



SOUTH CENTRAL PENNSYLVANIA HEALTH CARE QUALITY UNIT

IT'S YOUR HEALTH SPRING 2008

MARCH IS NATIONAL MENTAL RETARDATION AWARENESS MONTH

CAUSES AND PREVENTION OF MENTAL RETARDATION

WHAT IS MENTAL RETARDATION?

The definition used most often in the United States is from the American Association on Mental Retardation (AAMR). According to AAMR, mental retardation is a disability that occurs before age 18. It is characterized by significant limitations in intellectual functioning and adaptive behavior as expressed in conceptual, social and practical adaptive skills. It is diagnosed through the use of standardized tests of intelligence and adaptive behavior. Mental retardation is generally thought to be present if an individual has an IQ test score of approximately 70 or below and a significant deficit in at least one area of adaptive behavior (AAMR, 2002).

WHAT ARE THE CAUSES OF MENTAL RETARDATION?

Mental retardation can be caused by any condition that impairs development of the brain before birth, during birth or in the childhood years. Several hundred causes have been discovered, but in about one-third of the people affected, the cause remains unknown. The three major known causes of mental retardation are Down syndrome, fetal alcohol syndrome and fragile X syndrome. The causes can be categorized as follows:

Genetic conditions

These result from abnormalities of genes inherited from parents, errors when genes combine, or from other disorders of the genes caused during pregnancy by infections, overexposure to x-rays and other factors. There are many genetic diseases associated with mental retardation. Some examples include PKU (phenylketonuria), a single gene disorder. Due to a missing or defective enzyme, children with PKU cannot process a part of a protein called phenylalanine. Without treatment, phenylalanine builds up in the blood and causes mental retardation. Down syndrome is an example of a chromosomal disorder. Chromosomal disorders happen sporadically and are caused by too many or too few chromosomes, or by a change in structure of a chromosome. Fragile X syndrome is a single gene disorder located on the X chromosome and is the leading inherited cause of mental retardation.

Problems during pregnancy

Use of alcohol or drugs by the pregnant mother can cause mental retardation. In fact, alcohol is known to be the leading preventable cause of mental retardation. Recent research has implicated smoking in increasing the risk of mental retardation. Some of other risks include malnutrition, certain environmental toxins, and illnesses of the mother during pregnancy (i.e., toxoplasmosis, cytomegalovirus, rubella and syphilis).

Problems at birth

Prematurity and low birth weight predict serious problems more often than any other conditions. Difficulties in the birth process, such as temporary oxygen deprivation or birth injuries, may cause mental retardation.

Problems after birth

Childhood diseases such as whooping cough, chicken pox, measles and Hib disease that may lead to meningitis and encephalitis can damage the brain, as can injuries such as a blow to the head or near drowning. Lead, mercury and other environmental toxins can cause irreparable damage to the brain and nervous system.



Poverty and cultural deprivation

Children growing up in poverty are at higher risk for malnutrition, childhood diseases, exposure to environmental health hazards and often receive inadequate health care. These factors increase the risk of mental retardation. Also, children in disadvantaged areas may be deprived of many common cultural and educational experiences provided to other youngsters. Research suggests that such under-stimulation can result in irreversible damage and can serve as a cause of mental retardation.



WHAT CAN A COUPLE DO TO REDUCE THE CHANCES OF HAVING A BABY BORN WITH MENTAL RETARDATION?

The health of a baby can depend on how healthy a mother is before pregnancy. Ideally, she should obtain a general health assessment six months before pregnancy that includes:

- Updating immunizations.
- Reviewing use of medications.
- Reviewing diet and vitamin supplementation, including folic acid.
- Considering genetic counseling.
- Stopping use of alcohol, cigarettes or other tobacco forms, illegal drugs and legal drugs not approved by the doctor.

Prenatal care should begin as soon as she suspects she is pregnant. During pregnancy, a woman can protect the developing fetus by:

- Getting plenty of rest and sleep.
- Eating nutritious meals.
- Avoiding alcohol, cigarettes and drugs.
- Avoiding people who are sick.
- Wearing seat belts in a car.
- Not lifting heavy objects.



WHEN SHOULD A COUPLE CONSIDER GENETIC COUNSELING?

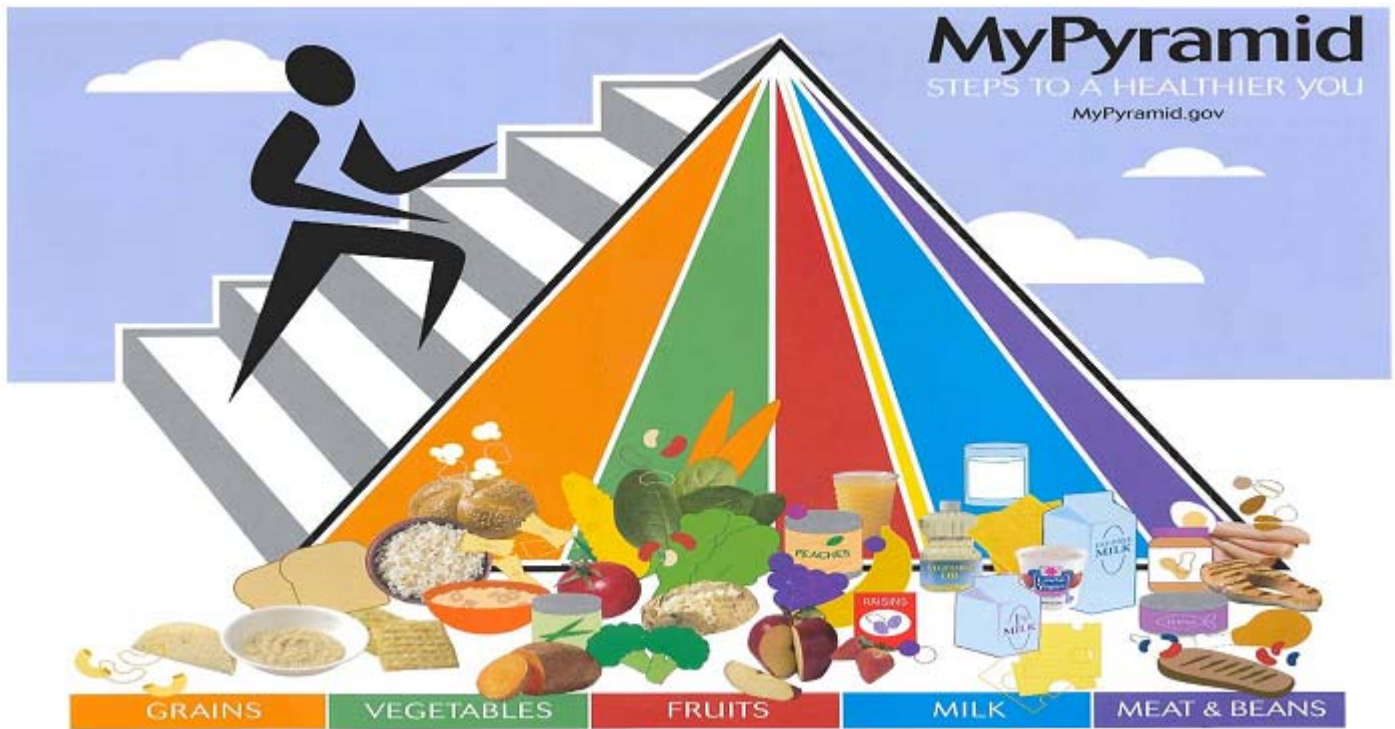
Genetic counseling should be considered if:

- The child may inherit a genetic or chromosomal disorder because of a specific condition in the family.
- A previous birth to either parent resulted in a child with a genetic disorder, unexplained mental retardation or a birth defect.
- The mother has had two or more miscarriages or a baby who died in infancy.
- The mother is 35 years of age or over.
- Either partner is of a race or ethnic group with a high incidence of a genetic condition.
- The partners are blood relatives.

MARCH IS NATIONAL NUTRITION MONTH

Through National Nutrition Month, created in 1973, the American Dietetic Association promotes healthful eating by providing practical nutrition guidance and focusing attention on making informed food choices and developing sound physical activity habits. National Nutrition Month also reminds consumers that registered dietitians are their most valuable and credible source of timely, science-based information.

With more than 67,000 members the American Dietetic Association is the nation's largest organization of food and nutrition professionals. ADA serves the public by promoting optimal nutrition, health and well-being. To locate a registered dietitian in your area, visit the American Dietetic Association at www.eatright.org.



GRAINS	VEGETABLES	FRUITS	MILK	MEAT & BEANS
<p>GRAINS Make half your grains whole</p> <p>Eat at least 3 oz. of whole-grain cereals, breads, crackers, rice, or pasta every day</p> <p>1 oz. is about 1 slice of bread, about 1 cup of breakfast cereal, or 1/2 cup of cooked rice, cereal, or pasta</p>	<p>VEGETABLES Vary your veggies</p> <p>Eat more dark-green veggies like broccoli, spinach, and other dark leafy greens</p> <p>Eat more orange vegetables like carrots and sweetpotatoes</p> <p>Eat more dry beans and peas like pinto beans, kidney beans, and lentils</p>	<p>FRUITS Focus on fruits</p> <p>Eat a variety of fruit</p> <p>Choose fresh, frozen, canned, or dried fruit</p> <p>Go easy on fruit juices</p>	<p>MILK Get your calcium-rich foods</p> <p>Go low-fat or fat-free when you choose milk, yogurt, and other milk products</p> <p>If you don't or can't consume milk, choose lactose-free products or other calcium sources such as fortified foods and beverages</p>	<p>MEAT & BEANS Go lean with protein</p> <p>Choose low-fat or lean meats and poultry</p> <p>Bake it, broil it, or grill it</p> <p>Vary your protein routine – choose more fish, beans, peas, nuts, and seeds</p>

For a 2,000-calorie diet, you need the amounts below from each food group. To find the amounts that are right for you, go to MyPyramid.gov.

Eat 6 oz. every day	Eat 2 1/2 cups every day	Eat 2 cups every day	Get 3 cups every day; for kids aged 2 to 8, it's 2	Eat 5 1/2 oz. every day
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Find your balance between food and physical activity

- Be sure to stay within your daily calorie needs.
- Be physically active for at least 30 minutes most days of the week.
- About 60 minutes a day of physical activity may be needed to prevent weight gain.
- For sustaining weight loss, at least 60 to 90 minutes a day of physical activity may be required.
- Children and teenagers should be physically active for 60 minutes every day, or most days.



Know the limits on fats, sugars, and salt (sodium)

- Make most of your fat sources from fish, nuts, and vegetable oils.
- Limit solid fats like butter, stick margarine, shortening, and lard, as well as foods that contain these.
- Check the Nutrition Facts label to keep saturated fats, trans fats, and sodium low.
- Choose food and beverages low in added sugars. Added sugars contribute calories with few, if any, nutrients.



U.S. Department of Agriculture
Center for Nutrition Policy and Promotion
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UNDERSTANDING MRSA AND CA-MRSA

Excessive use of penicillin antibiotics over the years has led to the development of stronger strains of bacteria that are no longer killed by penicillin-type antibiotics. Methicillin-resistant *Staphylococcus aureus* (MRSA) is a strain of staph bacteria resistant to penicillin and standard penicillin-related antibiotics. MRSA causes the same types of infections that ordinary staph causes. Though MRSA was previously known for being an infection found only in ill people in hospitals, it is now showing up in the general, healthy population. This type of staph infection, known as community-acquired or community-associated methicillin-resistant *Staphylococcus aureus* (CA-MRSA), can be carried by healthy adults and children who do not have any symptoms. These carriers can get a skin or soft tissue infection with CA-MRSA, or non-carriers might get infected from exposure to staph from another person. These people, if they develop a skin or soft tissue infection, will need to be treated with an antibiotic other than a standard penicillin antibiotic.

SIGNS AND SYMPTOMS OF MRSA

It is important to note that it is rare for any staph infection to become life threatening in a healthy person. While resistant to penicillin and penicillin-related antibiotics, most CA-MRSA infection treatment successfully utilizes common alternative antibiotics (i.e., trimethoprim-sulfamethoxazole, clindamycin, tetracycline and a few others). If your doctor prescribes antibiotics, be sure to take the full course of treatment.

WHAT ARE SOME SYMPTOMS OF A STAPH SKIN INFECTION?

- Red bump that may be pus filled (sometimes mistaken for a spider bite)
- Warmth
- Pain
- Swollen, red, tender skin lesions



Folliculitis is a skin condition caused by an inflammation of one or more hair follicles in a limited area. It typically occurs in areas of irritation, such as sites of shaving, skin friction or rubbing from clothes. In most cases of folliculitis, the inflamed follicles are infected with bacteria, especially with *Staphylococcus* organisms, that normally live on the skin.

Boils (furuncles) are painful pus-filled bumps on the skin resulting from the deep infection of a hair follicle. The infection is usually caused by a type of bacteria called *Staphylococcus aureus* (staph). Many people are "carriers" of the staph germ, meaning that it normally lives on their skin or in their nose without doing them any harm. Tiny breaks in the surface of the skin (i.e., those caused by friction or scratching), however, can help the germ gain entry into and infect the hair follicle, resulting in a boil.



Impetigo is a common and contagious bacterial skin infection that is usually a minor problem, but sometimes complications may occur that require treatment. Complications related to impetigo can include deeper skin infection (cellulitis), meningitis, or a kidney inflammation (post streptococcal glomerulonephritis, which is not prevented by treatment). Impetigo often starts with a cut or break in the skin that allows bacteria entry. Impetigo is usually caused by "staph" (*Staphylococcus*) or "strep" (*Streptococcus*) bacteria.

Cellulitis is an infection of the deeper skin tissue, which is most often caused by the bacteria *Streptococcus* or *Staphylococcus*. These bacteria are able to invade the skin through small cracks (fissures) in the skin, causing the sudden appearance of skin redness, swelling and the sensation of heat. Cellulitis is often accompanied by fever and chills.





An **abscess** is an infection characterized by a collection of pus underneath a portion of the skin. Bacteria commonly causing abscesses are *Staphylococcus aureus* and *Streptococcus*. These bacteria enter the skin through any cracks or injury to the skin. That area of skin then becomes red, tender, warm and swollen over days to one to two weeks and a fever may develop. Abscesses can sometimes form if minor superficial skin infections are not treated appropriately and in a timely fashion. Most abscesses resolve quickly once appropriately treated.

Pictures from: <http://www.dermnetnz.org/>

Basic infection control practices are the key to the prevention and control of MRSA in healthcare and other settings when a person is infected or colonized with MRSA. General infection control practices include:

- Washing hands with soap and warm water.
- Keeping cuts and scrapes clean and covered with a bandage until healed.
- Avoiding contact with other peoples wounds or bandages.
- Avoiding sharing personal items like towels, washcloths, razors, clothing or uniforms that may had contact with the infected wound or bandage.
- Wash soiled items with water and detergent and dry them in a hot dryer rather than air drying.
- Careful handling of soiled items. Items like bandages may be discarded in the regular trash and good hand washing after discarding will prevent spread.

Proper Hand Washing



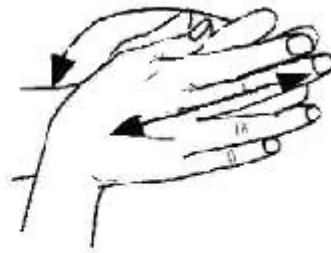
Procedure 1

Wet hands and wrists.
Apply soap.



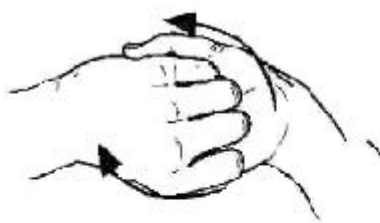
Procedure 2

Right palm over left,
left over right.



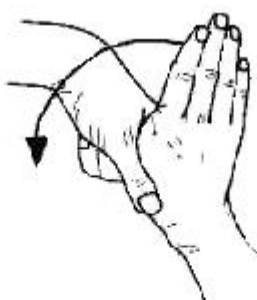
Procedure 3

Palm to palm, fingers
interlaced.



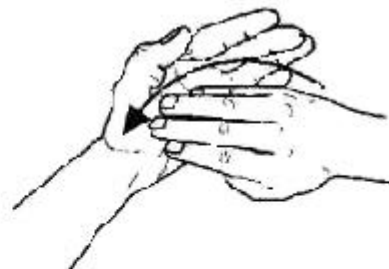
Procedure 4

Back fingers to opposing
fingers interlocked.



Procedure 5

Rotational rubbing of right
thumb clasped in left palm
and vice versa.



Procedure 6

Rotational rubbing backwards
and forwards with tops of
fingers and thumb of right
hand in left and vice versa.

NOTE: Repeat procedures 1-6 until the hands are clean. Rinse hands and pat dry.



MAY IS MENTAL HEALTH MONTH

What is Mental Illness?

A mental illness is a medical condition that disrupt a person's thinking, feeling, mood, ability to relate to others and daily functioning. Just as diabetes is a disorder of the pancreas, mental illness is a medical condition that often results in a diminished capacity for coping with the ordinary demands of life.

Serious mental illnesses include major depression, schizophrenia, bipolar disorder, obsessive compulsive disorder (OCD), panic disorder, post traumatic stress disorder (PTSD) and borderline personality disorder. The good news about mental illness is that recovery is possible.

Mental illness can affect persons of any age, race, religion or income. Mental illness is not the result of personal weakness, lack of character or poor upbringing. Mental illness is treatable. Most people diagnosed with a serious mental illness can experience relief from their symptoms by actively participating in an individual treatment plan.

In addition to medication treatment, psychosocial treatment such as cognitive behavioral therapy, interpersonal therapy, peer support groups and other community services can also be components of a treatment plan and that assist with recovery. The availability of transportation, diet, exercise, sleep, friends and meaningful paid or volunteer activities contributes to overall health and wellness.



Here are some important facts about mental illness and recovery:

- Mental illnesses are biologically based brain disorders. They cannot be overcome through "will power" and are not related to a person's "character" or intelligence.
- Mental disorders fall along a continuum of severity. Even though mental disorders are widespread in the population, the main burden of illness is concentrated in a much smaller proportion — about 6 percent, or 1 in 17 Americans — who suffer from a serious mental illness. It is estimated that mental illness affects 1 in 5 families in America.
- The World Health Organization has reported that four of the 10 leading causes of disability in the US and other developed countries are mental disorders. By 2020, major depressive illness will be the leading cause of disability in the world for women and children.
- Mental illnesses usually strike individuals in the prime of their lives, often during adolescence and young adulthood. All ages are susceptible, but the young and the old are especially vulnerable.
- Without treatment the consequences of mental illness for the individual and society are staggering: unnecessary disability; unemployment; substance abuse; homelessness; inappropriate incarceration; suicide and wasted lives, The economic cost of untreated mental illness is more than 100 billion dollars each year in the United States.

- The best treatments for serious mental illnesses today are highly effective; between 70 and 90 percent of individuals have significant reduction of symptoms and improved quality of life with a combination of pharmacological and psychosocial treatments and supports.
- With appropriate effective medication and a wide range of services tailored to their needs, most people who live with serious mental illnesses can significantly reduce the impact of their illness and find a satisfying measure of achievement and independence. A key concept is to develop expertise in developing strategies to manage the illness process.
- Early identification and treatment is of vital importance; By ensuring access to the treatment and recovery supports that are proven effective, recovery is accelerated and the further harm related to the course of illness is minimized.
- Stigma erodes confidence that mental disorders are real, treatable health conditions. We have allowed stigma and a now unwarranted sense of hopelessness to erect attitudinal, structural and financial barriers to effective treatment and recovery. It is time to take these barriers down.



Check out these websites mentioned in this edition of “It’s Your Health”.

American Dietetic Association

<http://www.eatright.org/cps/rde/xchg/ada/hs.xsl/index.html>

Autism Society of America

<http://www.autism-society.org/site/PageServer>

Mental Health America

<http://www.nmha.org/>

Lyme Disease Foundation

<http://www.lyme.org/>

The ARC

**[http://www.thearc.org/NetCommunity/Page.aspx?
&pid=183&srcid=183](http://www.thearc.org/NetCommunity/Page.aspx?&pid=183&srcid=183)**

NAMI

<http://www.nami.org/>

1512 East Caracas Avenue
Hershey, PA 17033



IDEAS FOR OUR NEWSLETTER?

Contact:

Star Long, B.S., R.N., Director

South Central PA Health Care Quality Unit

Toll-free at 1-877-315-6855 or

sl@theadvocacyalliance.org.