



## EASTERN PENNSYLVANIA HEALTH CARE QUALITY UNIT

# IT'S YOUR HEALTH WINTER 2016



Toll Free 1-877-315-6855  
www.theadvocacyalliance.org



## MENTAL HEALTH: LEARNING THE WARNING SIGNS AND KNOWING WHAT TO DO

If you have worked or volunteered anywhere in healthcare or a related field, you're probably certified to perform CPR, complete basic first aid tasks, and maybe even used an Automated External Defibrillator (AED). Study after study has shown that early recognition of the signs of sudden cardiac arrest, early bystander CPR and early use of an automatic defibrillator drastically increases the chances of a victim of sudden cardiac arrest surviving the event.

The Sudden Cardiac Arrest Foundation published a report in 2013 which showed that of about 424,000 adults who experienced out-of-hospital cardiac arrest only about 5.2%-10.4% survived to be discharged from the hospital when only assessed or treated by EMS. When the victim was experiencing ventricular fibrillation and a bystander witnessed the event, and when the bystander used CPR and an AED, the survival rate rose to 31.7%.

We all can agree that the prevalence and quality of CPR, First Aid, and AED training has increased dramatically over the last decade or so – and we can agree that this has saved lives where previously lives may have been lost. It's obvious, if you train yourself and your staff on these techniques and you'll know what to do in an emergency. As a society we've recognized the risk to public health and the danger of increased loss of life, we've found a strategy to help mitigate the problem, and we've taken steps to implement that strategy.

## SO WHAT DOES ANY OF THAT HAVE TO DO WITH MENTAL HEALTH?

It's quite simple actually – we talk about what to do in the event of a sudden cardiac arrest. We talk about the signs and the symptoms. We expect that to be part of standard training in many workplaces – not just those in the healthcare field. But we don't talk about mental health. We don't talk about suicide. We don't train ourselves and our

### HCQU Trainings

Our Health Care Quality Unit is always available for trainings for groups large and small. In addition to group trainings, we offer web trainings 24 hours a day/7 days per week. If you are interested in scheduling a training, or have any questions about web trainings, please contact Heather Coleman, M.A., Director, Eastern PA Health Care Quality Unit at 610-435-2700 or [hs@theadvocacyalliance.org](mailto:hs@theadvocacyalliance.org).

For a list of our current web trainings please go to <http://www.easternpa-hcqu.org/Trainings/trainings.htm>.

employees to be ready to intervene, to call for help, to do our best to save the lives of people suffering from mental illness. Why don't we do that? Is it that we don't think it's a significant problem, or is it just that we're uncomfortable with the subject matter?

## LET'S TAKE A LOOK AT SOME NUMBERS.

According to the National Institute of Mental Health (NIMH), 1 in 5 adults (43 million people) in the US experienced a diagnosable mental disorder within the last year. 41,149 people committed suicide in 2013. **That's about the same number of deaths due to breast cancer, six times the number of deaths from HIV, and almost three times the number of homicides.** Unlike rates for death by breast cancer, HIV, and homicide, the rate of suicide in the U.S. has not decreased in the past twenty years. In addition to all of this, adults with mental illness experience a median reduction in life expectancy by 10.1 years when compared to those without mental illness. For the U.S. that's about 350,000 deaths each year attributable to mental illness. So yes, this is definitely a problem that is just about as widespread as the problem of sudden cardiac arrest described above. This means that it must be something having to do with the stigma of mental illness that is causing us to shy away from taking action on this issue.



## HELP IS OUT THERE.

Whether we are healthcare professionals, mental health professionals, or simply members of our community – it has come time to give this issue the attention it deserves. We need to learn the warning signs for impending mental health crisis, we need to know what to do when we see those signs, and we need to know where to go for more help. Luckily, many organizations such as Mental Health America (MHA), The National Alliance on Mental Illness (NAMI), and Mental Health First Aid have all launched initiatives to help us learn more about these issues and take action.



# NAMI

National Alliance on Mental Illness

The resources offered by the **National Alliance on Mental Illness (NAMI)** provide a great place to start for those who have had limited contact with mental illness. They each have a large number of articles and help pages that are designed to help people living with mental illness as well as the friends and family of those living with mental

illness. At their site you can learn to recognize some of the signs and symptoms of mental illness, get advice on when to ask for help for yourself or for others, and get a list of resources for further help and support. NAMI also has nearly 1,000 state and local NAMI affiliates across the U.S., where they offer classes and support groups for community members. In addition to all of this, NAMI has a free app for iPhone and Android users called NAMI A.I.R. (Anonymous, Inspiring, Relatable) which is a mobile-based social network designed to allow individuals living with mental health conditions and their caregivers to share their stories and receive support anonymously. Find out about these and other NAMI initiatives at [www.nami.org](http://www.nami.org).

Mental Health America offers a number of online screening tools for various symptoms of mental illness, as well as tools to help locate services for yourself or someone you care about who lives with mental illness. In 2015 MHA launched the **"Before Stage 4"** initiative under the hashtag **#B4Stage4**.

Before Stage 4 encourages us to think about mental illness in the same way we think about physical illness. We don't wait years to treat the early signs

of cancer, heart disease, or diabetes – we begin with preventative measures and treatments at the first sign of symptoms leading to these diseases. Mental Health America reminds us that positive outcomes for men-



tal illness can be predicated on early interventions the same way that they are for physical illness. Check out [www.mentalhealthamerica.net](http://www.mentalhealthamerica.net) to find out more about Mental Health America and #B4Stage4.



Perhaps most importantly **Mental Health First Aid** is a course in which participants learn how to assist someone during a mental health or substance abuse related crisis. Trainees learn how to use a 5 step action plan in various situations such as helping someone through a panic attack, engaging with someone who may be suicidal, or assisting an individual who has overdosed. The training focuses on risk factors, warning sign for mental health and addiction concerns, strategies for how to help someone in both crisis and non-crisis situations, and where to turn for help. You can find out more about Mental Health First Aid, sign up for a local training, or learn how to become a trainer from their website at [www.mentalhealthfirstaid.org](http://www.mentalhealthfirstaid.org).

We need to view mental illness the same way we view medical illness. When someone in one of our communities is diagnosed with cancer or goes through heart surgery, we often hear stories of neighbors doing chores for them, bringing over meals, and providing transportation to appointments. It is unheard of for such a thing to happen when a community member is diagnosed with

schizophrenia or depression. However, the situation is starting to change as 700,000 people have been certified in mental health first aid in the past 10 years.

References:

- <http://www.sca-aware.org/sca-news/aha-releases-latest-statistics-on-out-of-hospital-cardiac-arrest>
- <http://www.sca-aware.org/sites/default/files/u1/images/2014%20AHA%20Stats-3.jpg>
- <https://www.nimh.nih.gov/about/director/2015/mental-health-awareness-month-by-the-numbers.shtml>
- <http://www.nami.org/Find-Support/Air-App>
- <http://www.mentalhealthamerica.net/>
- [http://www.mentalhealthamerica.net/issues/prevention-and-early-intervention-mental-health#\\_edn2](http://www.mentalhealthamerica.net/issues/prevention-and-early-intervention-mental-health#_edn2)
- [http://www.pennlive.com/midstate/index.ssf/2013/03/mental\\_health\\_care.html](http://www.pennlive.com/midstate/index.ssf/2013/03/mental_health_care.html)
- <https://www.mentalhealthfirstaid.org/>



## Check out these websites mentioned in this edition of "It's Your Health"

- [www.webmd.com](http://www.webmd.com)
- [www.medlinepluis.gov](http://www.medlinepluis.gov)
- [www.thyroid.org](http://www.thyroid.org)
- <http://www.sca-aware.org/sca-news/aha-releases-latest-statistics-on-out-of-hospital-cardiac-arrest>
- <http://www.sca-aware.org/sites/default/files/u1/images/2014%20AHA%20Stats-3.jpg>
- <https://www.nimh.nih.gov/about/director/2015/mental-health-awareness-month-by-the-numbers.shtml>
- <http://www.nami.org/Find-Support/Air-App>
- <http://www.mentalhealthamerica.net/>
- [http://www.mentalhealthamerica.net/issues/prevention-and-early-intervention-mental-health#\\_edn2](http://www.mentalhealthamerica.net/issues/prevention-and-early-intervention-mental-health#_edn2)
- [http://www.pennlive.com/midstate/index.ssf/2013/03/mental\\_health\\_care.html](http://www.pennlive.com/midstate/index.ssf/2013/03/mental_health_care.html)
- <https://www.mentalhealthfirstaid.org/>
- [www.aids.gov](http://www.aids.gov)
- <http://www.amfar.org>
- <http://www.avert.org>
- <http://www.who.int/hiv/en/>
- <https://www.worldaidsday.org>
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- [www.epa.gov/do-it-yourself-bed-bug-control](http://www.epa.gov/do-it-yourself-bed-bug-control)
- [www.nysipm.cornell.edu](http://www.nysipm.cornell.edu)
- <http://www.todayifoundout.com>
- [www.epa.gov/pesitcides/bedbugs](http://www.epa.gov/pesitcides/bedbugs)



## PANCREATIC CANCER

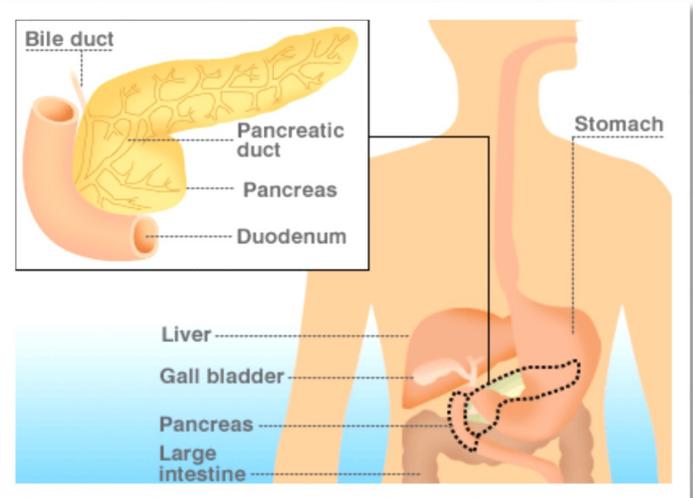
A healthy pancreas is able to produce the right chemicals at the right time in order to properly digest the food we eat for energy. It secretes enzymes necessary for digestion of proteins, carbohydrates and lipase to break down fats into fatty acids and cholesterol. The endocrine portion of the pancreas, or islets of Langerhans, is composed of several cells that secrete hormones

directly into our bloodstream.

Insulin is one of the hormones that it secretes in response to a rise in blood sugar. It is responsible for moving insulin from the blood into the cells of the body, where they are used for energy from glucose. Insulin also helps the liver absorb glucose as glycogen in case the body needs energy during stress or exercise. However, it is an organ and capable of malfunctioning. For example, a pancreas that does not produce enough digestive enzymes can lead to weight loss and diarrhea because of poorly absorbed food. The islets of Langerhans are cells responsible for producing insulin, there is a risk of Diabetes as blood glucose levels rise.

Unfortunately, it is also possible for cancer to develop in the pancreas. It is difficult for physicians to spot the exact cause of pancreatic cancer, but it is often linked to heavy drinking and smoking. Other risk factors include diabetes, chronic pancreatitis, liver problems and stomach infections. Pancreatic cancer is also more common in men and among African Americans.

Pancreatic cancer is the 4<sup>th</sup> leading cause of cancer-related deaths for both men and women in the United States, and it is the 11<sup>th</sup> most commonly diagnosed cancer in men and 8<sup>th</sup> in women. In the year 2015, 48,960 Americans were diagnosed with pancreatic cancer. Seventy-two percent of patients will die within first year of diagnosis. It is the only major cancer with a 5-year survival rate in the single digits, at just 7 percent. Pancreatic cancer is projected to move past breast and colon cancer to become the 2<sup>nd</sup> leading cause of cancer-related deaths in the United States in the year 2020.



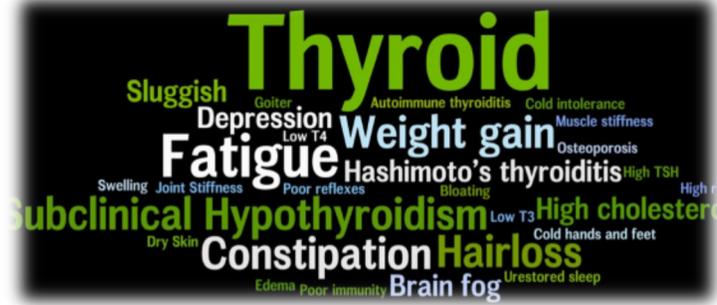
### **SIGNS AND SYMPTOMS OF PANCREATIC CANCER CAN BE THE FOLLOWING:**

- Pain in the upper abdomen from the tumor pushing up on nerves
- Jaundice—a painless yellowing of the skin and eyes and darkening of urine
- Loss of appetite, nausea and vomiting
- Significant weight loss and weakness
- Pale or grey stool and excess fat in stool
- Ascites or fluid in the abdomen
- Itching or pruritus of skin

At this time, there are no clues detectable by blood or other bodily fluids that would indicate a pancreatic tumor. The majority of pancreatic cases are diagnosed in late stage. Because the pancreas is deep within the abdomen, where tumors are hard to detect, and because pancreatic cancer can progress very quickly from stage I (localized within the pancreas) to stage IV (metastasized to other



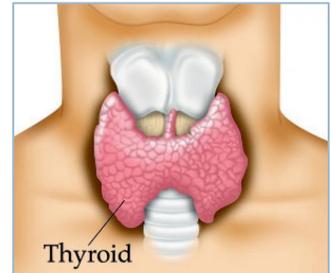
# THYROID DISORDERS



The thyroid gland is a butterfly shaped organ with two lobes connected by the isthmus (a strip of thyroid tissue), and located at the base of the neck below the Adam's apple. Individuals who don't have an isthmus have two

separate thyroid lobes. The thyroid gland releases hormones that control vital body functions such as breathing, cardiac function, temperature, body weight and the peripheral and central nervous systems.

Part of the endocrine system, the thyroid uses iodine from foods to produce triiodothyronine (T3) and thyroxine (T4). The hypothalamus and pituitary in the brain regulate these hormones. If the blood levels of these hormones are low the pituitary releases TSH (thyroid stimulating hormone) to stimulate the thyroid to produce more hormones.



**Hypothyroidism** is an underproduction of thyroid hormones, and occurs more frequently in women than men and in those over 60 years of age. Symptoms include fatigue, dry skin, weight gain, thinning hair, cold intolerance, joint and muscle pain, slowed heart rate and depression. Synthroid (levothyroxine) is a medication that may successfully manage hypothyroidism, and should be taken on an empty stomach, from ½ to 1 hour before meals.

**Hashimoto's Disease (chronic lymphocytic thyroiditis)**, is an autoimmune disorder that attacks the thyroid gland and is the most common cause of hypothyroidism. It occurs in men, women and children. Hypothyroidism can also be caused by thyroid nodules, radiation, surgical removal of all or part of the gland, or may be congenital. Individuals with other autoimmune disorders such as Rheumatoid Arthritis or Type I Diabetes are at risk to develop this condition. Although rare, **myxedema (advanced hypothyroidism)** may occur and can be life-threatening with symptoms including low blood pressure, low body temperature, decreased breathing, unresponsiveness or coma. Some medications, such as lithium, can interfere with thyroid function, as well as calcium, iron, Carafate (for ulcers) and Evista (for osteoporosis).

**Hyperthyroidism (Graves disease) Hyperthyroidism (overactive thyroid)** is a condition in which your thyroid gland produces too much of the hormone thyroxine. This may cause the metabolism to speed up, rapid weight loss, rapid or irregular heart beat, nervousness and anxiety. Graves' disease is an immune system disorder that results in the overproduction of thyroid hormones (hyperthyroidism). Although a number of disorders may result in hyperthyroidism, **Graves' disease** is a common cause. Because thyroid hormones affect a number of different body systems, signs and symptoms associated with Graves' disease can be wide ranging and significantly influence your overall well-being. Although Graves' disease may affect anyone, it's more common among women and before the age of 40. Treatment for Hyperthyroidism may include anti-thyroid medications, radioactive thyroid or surgical removal of all or part of the thyroid.

## THYROID CANCER

Some individuals develop benign nodules which are generally diagnosed by aspiration biopsy and an MRI may be ordered. In some cases surgical intervention is necessary, but most nodules are benign. Specific causes of thyroid cancer are unknown but it is generally treated with surgery, radiation and a diet low in iodine. A goiter is an enlarged thyroid gland and is caused by malfunctioning of the gland, and may be treated by medication, surgery or radioactive iodine depending on the cause of the problem.



## KEEPING YOUR THYROID HEALTHY

Sufficient dietary iodine is necessary to maintain thyroid functioning. Sources include iodized salt, dairy products, seafood, meat and eggs.

The American Thyroid Association recommends screening for thyroid functioning at age 35 and then every 5 years. The American Association of Clinical Endocrinologists recommends screening at an older age. The primary care provider (PCP) will determine when screening should occur, keeping in mind the risk factors of the individual — for example, individuals with Down's Syndrome have a higher incidence of the disease. It is always important to rule out thyroid issues when searching for a diagnosis because the thyroid gland is responsible to regulate numerous bodily functions.

References: [www.webmd.com](http://www.webmd.com); [www.medlineplus.gov](http://www.medlineplus.gov); [www.thyroid.org](http://www.thyroid.org).

## FETAL ALCOHOL SPECTRUM DISORDERS (FASD)

Fetal Alcohol Spectrum Disorders is an umbrella term describing a varying range of effects an individual can experience if they were exposed to alcohol in utero. It is also known as the hidden disability because diagnosis is not usually made until adolescence or adulthood if it is diagnosed at all. There is no safe amount of alcohol during any trimester. Individuals may have certain defining facial characteristics such as, a smooth philtrum (vertical groove on the surface of the upper lip), lower nasal bridge, smaller eye openings, and thinner upper lip just to name a few. Other defining characteristics may be a smaller head diameter which can lead to central nervous system issues. Some of the central nervous system deficits that may arise are problems with balance and coordination. Individuals may display a delay in walking or have difficulty balancing due to the structural abnormality in the brain. An MRI can also detect a decrease in brain size, reduction of the cerebellum and also damage to the basal ganglia.

### FETAL ALCOHOL SPECTRUM DISORDERS ARE 100% PREVENTABLE AND INCURABLE.

Prevention of FASD begins when any woman of childbearing age presents to the doctor. The physician should inquire about alcohol consumption in a nonjudgmental manner. Preparing for a doctor's appointment can be overwhelming especially if prenatal history is unknown (in the case of adoption), or if the woman is hesitant to discuss her prenatal history.

#### Some important information to discuss with the physician is:

- Any alcohol consumption during pregnancy
- Child exhibiting any hyperactive behavior
- Any difficulties in school — especially in math, speech and/or language delays
- Vision or hearing difficulties

**ADHD (attention deficit hyperactivity disorder)** is also a comorbidity with FASD. Individuals with FASD have expressive language which may be much better than their receptive language, and sensory issues are also common. Clothing that have tags or socks that have a reinforced toe can be bothersome to some, and it can be challenging to find clothing that may not irritate the person.

Individuals with Fetal Alcohol Spectrum Disorders may or may not have an **Intellectual Disability**. They may require extra time and guidance to complete tasks due to difficulties with information processing, and may require short and concise directions. Individuals with FASD may also have difficulty following rules and often end up in trouble with law enforcement. They can also have **Impulse Control Disorders** and may not be able to distinguish right from wrong. Some behavioral modifications that may be beneficial are: sticking to daily routines; social cueing; and consistent caregivers if you need to be away from your child. Most importantly, know your child's strengths and limitations. Individuals with an FASD diagnosis are able to attend college and enter the workforce with proper support.

References: <http://www.mayoclinic.org/diseases-conditions/fetal-alcohol-syndrome/basics/definition/con-20021015>; <http://fasdcenter.samhsa.gov/educationTraining/courses/CapCurriculum/competency2/index.aspx>; <http://cdc.gov/NCBDD/fasd/facts.html>; <http://www.nofas.org/recognizing-fasd/>; <http://www.mayoclinic.org/diseases-conditions/graves-disease/basics/definition/con-20025811>; <http://www.mayoclinic.org/diseases-conditions/hyperthyroidism/basics/complications/con-20020986>

## Don't Let the



## Bed Bugs Bite!

# “DON'T LET THE BED BUGS BITE”

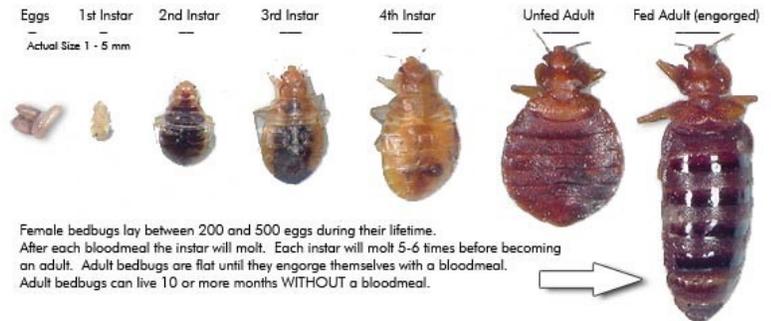
*Bed Bugs (Cimex Lectularius): Cimex meaning bug, and Lectularius meaning bed or couch.*

Bed bugs are thought to have originated in caves in the Middle East, first feeding on bats and then moving on to humans. They have been with us throughout ancient times and came to the Americas with English settlers and explorers. In the early 20th century it was believed the majority of Americans had seen a bed bug and most had been bitten by one. In the 1950's, with the widespread use of DDT to kill cockroaches and other problematic bugs, scientists noticed bed bugs were much less of a problem as the DDT was effective against them as well. During the 1970's DDT was banned after it was discovered to be linked to cancer and was having a negative effect on the environment, especially bird species. In the 1980's not only did we see an increase in bed bugs, we also started seeing them become resistant to other pesticides. Bed bug infestations began to be seen in large cities in the 1990's and continues to be an issue today for hotels/motels, including premium facilities, as well as hospitals, nursing homes, apartments, homes, and more. An increase in international travel is believed to have played a role in the wide spread increase in bed bug infestations.

There are over 90 different species of bed bugs around the world. Each bed bug has a 3 stage life cycle: **egg**, **nymph** and **adult**. Eggs are whitish in color and very small, yet still visible. Once they hatch they are known as a nymph, or juvenile, and are the size of a poppy seed. The nymph will go through 5 stages of feeding and molting as it grows into an adult. As an adult, bed bugs will be the size of an apple seed. As the adult feeds its body can swell to three times that size. Bed bugs have a flat, thin oval shaped body and can range in color from translucent/straw color as a nymph to mahogany brown as an adult. They got the name “bed bug” because they seek out warmth from bodies in warm areas, near or inside warm beds.

### Bedbug Life Cycle

4 Weeks - 5 Months Depending On Conditions



## HOW DO I KNOW IF I HAVE BED BUGS AND WHERE WILL I FIND THEM?



Bed bugs prefer feeding at night but don't exclusively, they also feed during the day. Bed bugs will bite as they are feeding, leaving a small red bump on the skin. While finding evidence of a bite is an easy way to detect you may have them it's not always accurate since the bite can be similar to other bug bites such as (mosquitos or chiggers) or they may resemble a rash or hives that you can get from other sources. Some people do not have any reaction to bed bugs and may not show a red bump at all.

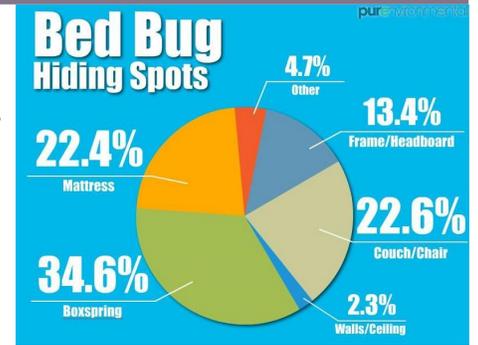
Bed bugs can also leave evidence in the form of a dried, blood-like spot or smear on walls, linens, mattresses or other furniture. These stains are actually bed bug fecal matter that they excrete after eating. You may also find the molted skin of the bed bug. It may be found anywhere the bed bug has been and will have an amber color, and look like a bed bug shell. Again, look closely when trying to identify bed bugs. They can be mistaken for other bugs such as carpet beetles, fleas or lice. When look-



ing for bed bugs be sure to check the common places they like to hide: bedding, mattresses, cushions, curtains, picture frames, cracks in walls or furniture, behind peeling wallpaper, base boards, screw holes in furniture, door jams, window seals, behind wall plates, electrical receptacles, and in clutter.

## IF I DO FIND BED BUGS, HOW DO I GET RID OF THEM?

There are some things you can do yourself, home remedies, to help reduce your bed bug problem but to ensure you have eradicated it entirely, call a professional who has experience with bed bug extermination. Remember, bed bugs can survive an entire year without feeding. This means they can hide in a safe place, maybe somewhere you can't see like behind a wall outlet, and wait to feed.



Heat treatments can be effective in killing bed bugs but as a home remedy you won't be able to reach the levels required to kill them. You need professionals to apply this treatment. Bed bugs need to be exposed to 113 degree heat for 90 minutes or 118 degree heat for 20 minutes and their eggs need to be exposed to 118 degree heat for 90 minutes to kill them. Pesticides can be effective in killing bed bug but may also be best left to the professionals. Any pesticide used needs to be approved by the Environmental Protection Agency (EPA Approved) and used as directed. Any non-approved pesticide can pose a serious threat to you or others.



Heat treatment for bed bugs.

	HEAT TREATMENT	CHEMICAL TREATMENT
Preparation	Remove Candles, Crayons, Aerosols Bag/Seal Excessive Clothing	Bag/Seal Excessive Clothing Throw away infested furniture
Home Visits	1	4 to 8
Time	6 to 12 hours	2 to 3 hours each visit
Life Stages	All	Adult Only
Post Treatment	Put away clothes and bed linens	Put away clothes and bed linens Carpets Professionally Cleaned
Guarantee	Depends on company - typical	Not typical
Environmental	Clean burning diesel or propane	Pesticides and Hormones
Cost	\$1 to \$2 per square foot	\$1 to \$2 per square foot

Things you can do at home to help include: cleaning up clutter, vacuum all furniture and floors, including around doors and baseboards, beds, and picture frames. When emptying a vacuum canister its best to take it outside, empty into a trash bag and throw it out. Wash all bedding, curtains, pillows that have been in use or sitting on the floor or in laundry hampers. Do these things weekly and continue for several months after your home has been treated. If you discard any furniture place a sign on it indicating it may have or have had bed bugs. Since they can

survive for a year someone else may unknowingly pick up unmarked furniture and transport the bugs to their home. If you live in a home that shares a wall with another home make sure to inform the neighbors so they can also check and treat their home as well. Bed bugs could easily travel between walls and you could have a re-infestation down the road.

You can also monitor for any ongoing issues by using a **bed bug interceptor**. This is a plastic dish that has a moat. You place this dish under the feet of your bed and it makes it harder for the bugs to cross over and climb up the bed (you can also add a light layer of talcum powder to the interceptor/moat, making it slippery for the bugs to climb). If you see bed bug evidence in the moat you know you still have a problem.

While bed bugs fall into the "creepy" or "gross" category for most of us, they can be treated, but can be a challenge, and take a while to be rid of, so have patience. Make sure you know what you are looking for and how to properly eradicate them should they make a visit to your home.

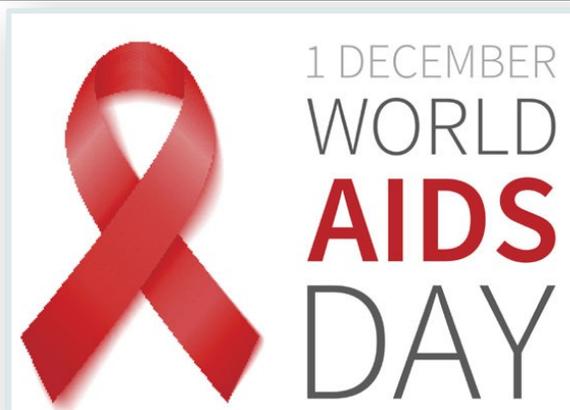


Bed Bug Interceptor

*Established in 1988, World Aids Day is a day for people around the world to join together in the fight against HIV/AIDS, show their support for those living with these diseases, and to remember those who have died.*

### WHAT IS HIV AND AIDS?

HIV stands for human immunodeficiency virus and AIDS stands for acquired immunodeficiency syndrome. HIV is the virus that causes AIDS. The HIV virus attacks your immune system, specifically your T-cells, which helps us fight off infections. The virus uses T-cells to reproduce more of the HIV virus, killing T-cells in the process. If not treated, the virus will continue to weaken a person's immune system, leading to AIDS. Opportunistic infection (infections that take advantage of this weakened immune system) wreak havoc on a person's body and are the most common cause of death in people with AIDS.



### HOW MANY PEOPLE ARE AFFECTED?



The World Health Organization (WHO) reported that in 2015 there were 36.7 million people worldwide living with HIV/AIDS and AIDS-related illnesses had taken the life of 1.1 million people. Aids.gov reports approximately 1.2 million people in the U.S. are living with HIV and of those, 1 in 8 don't know they have the virus. This leaves them at risk of passing on the disease to others unknowingly. The population most affected are gay and bisexual men. Of the more than 44,000 newly diagnosed cases in the U.S. in 2014, this population accounted for 67% of the total cases and 83% of cases in men. Black/African American males are affected at a higher rate, accounting for over 11,000 of the newly diagnosed. It is important to remember however, that this virus does not discriminate. Anyone can be at risk.

### HOW DO YOU GET HIV?

The HIV virus is transmitted through certain body fluids, including blood, semen, vaginal and rectal fluids, and breast milk. The infected fluids need to come in contact with mucous membranes or the bloodstream of another person in order to be passed on. The most common way the virus is passed is through sexual behavior and needle sharing with an infected person. Passing the virus to a baby during pregnancy/childbirth/breastfeeding and accidental needle sticks are possible but less common ways of transmitting the virus. Due to rigorous blood testing, contracting HIV from a blood transfusion is extremely rare these days.

**The HIV virus is not airborne and is not transmitted through casual contact such as:**

- saliva/tears/sweat (unless they are contaminated with infected blood)
- shaking hands
- hugging
- closed-mouth or "social" kissing
- sharing toilets
- sharing glasses or dishes
- water (including pools or water fountains)
- insect bites



### THE ONLY WAY TO KNOW IF YOU HAVE HIV IS TO BE TESTED.

The Centers for Disease Control (CDC) recommend that everyone ages 13-64 years old get tested at least once and those in a high risk group be tested more frequently. Consider speaking with your health

care provider about your risk factors, any possible exposure, which type of HIV test is right for you, what your results mean, and if follow up testing is appropriate. \*

### WHAT ARE THE 3 STAGES OF HIV INFECTION?

- 1) In the initial stage, called the **acute HIV infection stage**, the HIV virus is rapidly reproducing while T-cells are rapidly dying. This stage occurs within 2-4 weeks of contracting the virus. During this time you may have flu-like symptoms or may have no symptoms at all. You are at high risk for passing the virus to others during this stage, due to the high levels of the virus in your body.
- 2) The second stage is called the **clinical latency stage**. During this time the virus is still reproducing but at a much lower rate. It is common for people to experience no symptoms of illness however, you are still able to pass the virus to other during this stage. Without treatment this stage can last as long as 10 years but with treatment this stage can last decades.
- 3) In the **final stage**, AIDS, your immune system is severely compromised and you are at much higher risk for opportunistic infections. You will be considered to have AIDS when either one of the follow things happens: your CD4 (T-cell) count is below 200 cells/mm<sup>3</sup> or you develop one or more opportunistic infections regardless of your CD4 count. Without treatment, your life expectancy once you reach this stage is about 3 years. If you develop an opportunistic infection your life expectancy drops to 1 year.

### HOW IS IT PREVENTED AND TREATED?

While there is currently no cure for HIV/AIDS, the disease is preventable and treatable. When used correctly and consistently, condoms are very effective at preventing transmission of the HIV virus. Pre-exposure prophylaxis (PrEP) consist of taking 1 pill a day to help prevent HIV infection for those who are at very high risk of contracting the virus. Post-exposure prophylaxis (PEP) involves taking antiretroviral medications once or twice a day for 28 day after you have had a potential exposure to the HIV virus. This treatment must be started within 72 hours of the exposure and is not a guarantee that you won't contract the virus.\*

Ongoing treatment is done with **antiretroviral therapy (ART)**. This involves taking a combination of medication that interfere with the viruses' ability to reproduce. This keeps the level of HIV in your body low, giving your immune system the chance to fight off other infections and helping to slow and possibly prevent the progression to AIDS. A lower level of HIV in your body

also decreases your chances of passing the virus on to others. Adhering to your treatment regimen is crucial. HIV is a lifelong disease that requires lifelong treatment to stay healthy. With early intervention and by following your treatment regimen, many people with HIV can live long and happy lives.

*\*Visit [AIDS.gov](http://AIDS.gov) for more in-depth information on the following: transmission possibilities; high risk behaviors; ways to reduce your risk; what testing options are available; risk factors, prevention strategies and treatments. Also read "A Timeline of HIV/AIDS" on [AIDS.gov](http://AIDS.gov) for a look at the history of these diseases.*

**Antiretroviral Therapy...  
What does it do?**

Antiretroviral therapy (ART) is the daily use of a combination of HIV medicines to treat HIV.

ART saves lives, but does not cure HIV

- Reduces the amount of HIV in the body
- Protects the immune system
- Prevents HIV from advancing to AIDS
- Reduces the risk of HIV transmission

**AIDSinfo**  
For more information, visit: [aidsinfo.nih.gov](http://aidsinfo.nih.gov)

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## Ideas for Our Newsletter?

Contact:

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