

Primary Prevention: Upstream Approaches to the Prevention of Trauma-based Mental Health and Addiction Disorders

Mental Health America of Indiana is the largest state chapter of Mental Health America, working for the mental health of all citizens and impacting those affected by mental illness and addiction through public education, advocacy, direct service, and public health reform.

Behavioral Health

Mental Health Disorders

Substance Abuse Disorders

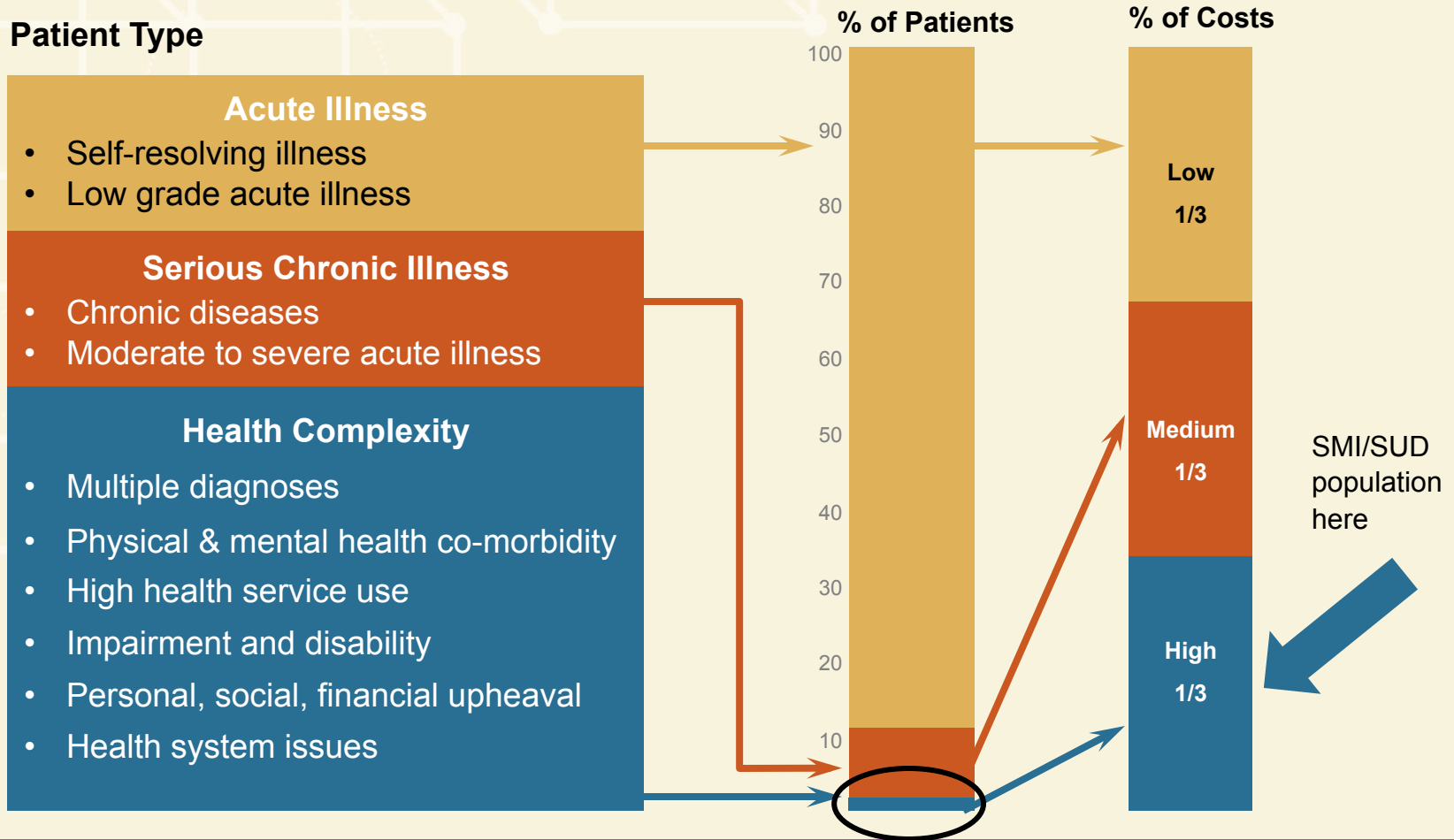
Addictive Disorders

Suicide

The Impact of Behavioral Health Disorders is Enormous

- By 2020, behavioral health disorders will surpass all physical diseases as a major cause of disability worldwide.
- An estimated 43.8 million adults aged 18 and older in the United States have a diagnosed mental illness, and 17.5 million have an SMI (8% of total pop.)
- 7.9 million have co-occurring disorder (30% of substance abuse disorders and 50% of individuals with SMI)
- An estimated 24.6 million Americans aged 12 and older need treatment for substance use.
- Serious mental illness and SUD's cost America \$247 billion in lost earnings last year.
- 44,193 deaths by suicide in 2015 – 30 year high – estimated combined lifetime cost of \$51 billion
- 962 deaths by suicide in 2015 – estimated combined lifetime cost of \$1.02 billion

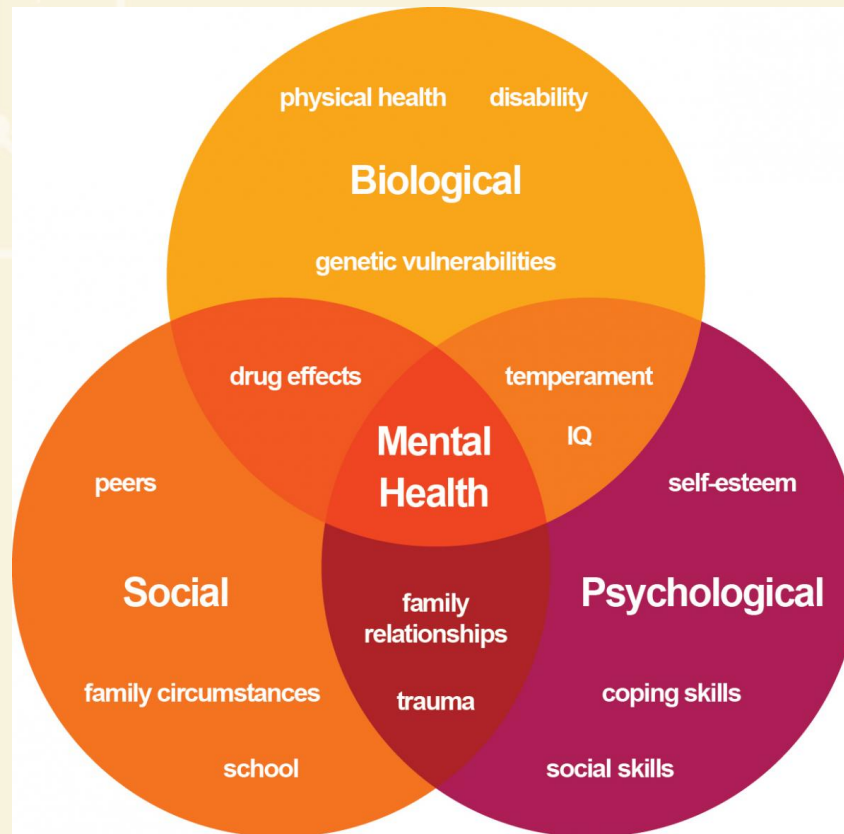
Cost of Health Complexity



What Causes Behavioral Health Issues?

- Biopsychosocial factors
- Environmental
- Sociocultural

The Perfect Storm!!



While there are over 300 classified forms of mental illness, the six most common categories are:

- Anxiety Disorders
- Personality Disorders
- Mood Disorders
- Schizophrenia/Psychotic Disorders
- Impulse Control/Addiction Disorders
- Eating Disorders

Most Common Substance Abuse Disorders

- Alcohol
- Tobacco
- Marijuana
- Stimulant
- Hallucinogen
- Opioid

Other Addictive Disorders

- Gambling
- Sex
- Shopping
- Shopping
- Internet/Social Media
- Food
- Video Games

Co-Occurring Disorders

Diagnosis	Lifetime Prevalence of Alcohol/Drug abuse or dependence
Antisocial Personality Disorder	70.1%
Bipolar I	60.2%
Bipolar II	56.1%
Panic Disorder	28.7%
Unipolar Depression	23.5%
General Population	13.8%

Evidence-Based Practices

- Pharmacological Treatment
- Dialectical Behavioral Therapy (DBT)
- Cognitive Behavioral Therapy (CBT)
- Solution Focused Therapy
- Assertive Community Treatment (ACT)
- Integrated Dual Diagnosis Treatment (IDDT)
- Family Psychoeducation
- Self Management – Stanford Self-Management, Health and Recovery Peer (HARP), Living Well, Whole Health Action Management (WHAM)*
- IMPACT model
- Matrix Model
- Twelve-Step Facilitation

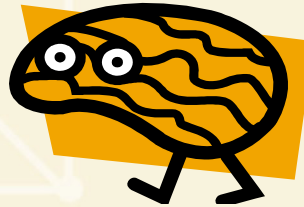
Army of Providers and Array of Services

- Medical – MD, DO, APN, PA
- Psychotherapy – many flavors
- Case Management – link to community supports (e.g., housing, education)
- Crisis Services – manage emergency situations, arrange hospitalization, emergency commitments if needed
- Assertive Community Treatment (ACT) – mobile units that reach more severely ill patients
- Peer Services – individuals in recovery from their own mental health conditions helping others
- Vocational Support – assistance in preparing for, finding, and being successful in employment
- Substance Abuse Treatment – detox, outpatient groups, medication assistance
- Psychiatric Rehabilitation – develop skills to function in communities
- Clubhouse – self-support services
- Wellness Education – helps patients manage their symptoms at home

Barriers to Behavioral Health Treatment



Lack of motivation,
apathy



Cognitive
impairment



Lack of perceived
need for care



Poverty



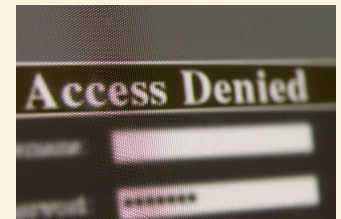
Cultural



Stigma



Poor social,
communication skills



Lack of access
to care

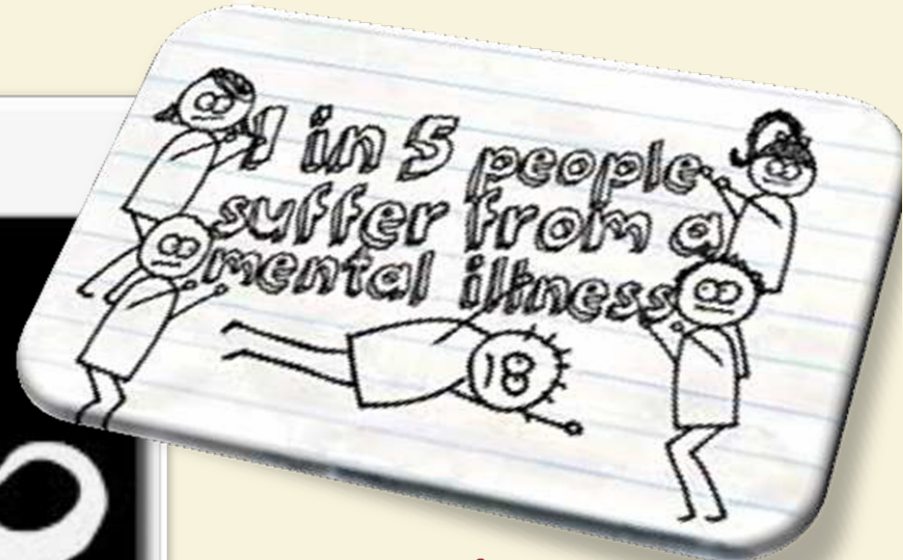
Behavioral Health Issues Have Typically Been Viewed as a Social/Individual Problem

- Public dialogue about behavioral health focuses on:
 - Homelessness
 - Crime/jails
 - Child welfare problems
 - School performance or youth behavior problems
 - Provider/system/institutional/government failures
 - Public tragedies
 - Individual weakness/poor choices

- Public (and public officials) often misunderstand, blame, discriminate, make moral judgments, and exclude
 - Ambivalence about worth of individuals affected and hesitant to make the investment in prevention/treatment/recovery
 - Ambivalence about ability to impact “problems”



Behavioral Health IS Public Health



***In a given year:
1 in 4, if substance use disorders are included***

SAMHSA'S Public Health Vision

A Nation That Acts On the Knowledge That:

- ALL Behavioral health is essential to health
- Prevention works
- Treatment is effective
- People recover

A Public Health Model For Behavioral Health...

- Universal – Focus on health of population as well as individuals
 - Health of any affects health of all – social inclusion

- Prevention First – Aim Is Healthy Individuals; Healthy Communities
 - Preparation and activities to promote emotional health development and wellness, prevent disease/disorder, and react quickly and effectively to conditions that impact health

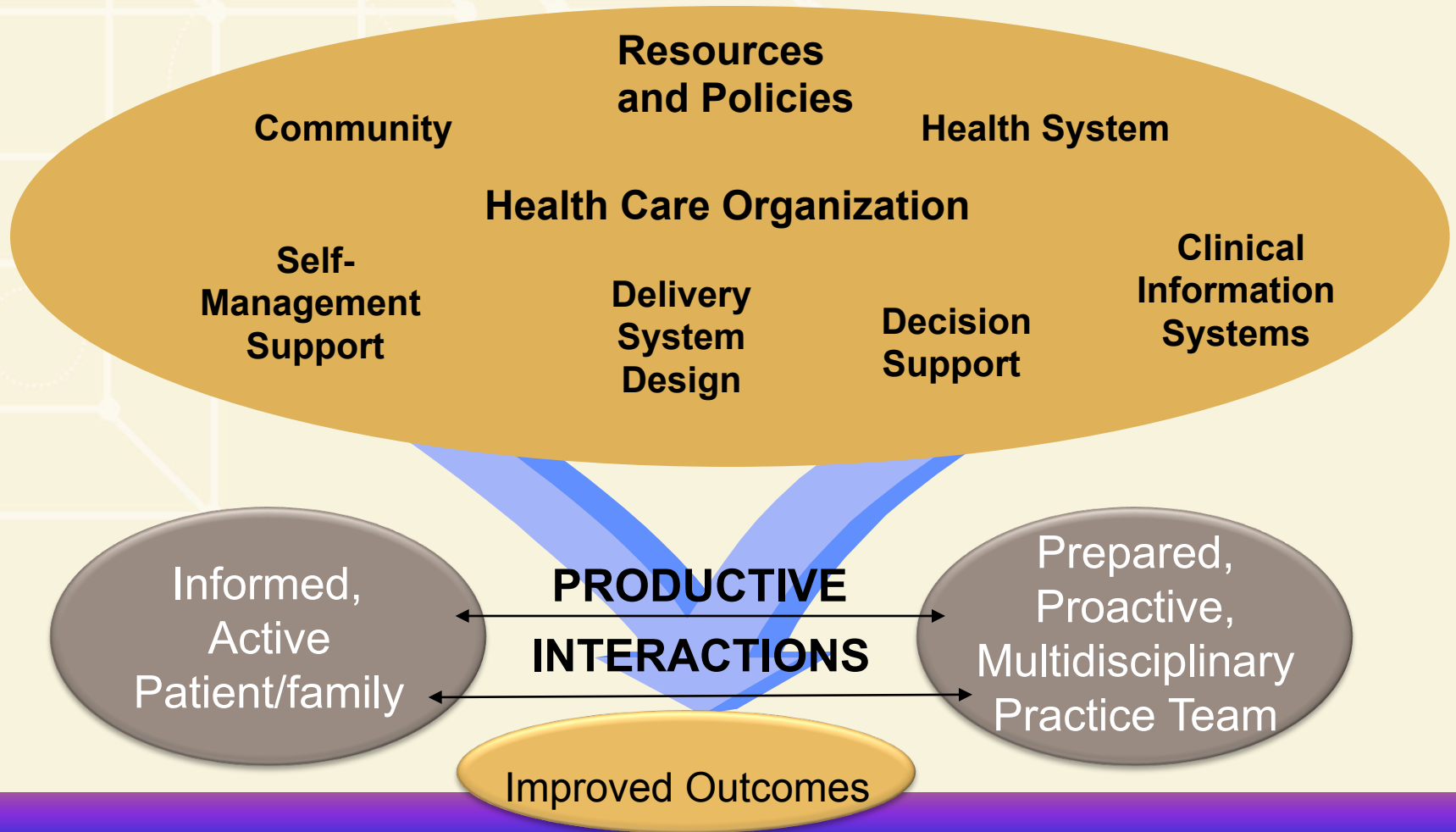
- Data & Information Driven – To Track and Improve Population-Based Health Status and Quality of Care/
Life
 - What drives health? What causes disease/disorder?
 - What works to prevent, treat and support recovery?
 - Evidence based approaches

- Policies – Affecting the Environment In Which Health or Disease Occurs
 - Laws, regulations, rules, norms, culture, conditions, expectations re individual and collective behavior for self and toward others

- Structures – Creating & Supporting Government and Community Infrastructure and Capacity
 - Departments, boards, committees, councils, commissions, coalitions, schools, universities

- Access – Assuring availability of right services when individuals, families, community need them
 - Prevention, treatment, and recovery supports
 - Adequate, trained, and culturally capable workforce

Public Health Model



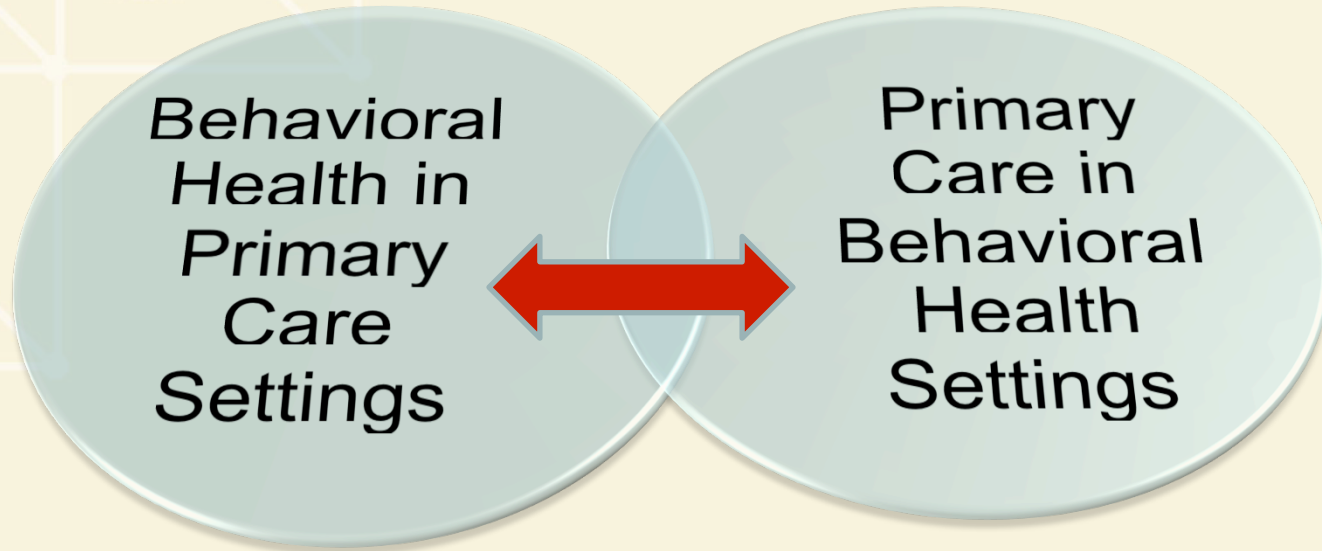
Integrated Care

The care that results from a practice team of primary care and behavioral health clinicians, working with patients and families, using a systematic and cost-effective approach, to provide patient-centered care for a defined population.

This care may address:

- Mental health and substance abuse conditions
- Health behaviors (including their contribution to chronic medical issues)
- Life stressors and crisis
- Stress related physical symptoms
- Ineffective patterns of health care utilization

Patient – Centered Collaborative Care Ensuring Parity



Good Physical Health

→ What It Takes

- Nutrition
- Exercise
- Rest

→ Reducing Risks

- Cleanliness
- Food sanitation
- Immunizations
- Universal precautions w others that are sick
- Avoiding unprotected sex

Good Behavioral Health

→ What It Takes

- Understanding/managing emotions
- Managing stress
- Positive social relationships

→ Reducing Risks

- Eliminating trauma
- Reducing chronic stress, esp. in childhood
- Promoting supportive relationships
- Informed parenting
- Teaching positive lifeskills

Physical Health Issues

→ Warning Signs of Illness

- Temperature
- Cough
- Fever
- Pain

→ Addressing Symptoms

- Early detection – tests/screening
- Stop the bleeding and pain
- Saving lives is the ultimate priority

Behavioral Health Issues

→ Warning Signs of Illness

- Suicidal thinking
- Depression and anxiety
- Post-traumatic stress
- Substance abuse
- Underage drinking/inappropriate amounts w adults

→ Addressing Symptoms

- Early detection – screening/brief interventions
- Stop emotional pain
- Saving lives is the ultimate priority

Early Intervention Reduces Impact

- 1/2 of all lifetime cases of mental illness begin by age 14; 3/4 by age 24
- On average, 8-10 years from onset of symptoms of M/SUDs to treatment
- 60% of individuals w MH issues and 90% w SUD never receive treatment

Early screenings + intervention + coordinated referrals
+ treatment + support =
RECOVERY

Recovery is...

...a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential. Recovery emerges from hope, is person-driven, holistic, supported by peers and allies, culturally based, addresses trauma, involves strengths, occurs via many pathways, and is based on respect.

It's More Than Just Recovery!!!

Resiliency is ...

...an individual's ability to overcome adversity and continue his or her normal development by both navigating their way to the psychological, social, cultural, and physical resources that sustain their well-being, as well as individually and collectively negotiating for these resources to be provided in meaningful ways.

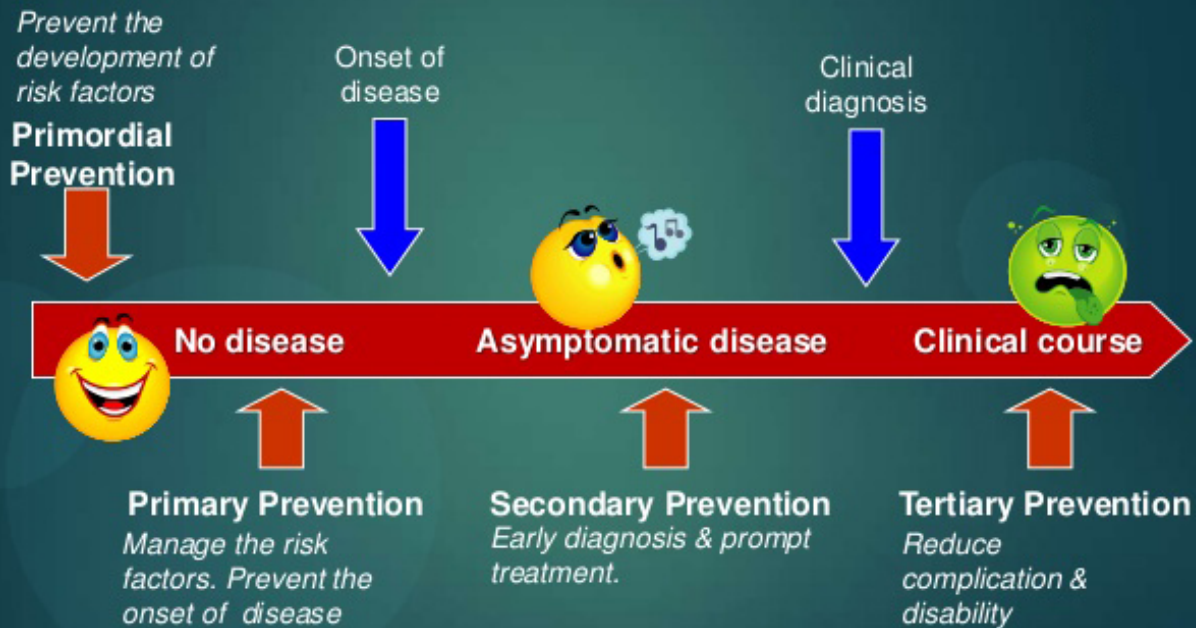
Prevention Efforts Build Resiliency!

Secondary prevention aims to reduce the impact of a disease or injury that has already occurred by detecting and treating disease or injury as soon as possible to halt or slow its progress, encouraging personal strategies to prevent reinjury or recurrence, and implementing programs to return people to their original health and function to prevent long-term problems.

Tertiary prevention aims to soften the impact of an ongoing illness or injury that has lasting effects by helping people manage long-term, often-complex health problems and injuries in order to improve as much as possible their ability to function, their quality of life and their life expectancy.

Primary prevention aims to prevent disease or injury before it ever occurs by preventing exposures to hazards that cause disease or injury, altering unhealthy or unsafe behaviors that can lead to disease or injury, and increasing resistance to disease or injury should exposure occur.

Level of Prevention



Let's say you are the mayor of a town near a swimming hole used by kids and adults alike. One summer, you learn that citizens are developing serious and persistent rashes after swimming as a result of a chemical irritant in the river. You decide to take action.

If you approach the company upstream that is discharging the chemical into the river and make it stop, you are engaging in **primary prevention**. You are removing the hazardous exposure and preventing rashes.

If you ask lifeguards to check swimmers as they get out of the river to look for signs of a rash that can then be treated right away, you are engaging in **secondary prevention**. You are not preventing rashes, but you are reducing their impact by treating them early on so individuals can regain their health and go about their everyday lives ASAP.

If you set up programs and support groups that teach people how to live with their persistent rashes, you are engaging in **tertiary prevention**. You are not preventing rashes or dealing with them right away, but you are softening their impact by helping people live with their rashes as best as possible.

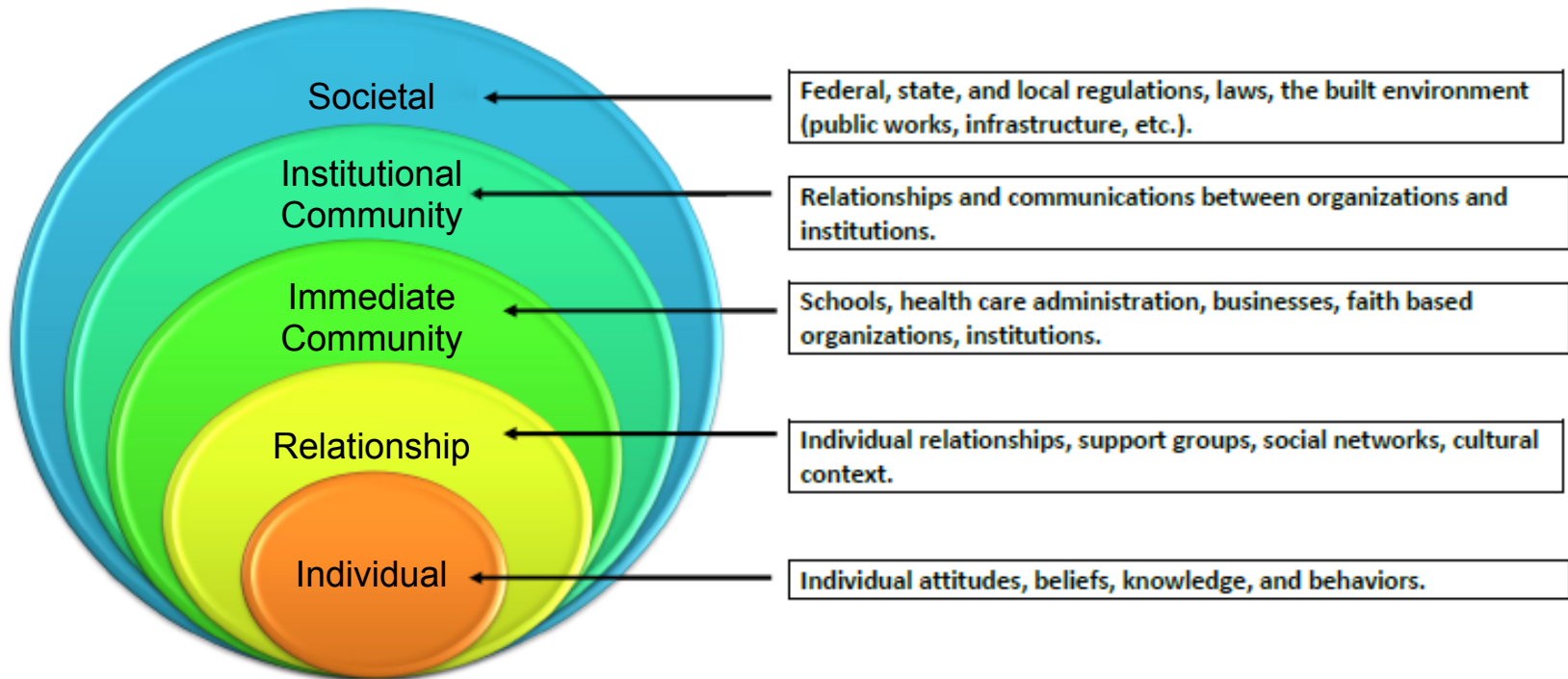
Behavioral Health Disorders CAN Be Prevented

Experiences trigger or exacerbate BH problems, such as:

Trauma, ACEs, disasters and their aftermath, poverty, domestic violence, involvement with the criminal justice or child welfare systems, neighborhood disorganization and family conflict

Addressing risk and protective factors is effective in reducing likelihood of BHDs

Social Ecological Rings



Behavioral Health Risk Factors	Behavioral Health Protective Factors
<u>Individual Factors</u>	<u>Individual Factors</u>
Prenatal brain damage	Easy temperament
Prematurity	Adequate nutrition
Birth injury	Above average intelligence
Low intelligence	Problem solving skills
Chronic illness	Internal locus of control
Poor health in infancy	Social competence
Insecure attachment in infancy/childhood	Social skills
Low birth weight, birth complications	Good coping style
Difficult temperament	Optimism
Physical and/or intellectual disability	Moral beliefs
Poor social skills	Values
Low self-esteem	Positive self regard
Impulsivity	Good physical health

INDIVIDUAL			
EMPLOYMENT			
Risk Factor	Protective Factor	Outcome	Citation Source
	Employment	Substance Abuse (SA) (IV drug use past 30 days; Needle sharing past 30 days; Crack cocaine past 30 day use)	Reynolds, G.L., Fisher, D.G., Estrada, A.L., & Trotter, R. (2000).
Unemployment		SA (Heavy drinking; Alcohol abuse and/or dependence; Illicit drug abuse and/or dependence)	Herman-Stahl, M., Spencer, D.L., & Duncan, J.E. (2003).
INCOME			
	Family income supplements	Mental Health (MH) (Any psychiatric disorder)	Costello, E.J., Erkanli, A., Copeland, W., & Angold, A. (2010).
Low social economic status of family members		SA (Alcohol abuse/dependence)	Yu, M., & Stiffman, A.R. (2007).
Financial strain		MH (Depression)	Whitbeck, L.B., Walls, M.L., Johnson, K.D., Morrisseau, A.D., & McDougall, C.M. (2009).
Childhood financial strain		MH (Depression/dysthymia; PTSD; Panic/GAD)	Libby, A.M., Orton, H.D., Novins, D.K., Beals, J., & Manson, S.M. (2005).

EDUCATION			
Risk Factor	Protective Factor	Outcome	Citation Source
Less than high school or high school education		SA (Heavy drinking)	Herman-Stahl, M., Spencer, D.L., & Duncan, J.E. (2003).
	Parental education	SA (Lifetime and 30 day alcohol use)	HeavyRunner-Rioux, A.R., & Hollist, D.R. (2010).
PSYCHOSOCIAL ISSUES			
Impulsivity		SA (Lifetime and 30 day alcohol; Marijuana; Illicit drug use)	HeavyRunner-Rioux, A.R., & Hollist, D.R. (2010).
Delinquent behavior		SA (Early onset SA)	Whitbeck, L.B., Hoyt, D.R., McMorris, B.J., Chen, X., & Stuben, J.D. (2001).
Conduct problems		SA (High stage substance use: illicit drug use, with or without marijuana, alcohol and inhalants.)	O'Connell, J.M., Novins, D.K., Beals, J., Whitesell, N., Libby, A.M., Orton, H.D., AI-SUPERPFT Team. (2007).
Violent Perpetration		MH (Suicide)	Pettingell, S.L., Bearinger, L.H., Skay, C.L., Resnick, M.D., Potthoff, S.J., & Eichhorn, J. (2008).
Pro-delinquency attitudes		SA (Lifetime and 30 day alcohol; Marijuana; Illicit drug use)	HeavyRunner-Rioux, A.R., & Hollist, D.R. (2010).

PSYCHOSOCIAL ISSUES, CONT.			
Risk Factor	Protective Factor	Outcome	Citation Source
Angry feelings		Early onset SA (Not specified)	Whitbeck, L.B., Hoyt, D.R., McMorris, B.J., Chen, X., & Stuben, J.D. (2001).
	Positive mood	MH (Suicide attempts)	Pettingell, S.L., Bearinger, L.H., Skay, C.L., Resnick, M.D., Potthoff, S.J., & Eichhorn, J. (2008).
Feeling life has no purpose		MH (Suicide attempts)	Chino, M., & Fullerton-Gleason, L. (2006).
Low self-worth		SA (Alcohol related problems)	Radin, S.M., Neighbors, C., Walker, P.S., Walker, R.D., Marlatt, G.A., & Larimer, M. (2006).
	High Self-esteem	MH (Suicide ideation)	Yoder, K.A., Whitbeck, L.B., Hoyt, D.R., & LaFromboise, T.
SPIRITUALITY/RELIGION			
	Involvement in a religious group or church	SA (Alcohol abuse/dependence)	Yu, M. & Stiffman, A.R. (2007)
	Belonging to church	SA (Alcohol, cigarette and marijuana use)	Kulis, S., Hodge, D.R., Ayers, S.L., Brown, E.F., & Marsiglia, F.F. (2012).
	Stronger religious beliefs	SA (Alcohol and cigarette use)	Kulis, S., Hodge, D.R., Ayers, S.L., Brown, E.F., & Marsiglia, F.F. (2012).
	Cultural pride/spirituality	SA (Alcohol abuse/dependence)	Yu, M., & Stiffman, A.R. (2007).

SPIRITUALITY/RELIGION, CONT.			
Risk Factor	Protective Factor	Outcome	Citation Source
	Cultural spiritual orientation	MH (Suicide attempts)	Garrouette, E.M., Goldberg, J., Beals, J., Herrell, R., Manson, S.P. (2003).
	Use of time for religion	SA (Alcohol use in the past 30 days)	Beebe, L.A., Vesely, S.K., Oman, R.F., Tolma, E., Aspy, C.E., & Rodine, S. (2008).
HEALTH			
Self-perception of poor general health		MH (Suicide attempts)	Grossman, D.C., Milligan, C., & Deyo, R.A. (1991).
	Good physical health	MH (Suicide attempts)	Mackin, J., Perkins, T., & Furrer, C. (2012).
Diagnosed chronic illness		MH (Depression/dysthymia) MH (PTSD)	Libby, A.M., Orton, H.D., Novins, D.K., Beals, J., & Manson, S.M. (2005).
Concerned about health		MH (Suicide attempts)	Borowsky, I.W., Resnick, M.D., Ireland, M., & Blum, R.W. (1999).

Behavioral Health Risk Factors	Behavioral Health Protective Factors
<u>Relationship Factors</u>	<u>Relationship Factors</u>
Absence of either parent in childhood	Attachment to family
Poor behavioral monitoring	Supportive, caring parents
Large family size	Family harmony
Anti-social role models or lack of social connectivity	Secure and stable family
Abuse and/or Neglect	Small family size
Marital discord in parents, divorce	More than two years between siblings
Harsh or inconsistent discipline style	High level of family responsibility
Family violence and disharmony	Strong family norms and morality
Low parental involvement in kids' activities	Economic security
Long term parental unemployment	Frequent contact with relatives
Parental criminality, substance/mental health disorder	Access to mentors
Critical, unsupportive partner	Social connectedness and support
Bullying, victimization, and peer rejection	Multiple friendships

Adverse Childhood Experiences (ACE's)

Joint study done by the CDC and Kaiser Permanente which demonstrated an association of adverse childhood experiences (ACEs) with health and social problems as an adult.

Three Types of ACEs

ABUSE



Physical



Emotional



Sexual

NEGLECT



Physical



Emotional

HOUSEHOLD DYSFUNCTION



Mental Illness



Mother treated violently



Divorce

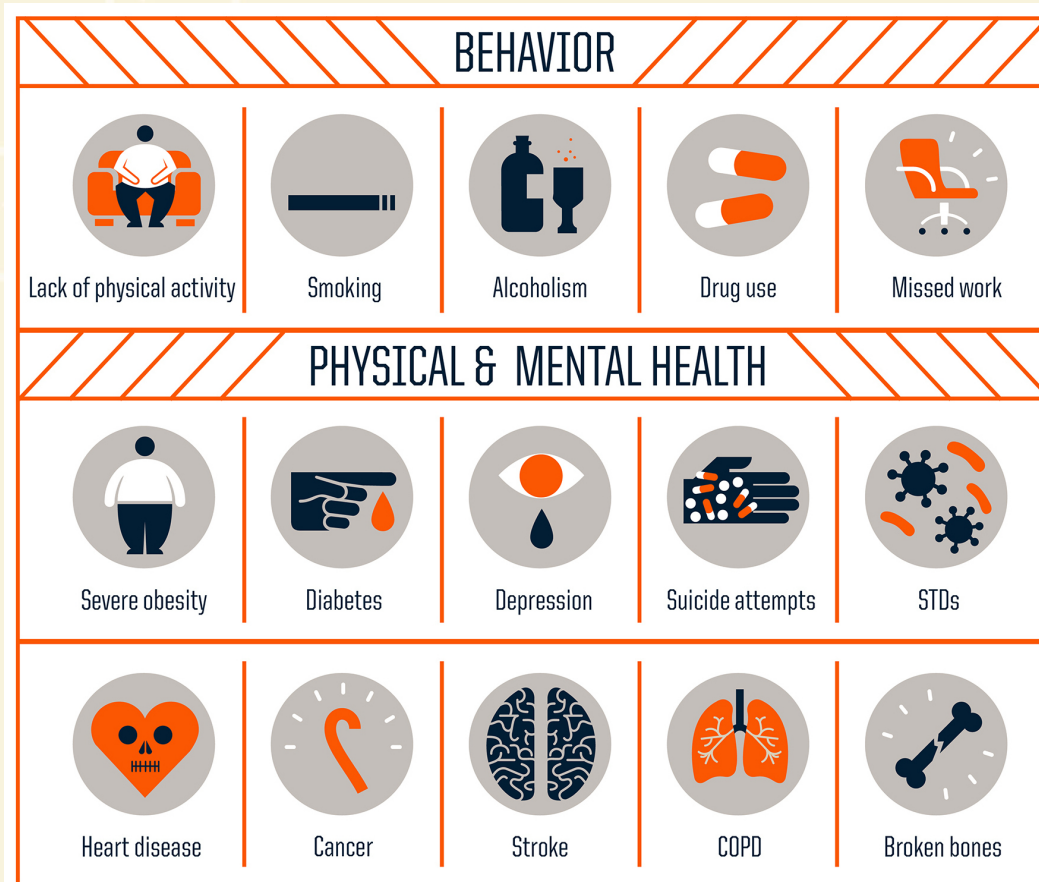


Incarcerated Relative



Substance Abuse

ACEs Increased Health Risks



- ACEs have a strong, graded relationship to trauma based mental health or addiction issues, or suicide attempts during childhood/adolescent and adulthood
- **ACE score of 7 or more:**
 - 51 times more likely as a child or adolescent
 - 30 times more likely as an adult
- Nearly 2/3 (64%) of trauma based mental health or addiction issues, or suicide attempts among adults are attributable to ACEs and 80% during childhood/adolescence are attributed to ACEs

Source:Dube et al, 2001

RELATIONSHIPS

ADVERSE CHILDHOOD EXPERIENCES AND OTHER TRAUMATIC EVENTS

Risk Factor	Protective Factor	Outcome	Citation Source
Child abuse (Physical and sexual abuse)		MH (Suicide attempts)	Mackin, J., Perkins, T., & Furrer, C. (2012).
Childhood sexual abuse		MH, (3 or more psychiatric disorders, including and not including alcohol dependence and abuse)	Robin, R.W., Chester, B., Rasmussen, J.K., Jaranson, J.M., & Goldman, D. (1997).
Child abuse		SA (Not specified)	Bohn, D.K. (2003).
Trauma (non-interpersonal, interpersonal, witnessed, traumatic news, and other trauma)		SA (Alcohol use disorder)	Boyd-Ball, A.J., Manson, S.M., Noonan, C., & Beals, J. (2006).
Childhood physical abuse		MH (Depression/dysthymia PTSD; Panic/GAD)	Libby, A.M., Orton, H.D., Novins, D.K., Beals, J., & Manson, S.M. (2005).
Childhood Physical abuse and Childhood Sexual abuse		SA (Alcohol dependence, alcohol abuse)	Clark, D.B. Lesnick, L., & Hegedus, A.M. (1997).
Childhood trauma (physical and sexual abuse)		MH (Suicide attempts)	Borowsky, I.W., Resnick, M.D., Ireland, M., & Blum, R.W. (1999).

PARENT/CHILD CONNECTION			
Risk Factor	Protective Factor	Outcome	Citation Source
	Discussing problems with family or friends	MH (Suicide attempts)	Borowsky, I.W., Resnick, M.D., Ireland, M., & Blum, R.W. (1999).
	Family Communication	SA (Other illicit drug use in the past 30 days)—	Beebe, L.A., Vesely, S.K., Oman, R.F., Tolma, E., Aspy, C.E., & Rodine, S. (2008)..
	Family attention	MH (Suicide ideation; Suicide attempts; Hopelessness)	Pharris, M.D., Resnick, M.D., & Blum, R.W. (1997).
	Positive family relationships	SA (Illicit drug use/dependence)	Yu, M., & Stiffman, A.R. (2010).
	Parental attachment	SA (Lifetime marijuana use)	HeavyRunner-Rioux, A.R. & Hollist, D.R. (2010).
	Parental pro-social behavior norms	MH (Suicide attempts)	Pettingell, S.L., Bearinger, L.H., Skay, C.L., Resnick, M.D., Potthoff, S.J., & Eichhorn, J. (2008).
	Parental caring	MH (Suicide ideation female only; Suicide attempts)	Pharris, M.D., Resnick, M.D., & Blum, R.W. (1997).
	Family connectedness	MH (Suicide attempts)	Borowsky, I.W., Resnick, M.D., Ireland, M., & Blum, R.W. (1999).
	Family caring	MH (Suicide attempts)	Pharris, M.D., Resnick, M.D., & Blum, R.W. (1997)..
	Family caring about adolescent's feelings	MH (Hopelessness ; Suicide ideation)	Pharris, M.D., Resnick, M.D., & Blum, R.W. (1997).

PARENT/CHILD CONNECTION CONT.			
Risk Factor	Protective Factor	Outcome	Citation Source
	Family support	SA (Alcohol quantity-frequency; frequency of intoxication)	Dick, R.W., Manson, S.M., & Beals, J. (1993).
Little perceived family social support		MH (Suicide attempts)	Manson, S.M., Beals, J., Dick, R.W., & Duclos, C. (1989).
	Parental expectations	MH (Hopelessness Suicide ideation)	Pharris, M.D., Resnick, M.D., & Blum, R.W. (1997).
	Family sanctions against drugs	SA (Drug use)	Swaim, R.C., Oetting, E.R., Thurman, P.J., Beauvais, F., & Edwards, R.W. (1993).
	Family sanctions against alcohol	SA (Alcohol involvement)	See Bates et al. (1997).
INVOLVEMENT WITH OTHER ADULTS			
	Non-parental adult role model	SA (Alcohol use past 30 days, tobacco use in the past 30 days, and other illicit drug use in the past 30 days)	Beebe, L.A., Vesely, S.K., Oman, R.F., Tolma, E., Aspy, C.E., & Rodine, S. (2008).
	Adult warmth and supportiveness	MH (Depression)	Whitbeck, L.B., Walls, M.L., Johnson, K.D., Morrisseau, A.D., McDougall, C.M. (2009).
	Youth leader caring	MH (Suicidal ideation; Hopelessness)	Pharris, M.D., Resnick, M.D., & Blum, R.W. (1997).
	Adult caring	MH (Suicidal ideation [Males and Females]; Hopelessness [Females])	Pharris, M.D., Resnick, M.D., & Blum, R.W. (1997).
	School people caring	MH (Suicidal ideation [Males])	Pharris, M.D., Resnick, M.D., & Blum, R.W. (1997).

PEER INTERACTION			
Risk Factor	Protective Factor	Outcome	Citation Source
Peer alcohol use		SA (Lifetime use; level of alcohol use)	Dickens, D.D., Dieterich, S.E., Henry, K.L., Beauvais, F. (2012)..
Peer misbehavior		SA (Alcohol abuse/dependence)	Yu, M., & Stiffman, A.R. (2007).
Deviant peers		SA (Illicit drug use/dependence)	Yu, M., & Stiffman, A.R. (2010).
Peer Deviance		SA (Alcohol related problems)	Radin, S.M., Neighbors, C., Walker, P.S., Walker, R.D., Marlatt, G.A., & Larimer, M. (2006).
Delinquent peers		SA (Lifetime; 30 day alcohol; Marijuana; Illicit drug use)	Heavy Runner-Rioux, A.R. & Hollist, D.R. (2010).
Peer misbehavior		SA (Tobacco use)	Yu, M., Stiffman, A.R., & Freedenthal, S. (2005).
Peer encouragement of alcohol use		SA (Quantity-frequency of alcohol use past month): Greatest and usual number of drinks; number of days drinking and drunk; episodes of drinking 2 days or more	Spicer, P., Novins, D., Mitchell, C.M., & Beals, J. (2003).
Peer alcohol associations		SA (Alcohol involvement)	Bates, S.C., Beauvais, F., & Trimble, J.E. (1997).
	Discussing problems with family or friends	MH (Suicide attempts)	Borowsky, I.W., Resnick, M.D., Ireland, M., & Blum, R.W. (1999).

SOCIAL CONNECTIVITY			
Risk Factor	Protective Factor	Outcome	Citation Source
	Sense of belonging as connectedness	MH (Suicidal ideation)	Hill, D.L. (2009).
Extreme alienation from family and community		MH (Suicide attempts)	Grossman, D.C., Milligan, C., & Deyo, R.A. (1991).
PARTNER/MARITAL PROBLEMS			
Domestic Violence (physical assault)		MH (Depression; PTSD symptomology)	Hamby, S.L., & Skupien, M.B. (1998).
Partner's control over finances		MH (Depression; PTSD symptomology)	Hamby, S.L., & Skupien, M.B. (1998).
Severe physical or sexual intimate partner violence		MH (Any mood disorder)	Duran, B., Oetzel, J., Parker, T, Malco Halinka L., Lucero, J., Jiang, Y. (2009)
Shorter relationship lengths		MH (Depression)	Hamby, S.L., & Skupien, M.B. (1998).

LIFETIME ABUSE/ASSAULT			
Risk Factor	Protective Factor	Outcome	Citation Source
Adult abuse events (Including domestic violence)		SA (Not specified)	Bohn, D.K. (2003).
Sexual assault Multiple victimization		MH (Depression; Dysphoria)	Evans-Campbell, T., Lindhorst, T., Huang, B., & Walters, K.L. (2006).
Violence perpetration (males)		MH (Suicide attempts)	Pettingell, S.L., Bearinger, L.H., Skay, C.L., Resnick, M.D., Potthoff, S.J., & Eichhorn, J. (2008).
Adult victim of physical abuse/attack		MH (Depression/dysthymia; PTSD; Panic/GAD)	Libby, A.M., Orton, H.D., Novins, D.K., Beals, J., & Manson, S.M. (2005).
Adult victim of sexual abuse		MH (Depression/dysthymia; PTSD; Panic/GAD)	Libby, A.M., Orton, H.D., Novins, D.K., Beals, J., & Manson, S.M. (2005).

Behavioral Health Risk Factors	Behavioral Health Protective Factors
<u>Community and Cultural Factors</u>	<u>Community and Cultural Factors</u>
Socio-economic disadvantage	Sense of connectedness to community
Social or cultural discrimination	Attachment to community networks
Neighborhood violence and crime	Participation in church or other community group
Overcrowded housing conditions	Strong cultural identity and ethnic pride
Lack of recreational opportunities	Access to support services
Lack of support services	Community cultural norms against violence
	Caring neighborhood

Behavioral Health Risk Factors	Behavioral Health Protective Factors
<u>School Factors</u>	<u>School Factors</u>
Poor attachment to school	School achievement
Bullying	Sense of belonging at school
Peer rejection	Positive school climate
Inadequate behavior management	Pro-social peer group
Deviant peer group	High expectations
School failure	Required responsibility and service to others
Frequent school transitions	Opportunities for success
	Opportunities for recognition of achievement
	School norms against violence
	Child receives support from adults other than parents
	School provides clear rules and boundaries

COMMUNITY			
COMMUNITY STRESS/VIOLENCE			
Risk Factor	Protective Factor	Outcome	Citation Source
Gun availability		MH (Suicide attempts)	Borowsky, I.W., Resnick, M.D., Ireland, M., & Blum, R.W. (1999).
Gang involvement		MH (Suicide attempts)	Borowsky, I.W., Resnick, M.D., Ireland, M., & Blum, R.W. (1999).
Neighborhood safety		SA (Alcohol use past 30 days; Marijuana past 30 days) MH (Depressive symptoms)	Nalls, A.M., Mullis, R.L., & Mullis, A.K. (2009).
Neighborhood poverty		SA (Lifetime; 3- day marijuana use)	HeavyRunner-Rioux, A.R. & Hollist, D.R. (2010).
SCHOOL			
Did not go to school in the past 30 days because felt unsafe		MH (Suicide attempts)	Mackin, J., Perkins, T., & Furrer, C. (2012).
Negative school environment		SA (Illicit drug use/dependence)	Yu, M., & Stiffman, A.R. (2010).
	School attachment	SA (Lifetime illicit drug use)	HeavyRunner-Rioux, A.R., & Hollist, D.R. (2010).

SCHOOL, CONT.			
Risk Factor	Protective Factor	Outcome	Citation Source
	School bonding	SA (Lifetime and level of alcohol use)	Dickens, D.D., Dieterich, S.E., Henry, K.L., Beauvais, F. (2012).
Low sense of school safety		SA (Marijuana, past 30 days)	Nalls, A.M., Mullis, R.L., & Mullis, A.K. (2009).
	Sense of belonging in school	SA (Lifetime use of alcohol and cigarettes; amount of cigarettes and marijuana used in the last 30 days; frequency of alcohol and cigarettes past 30 days; average frequency of drug use; number of drugs ever used; age of initiation into drug use; later onset of drug use)	Napoli, M., Marsiglia, F.F., & Kulis, S. (2003).
	Positive feelings about school	MH (Hopelessness Suicidal ideation; Suicide attempts)	Pharris, M.D., Resnick, M.D., & Blum, R.W. (1997).

Behavioral Health Risk Factors	Behavioral Health Protective Factors
<u>Societal Factors</u>	<u>Societal Factors</u>
Prejudice	Social inclusion policies
Perceived discrimination	Anti-discrimination laws
Lack of cultural identify	Education policies
Stigma	Gender-equity policies
Societal norms of accepted behaviors	Awareness raising campaigns
Inadequate health, economic, and educational policies	Responsible reporting in the media

SOCIETAL			
HISTORICAL LOSS			
Risk Factor	Protective Factor	Outcome	Citation Source
Historical loss		SA (Alcohol abuse) MH (Depression)	Whitbeck, L.B., Chen, X., Hoyt, D.R. & Adams, G.W. (2004).
PERCEIVED DISCRIMINATION			
Perceived discrimination and prejudice		MH (Depression, Internalizing symptoms, Suicide attempts) SA (Early onset SA)	Whitbeck, L.B., Walls, M.L., Johnson, K.D., Morrisseau, A.D., McDougall, C.M. (2009)
	Anti- discrimination laws and social inclusion policies	MH (Depression, Suicide attempts) SA (Early onset SA)	Whitbeck, L.B., Walls, M.L., Johnson, K.D., Morrisseau, A.D., McDougall, C.M. (2009)
CULTURE			
Lack of cultural identity		SA (Heavy drinking; Alcohol abuse and/or dependence)	Herman-Stahl, M., Spencer, D.L., & Duncan, J.E. (2003).
	More culturally oriented	SA (Heavy drinking; Alcohol abuse and/or dependence)	Herman-Stahl, M., Spencer, D.L., & Duncan, J.E. (2003).
	Participation in cultural activities	MH (Suicide attempts) SA (Alcohol/drug abuse)	Yoder, K.A., Whitbeck, L.B., Hoyt, D.R., & LaFromboise, T. (2006).

Substance Abuse Disorders: Key Risk and Protective Factors

Setting	Risk Factors	Protective Factors
In the individual	<ul style="list-style-type: none"> • Trauma • Attention deficits, hyperactivity or learning disorders • High emotional distress • Low IQ • Depression 	<ul style="list-style-type: none"> • High IQ • Involvement in social activities • High self-esteem • Good coping skills and problem-solving skills • Achievement motivation
In families	<ul style="list-style-type: none"> • Family members with a history of drug and/or alcohol use • Lack of parental monitoring • Family conflict/abuse 	<ul style="list-style-type: none"> • Parental involvement • Strong value placed on education • Clear expectations regarding drug and alcohol use
In communities	<ul style="list-style-type: none"> • Poverty • Easy access to alcohol and drugs • Afflictions with deviant peers • Overcrowded schools 	<ul style="list-style-type: none"> • Strong neighborhood attachment • After school activities • Faith-based resources • Positive peer role models
In society	<ul style="list-style-type: none"> • Poverty • Social acceptance of underage drinking • Alcohol and drugs easily available • Portrayal of alcohol and other drugs in movies and on TV • High unemployment 	<ul style="list-style-type: none"> • Laws and policies limiting access to alcohol and drugs • Cultural influences • Laws and ordinances strictly enforced

What would prevention activities look like???

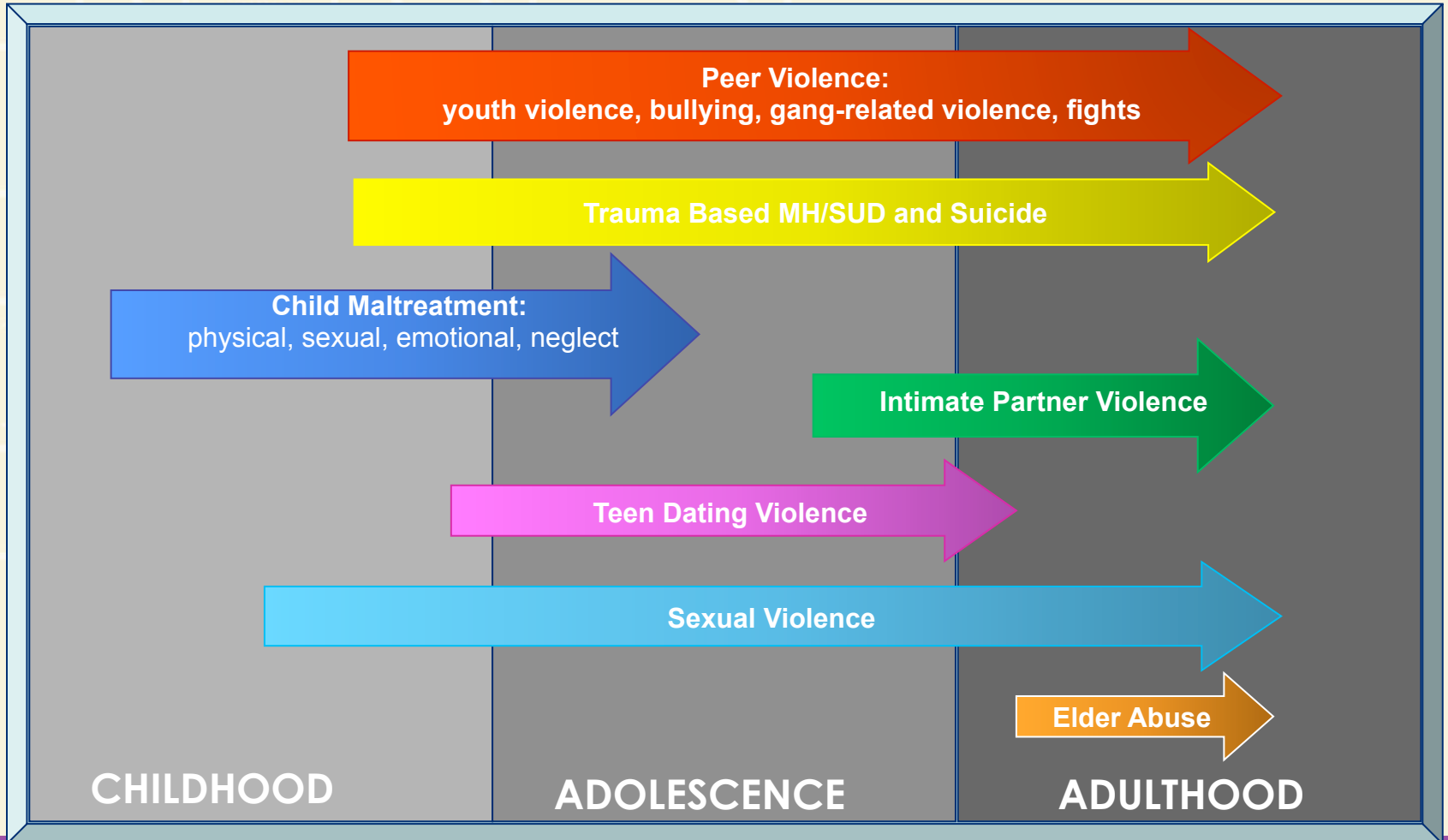
Let's Play Netty Spaghetti !!!!

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Human Services.




Significant overlap of risk and protective factors as related to most Social and Behavioral Health issues

On average, nearly 75%!




Individual Risk Factors

	CM	TDV	IPV	SV	YV	Bullying	MH/SUD or Suicide	Elder Abuse
Low education	X	X	X		X	X	X	
Lack of non-violent problem solving skills	X	X	X	X	X	X	X	X
Poor behavior/ impulse control	X	X	X	X	X		X	
Violent victimization	X	X	X	X	X	X	X	X
Witnessing violence	X	X	X	X	X	X	X	
Mental Health Problems	X	X	X		X		X	X
Substance use	X	X	X	X	X	X	X	X


Source: Wilkins, N., Tsao, B., Hertz, M., Davis, R., Klevens, J. (2014). **Connecting the Dots: An Overview of the Links Among Multiple Forms of Violence**. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention Oakland, CA: Prevention Institute.

Relationship Risk Factors

	CM	TDV	IPV	SV	YV	Bullying	MH/SUD or Suicide	Elder Abuse
Social isolation	X	X	X		X	X	X	X
Poor parent-child relationships	X	X	X	X	X	X	X	
Family conflict	X	X	X	X	X	X	X	
Economic stress	X		X		X		X	X
Association w/ delinquent peers		X	X	X	X	X		
Gang involvement		X	X	X	X			


Source: Wilkins, N., Tsao, B., Hertz, M., Davis, R., Klevens, J. (2014). **Connecting the Dots: An Overview of the Links Among Multiple Forms of Violence**. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention Oakland, CA: Prevention Institute.

Individual/Relationship Protective Factors

	CM	TDV	IPV	SV	YV	Bullying	MH/SUD or Suicide	Elder Abuse
Family support/ connectedness	X	X			X	X	X	X
Connection to a caring adult		X			X		X	
Association w/ prosocial peers		X			X	X		
Connection/ commitment to school		X		X	X	X	X	
Skills solving problems non- violently	X	X			X		X	


Source: Wilkins, N., Tsao, B., Hertz, M., Davis, R., Klevens, J. (2014). **Connecting the Dots: An Overview of the Links Among Multiple Forms of Violence**. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention Oakland, CA: Prevention Institute.

Community Risk Factors

	CM	TDV	IPV	SV	YV	Bullying	MH/SUD or Suicide	Elder Abuse
Neighborhood poverty	X		X	X	X		X	
High alcohol outlet density	X		X		X		X	
Community Violence	X			X	X	X		
Lack of economic opportunities	X		X	X	X		X	
Low Neighborhood Support/ Cohesion*	X	X	X		X		X	


Source: Wilkins, N., Tsao, B., Hertz, M., Davis, R., Klevens, J. (2014). **Connecting the Dots: An Overview of the Links Among Multiple Forms of Violence**. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention Oakland, CA: Prevention Institute.

Community Protective Factors

	CM	TDV	IPV	SV	YV	Bullying	MH/SUD or Suicide	Elder Abuse
Coordination of services among community agencies	X		X				X	X
Access to mental health and substance abuse services	X						X	
Community support and connectedness*	X		X	X	X		X	X

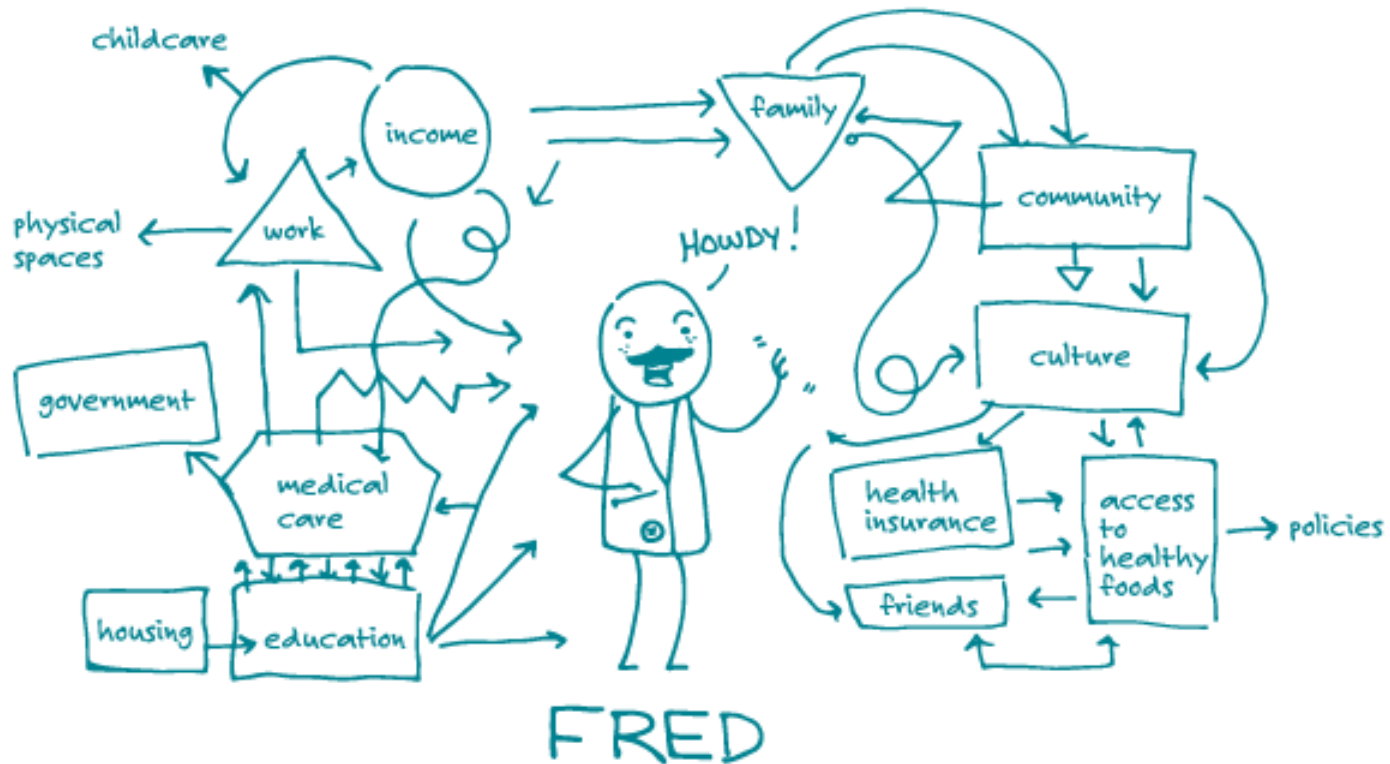
Source: Wilkins, N., Tsao, B., Hertz, M., Davis, R., Klevens, J. (2014). **Connecting the Dots: An Overview of the Links Among Multiple Forms of Violence.** Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention Oakland, CA: Prevention Institute.

Societal Risk Factors

	CM	TDV	IPV	SV	YV	Bullying	MH/SUD or Suicide	Elder Abuse
Norms supporting aggression	X	X	X	X	X		X	X
Media Violence				X	X	X	X	
Societal income inequality	X		X		X	X	X	
Weak health, educational, economic, and social policies/laws	X		X	X			X	
Harmful gender norms*	X	X	X	X	X	X	X	

Source: Wilkins, N., Tsao, B., Hertz, M., Davis, R., Klevens, J. (2014). **Connecting the Dots: An Overview of the Links Among Multiple Forms of Violence.** Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention Oakland, CA: Prevention Institute.

SEE? IT'S THIS EASY!



Can we imagine:

- A generation without one new case of trauma-related mental or substance use disorder?
- A generation without a death by suicide?
- A generation without one person being jailed or living without a home because they have an addiction or mental illness?
- A generation without one youth being bullied or rejected because they are LGBT?
- A generation in which no one in recovery struggles to find a job?

Connecting the Dots: An Overview of the Links Between Multiple Forms of Violence

[www.cdc.gov/violenceprevention/
pub/connecting_dots.html](http://www.cdc.gov/violenceprevention/pub/connecting_dots.html)

QUESTIONS???