poverty Law, From *The Long-term Effects of Childhood Trauma*

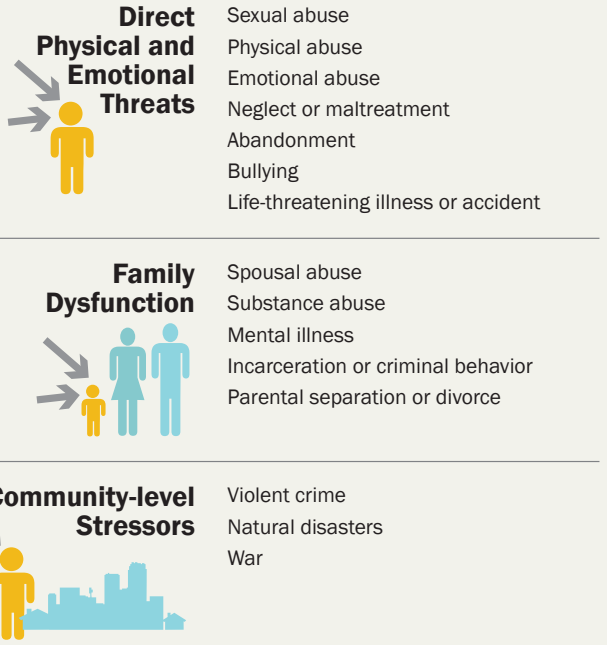
**In Central New York, an estimated 166,300 children, or close to two out of three under the age of 18, will experience at least one traumatic event during their childhood, from child abuse and neglect to exposure to violence in the home and community.** More than one in five children in this region will undergo multiple traumatic events before they reach adulthood, with those living in poverty at greater risk for many types of trauma. What's more, victim denial, underreporting and gaps in screenings and assessments suggest an even larger scope to this challenge. Young children, at a critical stage of brain development, are particularly vulnerable. Impacts can extend over the course of their lifetime, including learning disabilities, depression and suicidal tendencies, engagement in risky behavior and even higher incidences of chronic disease like cancer and diabetes.

Yet much childhood trauma can be prevented, and its health impacts mitigated, through integrated, trauma-informed intervention and education. Indeed, while children are particularly vulnerable to trauma, they are also tremendously resilient, with the capacity to bounce back from even the most horrific traumatic experiences. Innovative models and best practices engage the full treatment continuum – parents, foster care, schools and child care centers, health care practitioners and mental health and social services – toward prevention, early interventions and the cultivation of resiliency.

In Central New York, service providers, educators and child advocates are pursuing several notable programs to reduce the incidence of trauma and alleviate the long-term effects of these events on children.

**FIGURE 2**

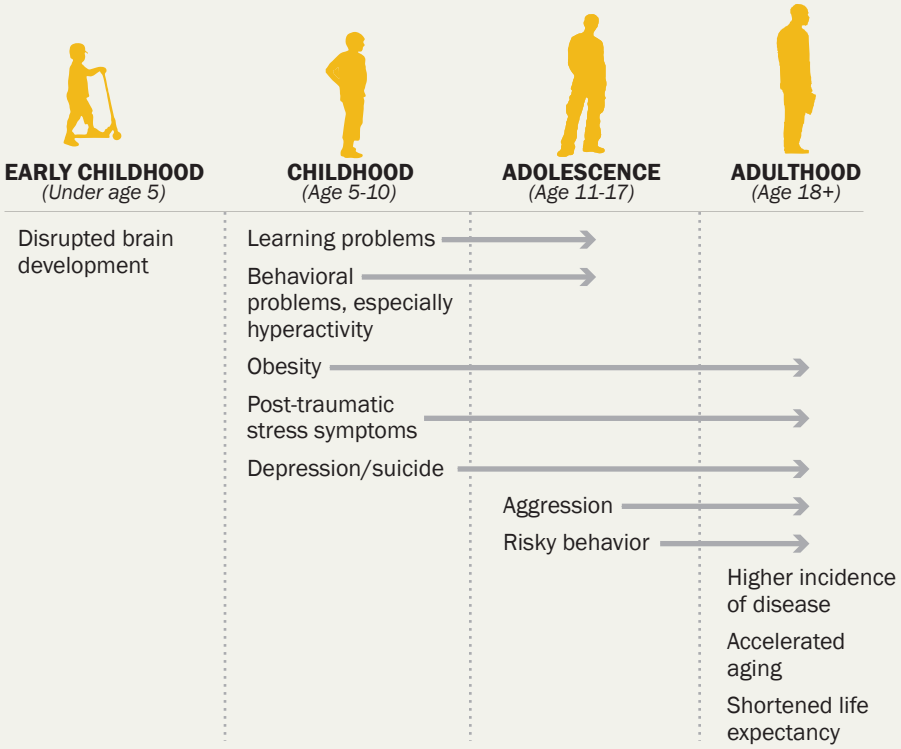
## Adverse childhood experiences come in many forms and varieties.




Source: See Data Sources and Notes for Figure 2.

**FIGURE 3**

## The impacts of trauma can last a lifetime.




Source: See Data Sources and Notes for Figure 3.

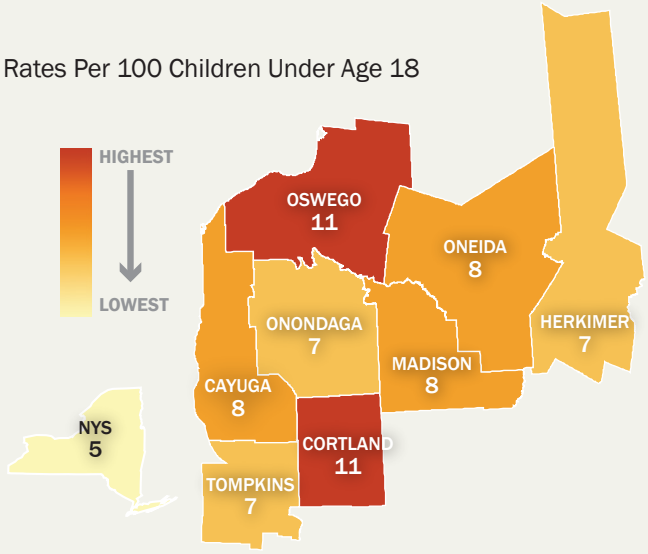
**Defining Trauma.** Broadly defined, trauma is anything that poses an actual or perceived threat to life or safety, causing terror, helplessness or feelings of vulnerability. Trauma can take the form of an isolated event, such as an accident or natural disaster, or involve chronic, long-term exposure to stressors ranging from bullying at school to violence in the home. Trauma may involve a direct threat to a child, or it may be more distal in nature, such as witnessing violent crime in the community. In all cases, trauma begins with an event or experience that so upsets a child's equilibrium it requires a righting, adaptive response (Perry; Kiser and Black).

**Consequences of Trauma.** Traumatic events and experiences have been linked to a range of emotional, behavioral and physical health effects in children and adults. In fact, research has shown that trauma actually disrupts brain development, making early childhood, when the brain is most rapidly developing and pliable, a critical period in terms of vulnerability to trauma and increased risk for potentially lifelong impacts.

Learning disabilities and behavioral problems are common among traumatized children. Chronic exposure to stress causes the overdevelopment of areas of the brain involved in producing anxiety, fear and sensitivity to threats, while inhibiting development of other areas of the brain, such as those involved in complex thought (Perry; Streeck-Fischer and van der Kolk). As a result, children are unable to adequately regulate their emotional response to stress. One study of urban youth found that 51 percent of children experiencing at least four categories of trauma demonstrated learning and behavioral problems, compared to only 3 percent of children who had never been exposed to trauma, and 21 percent of those experiencing a lesser degree of trauma (Burke). Obesity, depression, aggression, aggravation of asthma symptoms, and engagement in risky behaviors are additional symptoms that manifest from early childhood through adolescence. Some are the direct result of trauma, while others are developed as adaptive or coping responses to the traumatic experience.

**FIGURE 4**

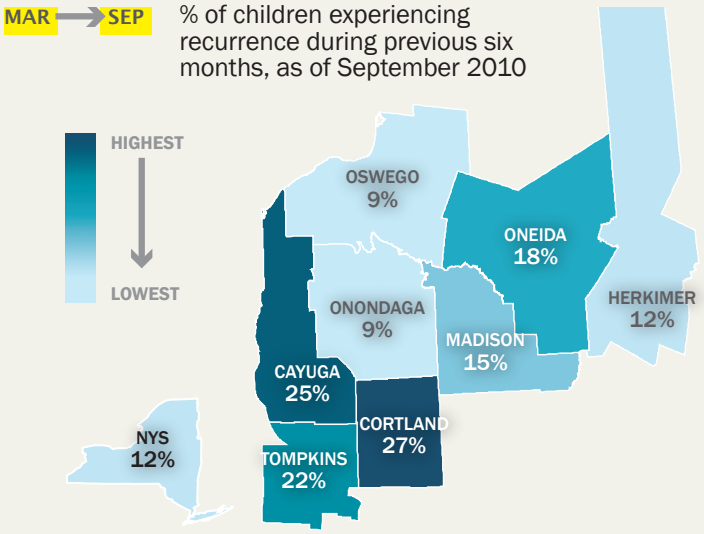
## Rates of reported child abuse in CNY exceeded the state average in 2010.




Source: NYS Office of Children and Family Services and 2005-09 American Community Survey.

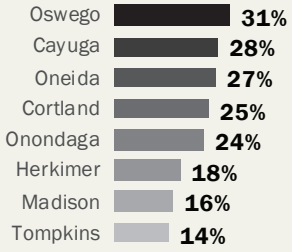
**FIGURE 5**

## Nearly a quarter or more of cases represent recurring abuse in several counties.




Source: NYS Office of Children and Family Services.

% Children Under Age 5 Living in Poverty




Source: 2005-09 American Community Survey.

> "We all are aware of how rapidly young children can learn language, develop new behaviors and master new tasks. The very same neurodevelopmental sensitivity that allows amazing developmental advances in response to predictable, nurturing, repetitive and enriching experiences make the developing child vulnerable to adverse experiences."
>
> - **Bruce Perry**, M.D., Ph.D.
> From *The Neuroarcheology of Childhood Maltreatment*

The impacts of trauma can extend over the course of a lifetime. A groundbreaking study, commonly called the ACE study, has linked exposure to adverse childhood experiences to the prevalence of health risk factors and disease in adults. For instance, those who had experienced at least four kinds of trauma during childhood had up to a 12-fold increase in behaviors such as smoking, drug and alcohol use and sexual promiscuity, as well as depression and suicide attempts. This population also exhibited higher incidences of chronic diseases such as cancer, heart disease, diabetes and bronchitis. Research has shown that victims of childhood trauma with symptoms of post-traumatic stress are actually biologically older than their non-traumatized counterparts (O'Donovan et al.), while another study discovered that adults with significant exposure to childhood trauma have life expectancies about 20 years shorter than normal (Brown et al.).

**Responding to Trauma – Risk Factors and Resiliency.** How a child responds to trauma is shaped by a diverse range of factors at the individual, family and community levels, from a child's personality type to the stability of his or her family unit to the presence of positive role models in the community. The presence of these characteristics in a child's life can either cultivate or threaten his or her resiliency, or ability to recover from or adapt to traumatic events. Many of these same factors, as well as poverty and other stressors in the home, school and community – can increase a child's risk for experiencing traumatic events.

The strength and stability of the family unit has perhaps the greatest impact on a child's risk level for, and capacity to bounce back from, trauma. Strong, positive, nurturing and stable family relationships help to regulate a child's response to trauma and buffer him or her from related distress, even shaping physiological responses to adverse experiences. "[P]arenting practices are potentially the most salient target of intervention in promoting children's resilience posttrauma" (Gewirtz, Forgatch and Wieling). At the same time, distress in the family unit – such as marital conflict, domestic violence, parental depression, substance abuse and social isolation – not only creates a risk-laden environment but hampers a child's resiliency. Often these disruptions occur as a result of

a parent struggling with the impacts of trauma him- or herself. In this way, the impacts of trauma can be intergenerational, extending beyond the life of the victim. Research has also shown that disruptions to the family unit as a result of trauma greatly increase a child's risk for suffering negative impacts related to that event. "[D]isruptions in family functioning following trauma predict development of symptoms better than event-related variables, such as duration or extent of loss" (Kiser and Black).

Stressors at the community level are closely intertwined with the stability of the family unit and the capacity to create a nurturing environment for children. Poverty is perhaps the most significant of these forces, not only increasing a child's risk for trauma exposure, but magnifying its impacts.

> "Families living in high-risk, low-income, urban neighborhoods risk exposure to multiple traumatic events within a context loaded with non-traumatic events that exacerbate the level of distress experienced."
>
> - **Laurel Kiser and Maureen Black**, From *Family processes in the midst of urban poverty: What does the trauma literature tell us?*

Yet just as community conditions can put parents and families under stress, the larger environment can also help promote resiliency. In fact, "[s]upport for the family has been cited as a major discriminating factor in identifying resilient urban children who have experienced major life stresses" (Condly). Educational and faith-based programs aimed at high-risk students offer meaningful opportunities for communities to directly foster childhood resiliency, while anti-bullying campaigns can address this issue in schools. Family supports, from parenting skills development to mentoring programs to family recreational opportunities, can also help reduce the impact of these stressors and promote resiliency.

**Trauma Exposure Levels in Central New York.** Several health indicators provide a glimpse into the scope of select types of child trauma in Central New York – namely child abuse, domestic violence and exposure to violence in the community. Reinforcing the connection between the risk for trauma and poverty, instances of child abuse and family and community violence are concentrated in Central New York's economically disadvantaged communities.

In 2010, there were 15,660 reports of child abuse and maltreatment across Central New York, involving over 20,000 children under age 18. That's 43 alleged incidences a day affecting 8 out of 100 children in the region. This figure also represents a 22 percent increase from 2006 in the number of children allegedly abused or maltreated. To the extent child abuse is not recognized or is suspected but not reported, these numbers underestimate actual levels.

In all eight counties, rates of child abuse are higher than the statewide average of 5 out of 100, though rates vary widely across the region. Per-capita rates range from a low of 7 out of 100 children in Onondaga and Tompkins Counties to a high of 11 out of 100 children in Cortland and Oswego Counties. These two counties also have some of the highest rates of child poverty in the region, with 25 percent and 31 percent, respectively, of children under age five living in poverty.

Reports of recurring abuse are also troubling indicators of childhood trauma in the region. Altogether, five out of Central New York's eight counties report rates of recurring abuse exceeding the statewide rate of 12 percent. In Cortland, Cayuga and Tompkins Counties, between 22 percent and 27 percent of alleged victims of child abuse have experienced a recurrence of abuse or maltreatment within the past six months. In two of these counties – Cortland and Cayuga – high rates of recurring abuse coincide with areas of the region where a quarter or more of young children live in poverty.

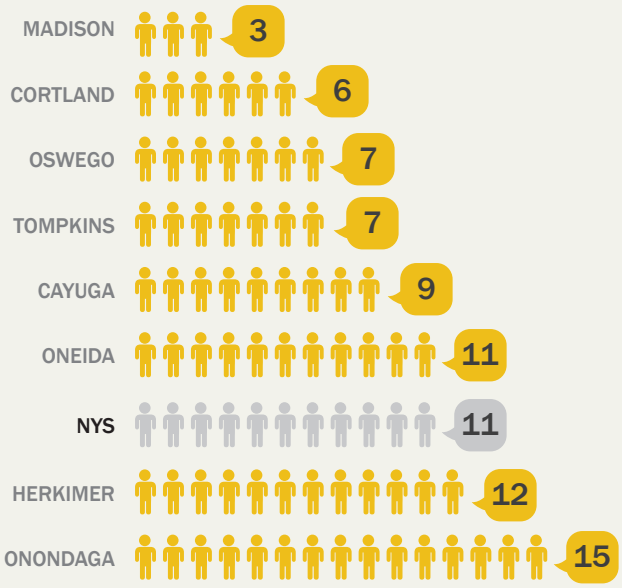
Violence within the home is also reflective of the level of childhood trauma that tends to concentrate in urban Central New York. In 2010, there were 7,600 victims of domestic violence in Central New York, according to police department reports. About half involved intimate partners, with women predominately the victims, while children and other family members comprised the balance of victims. About 70 percent of these incidences occurred in the region's urban counties – Onondaga and Oneida.

Outside the home, violence and threats of violence at school are a source of major distress for many

**FIGURE 6**

## Children in Onondaga County are at the highest risk for trauma from violent crime in the the community.

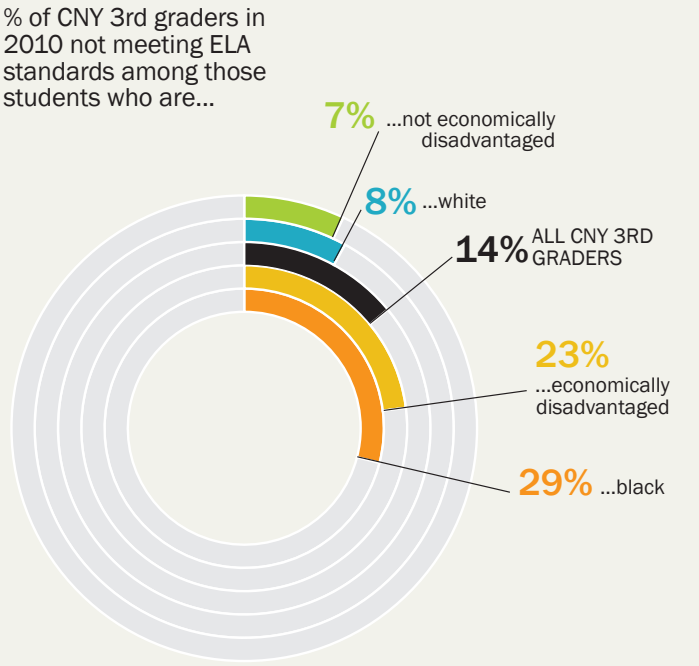
2010 violent crime rates per 1,000 children under age 18




Source: NYS Division of Criminal Justice Services.

**FIGURE 7**

## Academic performance indicators suggest that econonomically disadvantaged children are among those at highest risk.

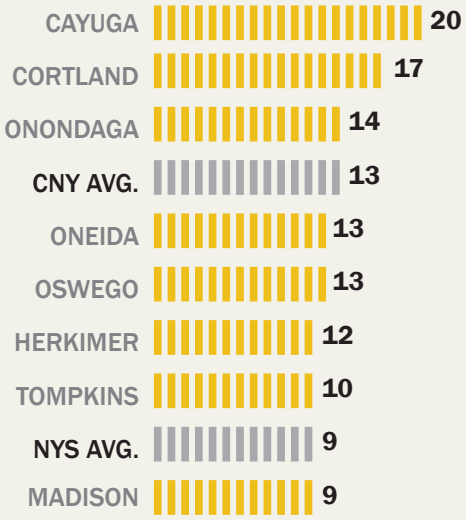



Source: NYS Education Department, 2009-10 School Report Card Database.

**FIGURE 8**

## Self-inflicted injuries are more common among teens in Central New York.

Self-inflicted discharge rates per 10,000 population age 15-19




Source: NYS Department of Health, SPARCS, 2006-08.

children. Across New York State, one in six schoolchildren reports being bullied on school property during the previous 12 months (Centers for Disease Control and Prevention). In Central New York, over 25,100 violent and disruptive incidences were reported in schools during 2008-09. At 14 incidences per 100 students, these involved assaults, altercations, bullying, sex offenses, weapon possession and larceny. Three-quarters of reports occurred in a school enrolling children younger than high school. School violence is particularly high in the Syracuse City School District. Of the 38 schools across Central New York that have incident rates double or more the regional average, 20 of these 38 schools were Syracuse public schools.

**Opportunities for Screening, Intervention and Building Resiliency.** A look at the number of children experiencing common symptoms of trauma and related risk factors – from lagging academic performance to depression to juvenile crime – points to pockets of risk in the region and potential victims of trauma. While there could be many possible factors behind these outcomes and indicators, these patterns at least suggest important opportunities for screening and assessments toward trauma prevention and intervention.

Select populations in Central New York – specifically black children and those who are economically disadvantaged – exhibit a relatively high incidence of outcomes potentially linked to trauma. These children are more likely to lag in academics or exhibit behavioral problems relative to children who are white or economically better off. They are also more than three times as likely to be falling behind by third grade, suggesting potential learning difficulties.

Children living in the region's urban centers are also more likely to exhibit academic and behavioral challenges. Nearly half of the 1,226 Central New York 3rd graders who are not meeting standards in the core ELA (English Language Arts) curriculum are enrolled in the region's three most urban school districts: Syracuse, North Syracuse and Utica.

Juvenile crime – indicative of children engaging in risky behaviors – is also prevalent in urban Central New York. Nearly three-quarters of the 11,919 juvenile arrests in the region between 2006 and 2010, involving both violent crime and lessor offenses such as drug use and possession and liquor law violations, occurred in urban Oneida and Onondaga Counties. Rates of crime and risky behavior in these counties are close to double or more relative to other parts of the region. In the city of Rome, juvenile crime rates are four times the regional average; in Syracuse, such crimes occur 60 percent more often than they do across the region. Notably, rates of child poverty and single-parent households in both cities are well above the regional average.

Yet signs of trauma are not limited to urban Central New York. When it comes to depression and internalized aggression, adolescents in rural Cayuga and Cortland Counties seem to be struggling the most. Here, rates of serious, self-inflicted injuries are, respectively, 30 percent to 50 percent above the regional average. Worse,

the overall rate for Central New York is 44 percent higher than the statewide average. In a recent survey of youth across the state, 13 percent reported having seriously considered attempting suicide within the past 12 months (Centers for Disease Control and Prevention).

**Strategies for Central New York.** Addressing child trauma and resiliency in Central New York requires a multifaceted and coordinated approach to education and training, assessment, intervention, resiliency-building and prevention. Central New York is ahead of the curve in many areas. However, those in the region working to combat child trauma say more can be done to cultivate resiliency and early detection through parent education and the engagement of schools and even child care providers.

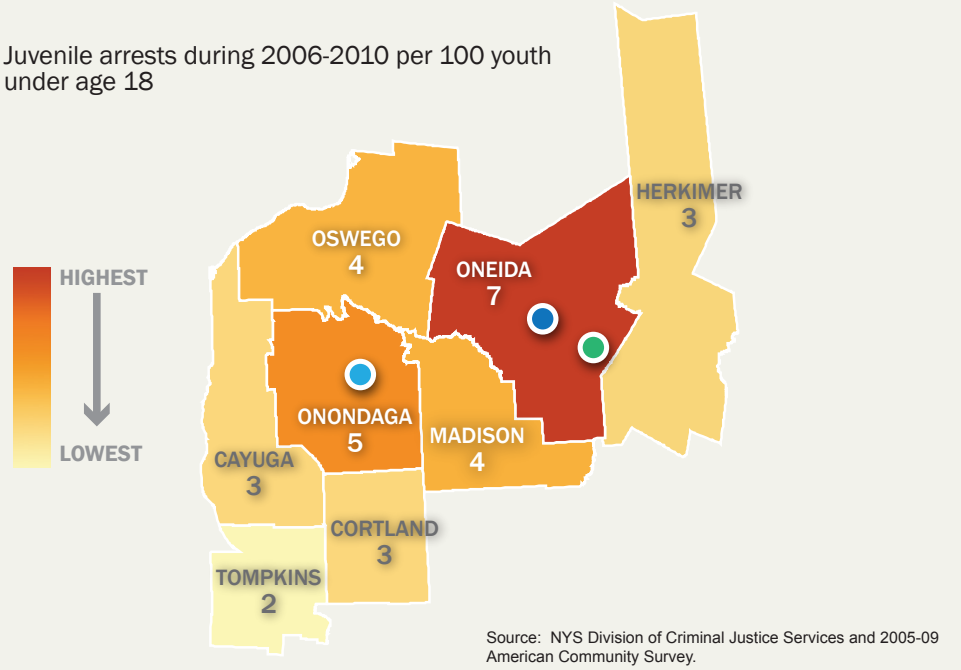
Early intervention is perhaps the most critical support in terms of building resiliency and mitigating risk for children and families. In Onondaga County, the Nurse-Family Partnership is a nationally recognized early intervention best practice that supports young first-time parents and fosters successful child development. Formed in 2007, the program sends registered nurses into the homes of new parents, particularly low-income single-parent families, to provide two years of parent education and early childhood development support. This rigorously tested model has been so successful in promoting child development, reducing child maltreatment, cutting family violence and juvenile delinquency and improving the economic situation of parents that it has been implemented in over 300 communities across the United States. The program in Onondaga County, housed in the county department of health, is one of three such programs in New York State. Since it was adopted, the program has served 111 infants, and in 2010 graduated its first cohort of 18 mothers and two-year-olds. With 6,500 children under age five living in poverty in Onondaga County alone, the need for more programs like this is great. Yet a new federal program could provide critical support. The Patient Protection and Affordable Care Act, signed into law last year, will provide new funds for home visitation programs targeting at-risk families in communities with concentrated poverty and crime and high rates of substance abuse, domestic violence and child maltreatment.

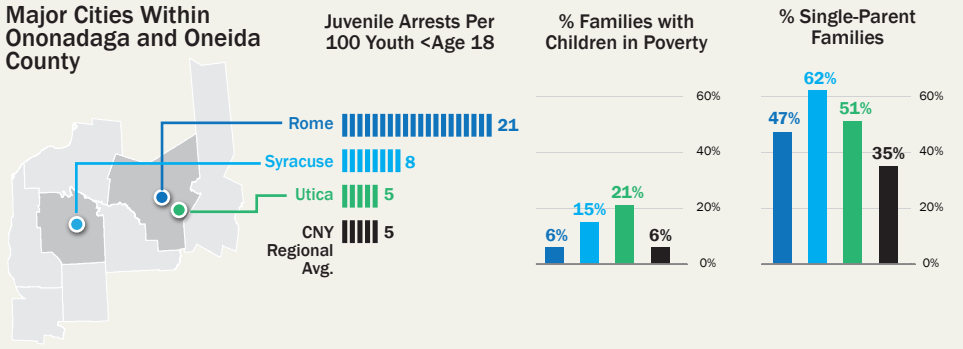
In Oneida County, the STOP ACEs' Task Force is drawing the community together to prevent and address adverse childhood experiences such as abuse, witnessing domestic violence or growing up in a household with substance abuse. Engaging the county health and mental health departments, educators and other services, the group is fostering a public dialogue around the issue, conducting research in the community and developing programs that support positive parenting and child resiliency. For instance, next year it will launch a transgenerational mentoring program, to be piloted at a neighborhood center in Utica. The program will train grandparents as mentors for at-risk parents while linking children with trained college-age mentors. According to Joanne Joseph, a national expert on child resiliency and a core member of the task force, this foster family approach will fill a critical gap in the support network for at-risk families by cultivating good parenting skills and providing vulnerable children with supportive role models.

Central New York is modeling best practices in its integration of child abuse services. In Onondaga County, a multidisciplinary team involving services from law enforcement to

**FIGURE 9**

## The region's higher-poverty urban counties also report higher rates of violent and risky behavior by youth.



mental health has been in place for over 20 years. The McMahon/Ryan Child Advocacy Site, where children who have been abused receive investigative, medical, therapeutic and support services, recently opened a new center, co-locating over 55 people from government, nonprofit and health centers to provide a one-stop location for children and their families. Executive Director Julie Cecile says that in addition to greater efficiency in service delivery, the center ensures a more holistic approach to treatment and intervention for children and their families.

Health care practitioners are also a core element in diagnosing and treating children who may be victims of trauma or adverse experiences. SUNY Upstate Medical University in Syracuse is playing a pivotal role in this regard. Ann Botash, M.D., at the university has been at the forefront, developing the Child Abuse Medical Provider Program to educate health care professionals in the identification and management of child sexual abuse cases. She also directs the university's Child Abuse Referral and Evaluation Program in Syracuse, a multidisciplinary team that works closely with law enforcement, child protective services and community agencies (including the McMahon/Ryan center) to provide comprehensive and sensitive medical management. Upstate Medical University President David Smith, M.D., says the university has the opportunity to expand its reach by integrating such training into its new master's in public health program and by building capacity through lay health advisors.

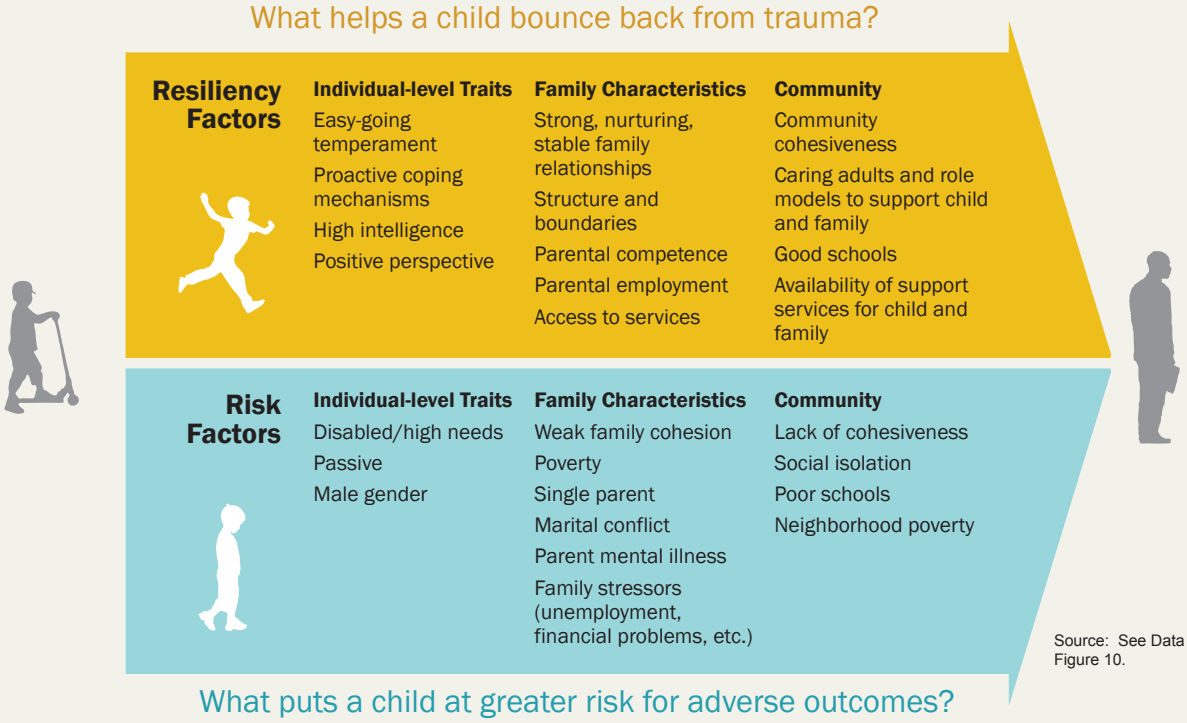
According to providers on the ground in Central New York, further headway will require broader and more effective engagement of vulnerable parents, as well as greater engagement of partners such as schools and child care centers. Many parents and families are at the breaking point in terms of the range of stressors they face, particularly in light of the recent economic recession. The region must do a better job, experts say, in cultivating healthy coping mechanisms for parents and connecting them to resources in the community.

Meanwhile, schools and child care providers can play a greater role in early detection – too often student behavioral problems are not seen as signs of trouble at home. Also, schools are fundamental to child resiliency as a source of positive role models, social connections and recreational opportunities. According to Mark Thayer, Director of Community Services for the Cortland County Department of Mental Health, budget cuts to sports and artistic programs deal a severe blow to resiliency support systems.

What is clear is that child trauma is a major public health concern for Central New York. From victims of abuse to witnessing domestic violence, the region's children are experiencing trauma at alarming rates, with consequences extending over the course of their lifetime and into the generations that follow. Thousands more are at risk, largely because of poverty and the pressures it places on families and children. While community leaders and child advocates in the region are working aggressively to reduce child trauma and improve the lives of victims, more is needed. Tackling child trauma will require additional creative solutions, greater public awareness and advocacy around the issue and – because not all trauma can be prevented – an increased focus on building resiliency in children.

**FIGURE 10**

## Resiliency factors protect children from trauma's impact, while many of the risk factors associated with urban poverty exacerbate it.




Source: See Data Sources and Notes for Figure 10.

## Data Sources and Notes

Figure 1: Estimates are calculated by applying national figures for the prevalence of adverse childhood experiences to the population of children under the age of 18 in Central New York. Population data are from the 2005-09 American Community Survey from the U.S. Census. Prevalence of individual adverse childhood experiences are reported by the Centers for Disease Control and Prevention and are based on findings from the ACE study.

Figure 2: Selected adverse childhood experiences are from a variety of sources listed in the bibliography, particularly those by Felitti et al. and the NYU Child Study Center. Full citations for these works are in the bibliography.

Figure 3: The impacts of childhood trauma draw from a variety of studies, particularly those conducted by Felitti et al., Perry, O'Donovan et al., Burke et al., Streeck-Fischer and van der Kolk, and Hornor. Full citations for these studies are in the bibliography.

Figure 4: Rates of child abuse are calculated using data on total alleged incidences in 2010 from the NYS Office of Children and Family Services, along with population data from the 2005-09 American Community Survey from the U.S. Census. Poverty data are also from the 2005-09 American Community Survey.

Figure 5: Rates of recurring abuse are from the NYS Office of Children and Family Services, as reported for September 2010.

Figure 6: Rates of violent crime are calculated using total 2010 violent crime counts reported in the NYS Division of Criminal Justices Services' 2010 County Index Crime Counts and Rates Per 100,000 Population. These were divided by the population of children under age 18 from the 2005-09 American Community Survey to calculate rates of violent crime per 1,000 children.

Figure 7: The NYS Education Department School Report Card Database for 2009-10 was the source of ELA performance data for students in Central New York. Only students scoring at the very lowest level, Level 1, defined as "not meeting learning standards" are captured by the figures reported for children displaying learning difficulties and falling behind.

Figure 8: Self-inflicted injury discharge rates are calculated using data from the 2006-08 SPARCS Database, as reported by the NYS Department of Health. Rates reflect the three-year average for 2006-08.

Figure 9: Rates of juvenile crime are calculated using juvenile arrest and criminal activity reported for 2006 through 2010 from the NYS Division of Criminal Justices Services. Total arrests are reported at the county level as well as for local enforcement agencies. Demographics for selected cities within Central New York as well as the region as a whole are calculated using data from the 2005-09 American Community Survey.

Figure 10: Resiliency and risk factors draw from a variety of sources, particularly those studies conducted by Kiser and Black and Gewirtz, Forgatch, and Wieling. Full citations for these studies are in the bibliography.

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