Mosquito is Spanish for “Little Fly.” The male dies 3—5 days after mating. Females lay 100—200 eggs every third night after mating only once. In a period of weeks, they can create a population of thousands. Some species can live as adults for up to 5—6 months, and they can live up to 2 months indoors.

According to the American Mosquito Control Association, there are over 3,500 species of mosquitos in the world, 176 of them are found in the United States, 50 reside in California, and 25 species are found in Butte County.

Thousands of species feed on the blood of various kinds of hosts, mammals, birds, reptiles, amphibians, and some kinds of fish. By passing from host to host, some mosquitos transmit extremely harmful infections such as: Malaria, Yellow Fever, Chikungunya, West Nile Virus, Dengue Fever, Filariasis, Zika, and other arboviruses, making it the deadliest animal family in the world. Mosquitos also carry heartworm which can be lethal to your dog.

**Butte County Species of Public Health Concern Include:**

**Encephalitis Mosquito (Culex tarsalis):** It is the primary vector of West Nile virus (WNV), Saint Louis encephalitis (SLE), and western equine encephalomyelitis (WEE). In Butte County, this mosquito breeds year round and prefers to feed on birds, but does readily attack humans, horses, and cattle.

**Northern House Mosquito (Culex pipiens):** A major vector of West Nile virus (WNV) and can vector Saint Louis encephalitis (SLE), and western equine encephalomyelitis (WEE). Birds are the principal meal, but they will attack humans and invade homes. They usually breed in spring to fall in Butte County.

**The Wetlands Mosquito (Aedes melaninom):** This major pest is a vector of West Nile Virus (WNV) it’s a secondary vector of western equine encephalomyelitis (WEE) virus in the Central and Sacramento Valleys. They’re aggressive and feed on mammals, humans and can emerge five days after eggs hatch.

**Western Treehole Mosquito (Aedes sierrensis):** A major nuisance mosquito located in the foothill regions of Butte County. It’s the primary vector of Dog Heart-worm. It’s small, aggressive and surfaces in early spring and is active into the summer months. It’s a vicious biter of humans and large mammals.

**Western Malaria Mosquito (Anopheles freeborni):** One of Butte County’s abundant pests and primary vector of Malaria. This aggressive mosquito feeds on mammals, humans and most active at dawn and dusk.

(Continued on Page 2)
To Stop the spread of these mosquitoes, residents of California need to do their part:

1. Call your local mosquito and vector control district if you see or are bitten by small black and white mosquitoes during the day! They are very sneaky, aggressive, and will easily follow you indoors. Once established, these mosquitoes are very difficult if not impossible to eradicate and control, but early detection might make it possible.

2. Drain and Dump standing, stagnant water around your home and property. Keep pet dishes, bird baths and kiddy pools scrubbed, clean and fresh. Mosquitoes are capable of laying thousands of eggs in just one container in your yard that holds water! They lay their eggs in saucers placed under potted plants (fill saucers with sand), clogged rain gutters, standing water under houses, rain barrels/buckets, around leaky faucets, abandoned swimming pools/hot tubs, ornamental/fish ponds, unsealed septic tanks and trash piles. Keep windows and doors properly screened.

3. Use Insect Repellents containing EPA registered active ingredients like DEET, Picaridin or oil of lemon eucalyptus to avoid all mosquito bites.

4. Don’t Transport or share plant stems that have been rooted in water or potted plants and the saucers used with them as the containers could be contaminated with mosquito eggs.

As of February 2018, no invasive mosquitoes have been found in Butte County. However, if you see mosquitoes fitting the above description, please call the Butte County Mosquito and Vector Control District (BCMVCD) immediately at (530) 533-6038. Help prevent more bites and diseases.

Sources:
- http://www.mosquitoworld.net
- https://en.wikipedia.org/wiki/Mosquito
- www.sutter-yubamvcd.org
Sun Safety
Submitted by Robbin Heckert-Bryant, CHDP Administrative Assistant

Summertime means spending more time outside swimming, camping, gardening, exercising and barbecuing. We should protect ourselves from excessive sun exposure while enjoying these activities and be especially attentive to protect children. Children need special attention – they tend to spend more time outdoors, can burn more easily and may not be aware of the dangers. Parents and other caregivers should protect children from excess sun exposure as severe sunburns in childhood may greatly increase risk of melanoma in later life.

The American Cancer Society estimates that in 2018 there will be 91,270 new cases of melanoma (a type of skin cancer) in the United States. About 9,320 people will die of this disease.

Sunburns damage the skin and that damage can lead to skin cancer. Skin cancer is the most common form of cancer in the United States. According to one estimate, about 5.4 million cases of basal and squamous cell skin cancer are diagnosed each year, while more than 91,000 people are diagnosed with melanoma, the deadliest forms of skin cancer. Melanoma accounts for less than 5% of skin cancer cases, but it causes the most skin cancer deaths and is more likely than other skin tumors to spread to other parts of the body. Though the statistics are sobering, skin cancer actually is one of the most preventable forms of cancer. The American Cancer Society encourages people to take steps to help lower their risk of developing this disease.

The American Cancer Society promotes early detection of skin cancer in adults through regular skin self-exams, and an examination for skin cancer should be part of periodic health exams. If there are any changes in the size, color, shape or texture of a mole, the development of a new mole, or any other unusual changes in the skin, you should see a dermatologist (a doctor specializing in skin) immediately.

The National Council on Skin Cancer Prevention has designated Friday, May 25, 2018 as Don’t Fry Day™, an annual effort to raise awareness of skin cancer prevention. This initiative is designed to help people stay well by raising awareness about the steps they can take to prevent skin cancer.

The following tips can help prevent sunburns that can do lasting damage to the skin:

Encourage children to play in the shade between 10 a.m. and 4 p.m. when the sun’s rays are the strongest. Adults should also limit their time in the sun during these hours, and apply sunscreen liberally if out in the sun during this time.

Choose a sunscreen with “broad-spectrum” protection. Sunscreens with this label protect against both UVA and UVB rays. Apply sunscreen with a Sun Protection Factor (SPF) of 30 or higher at least 30 minutes before going outside every day. Reapply every two hours and after swimming, sweating, or towel drying. Check the expiration date on sunscreens; you may need to buy a “fresh” supply.

Do not use sunscreen on babies less than 6 months old. Their skin is thin and their systems can absorb chemicals causing toxicity. They should be kept out of the sun entirely.

Cover up with hats and clothing. There are even companies that make clothing with built in SPF.

Wear sunglasses that block 99%-100% of UVA and UVB rays.

Remember: Slip, Slop, Slap and Wrap! ® Slip! on a shirt. Wear protective clothing when out in the sun. Slop! on sunscreen with an SPF of 30 or higher even on cloudy days. Slap! on a hat that shades the face, neck, and ears, and Wrap! on sunglasses to protect your eyes and sensitive skin around them. (Recommended by the American Cancer Society)

(Continued on Page 4)
Sun Safety (Continued)

- Beware of reflected sunlight; Ultraviolet (UV) rays reflect off water, sand, and snow. UV rays also reach below water’s surface.
- Check with a doctor before sun exposure if you are taking any prescription drugs. Some medications interact with the sun to produce rashes or other side effects.
- Inform a dermatologist (a doctor specializing in skin) of any change in the appearance or sensation of any mole or growth.

For more information about skin cancer and sun protection contact a local dermatologist or the American Cancer Society at 1-800-ACS-2345 – www.cancer.org, or visit the American Academy of Dermatology website at www.aad.org.

HIV Among Youth
Submitted by Lorna Andreatta, Health Education Specialist, Senior

Today’s young people are the first generation that has never known a world without HIV or AIDS. April 10, 2018 was National Youth HIV and AIDS Awareness Day: A day to recognize the impact of the HIV/AIDS epidemic on young people. This is a reminder that investing in young people’s education and health is a critical step to achieving an AIDS-free generation.

The Center for Disease Control and Prevention (CDC) reported that, in 2015, 1 in 5 new HIV diagnoses were among youth 13 to 24 years old. Youth are the least likely persons to be tested for HIV; only 10% of sexually active U.S. high school students have ever been tested for HIV. Youth are also the least likely to be linked to care and have their infection under control. Addressing HIV in youth requires that we give them the tools and information they need to reduce their risk, make healthy decisions, and get care and treatment if needed.

According to the CDC’s 2014 School Health Profiles, sex education is inadequate in many areas of the United States. Sex education is not starting early enough. Fewer than half of high schools teach all 16 topics recommended by the CDC. The percentage of US schools where students are required to receive education on HIV, prevention has decreased from 64% in 2000 to 41% in 2014, according to the School Health Policies and Practices Study.

From 2005 to 2015, CDC data shows a decline in sexual risk behavior among teens. However, prevalence of certain behaviors remains high and puts young people at risk for HIV infection. For example, teens are using condoms less often, with 40% of sexually active high school students reporting that they did not use a condom the last time they had sex.

Youth must be encouraged and reminded to stay healthy and adopt behaviors that reduce their risk for pregnancy, HIV, sexually transmitted disease (STDs) and other related health problems. Educating our youth provides them with the knowledge they need to make healthy choices. To prevent HIV/AIDS and other STDs in youth, we must teach our youth about the diseases, including the importance of prevention, early identification, and treatment, and provide them with access to confidential HIV counseling and testing services.

Testing sites can be accessed here: https://gettested.cdc.gov/
For more information on HIV among youth: https://go.usa.gov/xX9Kv
9 Things to Make Shots Less Stressful...For You and Your Baby

1. Read Up:
Take a moment to read this helpful document before your visit, and read any vaccine information provided by your healthcare professional. Your healthcare professional should have helpful information and can describe possible side effects your child may experience. You can also find credible information on this CDC website. The more informed you are about vaccinations, the better you may feel.

2. Be Happy & Calm
A smile goes a long way, especially between parents and their children. Children often take their parents’ moods into account when experiencing the world around them. Hugs, cuddles, soft whispers, and a calm, reassuring attitude will help ease children through the vaccination process. Remain upbeat and relaxed before, during, and especially after shots. Let your child know everything is ok.

3. Offer a Sweet Drink
Here’s a sweet tip to distract your child and it may even reduce your child’s pain response. If your child is older than six months, offering a sweet beverage, like juice, may help soothe your child. If your baby is breastfeeding, that may be a great way to help calm and relax your child.

4. Bring Their Favorite Things
Whether it’s a toy, a cuddly blanket, or a familiar book, use your baby’s favorite things to keep your baby’s mind off of what’s going on and let your baby focus on something comforting instead. Make sure to check with your doctor before bringing items into the room with you.

5. Be Honest
Kids are super smart. Take some time to explain in simple terms what to expect. Explain that your child may feel a little pinch and it will go away very fast. Even if your baby can’t understand you just yet, your calming, reassuring voice will make your baby feel more at ease. Never tell scary stories about shots or make threats about shots.

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6. Distract Your Child
Parents are the masters of distraction—use this skill! Pick a careful time to call your child’s name right before the shot, sing your child’s favorite song, or just act plain silly to pull your child’s attention away from the shot giver. Keep the distraction going after vaccine is given.

7. Swaddle Your Baby
Swaddling is a great technique to calm young infants. Swaddling involves wrapping your child’s arms, body, and legs all together in a blanket or cloth. The wrap should be comfortable but firm. Swaddling mimics conditions in the womb, reminding your baby of before they were born and putting them more at ease.

8. Big Kids Need Support Too
If your child is older, you can take deep breaths with them to help “blow out” the pain. Have them imagine the pain is leaving their mouth as they breathe out. You also can point out interesting things in the room to help create distractions (see tip #6). You can even tell or read stories. Remember to pack their favorite book!

9. Care After the Shot Counts Too
Sometimes children have mild reactions from vaccines, such as pain where the shot was given, a rash, or a fever. These reactions are normal and will usually go away soon. Once you and your child get home after your vaccination appointment, you can use a cool, wet cloth to ease redness, soreness, and swelling in the place where the shot was given. Reduce any fevers with a cool sponge bath. If your doctor approves, give non-aspirin pain reliever. You also can read them stories, cuddle and praise them, and show them some extra attention. Contact your doctor if anything concerns you.
Breastfed babies have a lower energy expenditure than formula-fed babies. Their metabolic rates during sleep, rectal temperature and heart rates are all lower than formula-fed babies. By 8 months, breastfed babies have consumed about 30,000 kcal less than formula-fed infants. Breastmilk is used more completely with less waste than artificial milk.

Infant Growth – Babies grow fast, about 10g/kg per day the first 4 weeks. That’s about 5-7 oz a week. At that point, they slow down to 1g/kg/day, or 3 oz per week. Breastfed babies grow a little faster than formula-fed babies the first 3 or 4 months. After this time, formula-fed babies grow faster, and breastfed babies actually weigh less than their artificially fed counterparts. There is some evidence that formula fed babies are overfed.

Nutrition

Fat – Human milk fat provides about half of the milk’s calories. Hindmilk, the milk baby receives at the end of the feed, has at least twice as much fat as foremilk does. Within the lipid fraction of human milk are the essential fatty acids. Breastmilk contains a wide range of long-chain polyunsaturated fatty acids, which represents about 88% of the fat in human milk. These fatty acids are crucial in the promotion of infant brain growth, which is at its highest from the third trimester of pregnancy through the first year of life. Docosahexanoic acid (DHA) and arachidonic acid (AA) are associated with visual acuity and cognitive development. Children who were breastfed score higher on IQ tests and cognitive function than artificially fed babies.

Carbohydrates – Lactose takes up the bulk of the carbohydrates in breastmilk. There are also small quantities of oligosaccharides, galactose, and fructose present. Lactose supplies energy to the growing baby, especially the rapidly growing brain. Some oligosaccharides promote the growth of Lactobacillus bifidus, which increases intestinal acidity and stems the growth of pathogens by competing with other bacteria for nutrients.
What’s So Special About Breastmilk? (Continued)

Protein – Human milk contains casein and whey protein. In the beginning of lactation, 90% of the protein is whey. As the relationship progresses, the casein concentration increases. Whey protein has five major components: Alpha-lactalbumin, serum albumin, lactoferrin, immunoglobulins and lysozyme. The latter three ingredients are important to immunological defenses.

Immunity

The human immune system is not fully developed at birth, so infants are vulnerable to infection. Most antigens that mother has been exposed to sensitize local, secretory lymphocytes that migrate to the breast. There, they secrete immunoglobulins into the milk. Breastmilk confers both passive and active immunity. Antibodies in breastmilk provides passive immunity, which gives short-term protection to the baby until his own system begins to respond on its own. Breastfeeding also helps in the development of long term immunity by stimulating an active immune response.

There are two main types of leukocytes or white blood cells in human milk, phagocytes and lymphocytes. Phagocytes, mostly macrophages, comprise 90% of the leukocytes. They engulf and absorb the pathogens. Macrophages also release IgA and produce complement, lactoferrin, and lysozyme. Neutrophils are another phagocytic leukocyte. They are the first cells to an inflamed area, such as mastitis.

Lymphocytes include T cells and B cells. Lymphocytes account for about 4% of the leukocytes in early lactation. Most of the lymphocytes are T cells. There are many ways in which lymphocytes recognize and help destroy antigens, collectively called cell-mediated immunity. They are particularly important in the destruction of viruses. The cells in which viruses live (and hide) shield them from the action of antibodies. T cells decrease rapidly in the first week after birth and decline thereafter. T cells can also be activated into memory T cells, which are crucial to active immunity. Memory T cells live for years and provide long lasting protection.

B cells are similar to T cells in their work and function. They are plasma like, and migrate to the epithelial tissue of the breast. There they release antibodies that recognize and act against specific pathogens in the local environment.

Antibodies – Antibodies are immunoglobulins that recognize and act against a particular antigen. There are five types of immunoglobulins: IgG, IgA, IgM, IgE, and IgD. IgA and IgE play a critical role in protecting the infant from illness.

Breastmilk protection—Breastmilk not only nourishes baby, but protects her from disease and reduces the risk of death. Substances in breastmilk that protect the baby provide tiers of protection. The top tier of secretory antibodies attack specific antigens. Secondary to this is a tier of fatty acids and lactoferrin that provide broad-spectrum protection. Following these are the glycoconjugates and oligosaccharides, each protecting against one or more specific pathogens. Breastmilk is truly “white gold”!

Source:

Sugar is in chicken stock, sliced cheese, bacon and smoked salmon, in mustard and salad dressing, in crackers and nearly every single brand of sandwich bread. It is all around us — in obvious ways and hidden ones — and it is utterly delicious.

It is sugar, in its many forms: Powdered sugar, honey, corn syrup, you name it. The kind you eat matters less than people once thought, scientific research suggests, and the amount matters much more. Our national sugar habit is the driving force behind the diabetes and obesity epidemics and may be a contributing factor to cancer and Alzheimer's.

If you want to challenge yourself, go cold turkey, for one month, a full 30 days - and commit to eating no added sugars or sweeteners. It isn’t easy, but it is worth it. It will reset your sugar-addled taste buds and open your eyes to the many products that needlessly contain sugar. You will know which brands of chicken stock, bacon, smoked salmon, mustard and hot sauce contain added sugar and which ones do not.

Triscuits and pita bread are our friends. They have only a few ingredients, and no sugar. Wheat Thins and most packaged sandwich breads, on the other hand, have an ingredient list that evokes high school chemistry class, including added sugars.

How Much Sugar Can You Avoid Today?

If you give up sugar for a month, you’ll become part of a growing anti-sugar movement. Research increasingly indicates that an overabundance of simple carbohydrates, and sugar in particular, is the number one problem in modern diets. An aggressive, well-financed campaign by the sugar industry masked this reality for years. Big Sugar instead placed the blame on fats — which seem, after all, as if they should cause obesity. But fats tend to have more nutritional value than sugar, and sugar is far easier to overeat. Put it this way: Would you find it easier to eat two steaks or two pieces of cake?

Fortunately, the growing understanding of sugar’s dangers has led to a backlash, both in politics and in our diets. Taxes on sweetened drinks — and soda is probably the most efficient delivery system for sugar — have recently passed in Chicago, Philadelphia, Oakland, San Francisco and Boulder, CO. Mexico and France now have one as well, and Ireland and Britain soon will.

Even before the taxes, Americans were cutting back on sugar. Since 1999, per capita consumption of added sweeteners has fallen about 14 percent, according to the Agriculture Department. Yet it needs to drop a lot more — another 40 percent or so — to return to a healthy level.

A good long-term limit for adults is no more than 38 grams (or about 9 teaspoons) of added sugars per day. A single 16-ounce bottle of Coke has 52 grams.

You don’t have to cut out sugar for a month to eat less of it, of course. But it can be difficult to reduce your consumption in scattered little ways. You can usually find an excuse to say yes to the plate of cookies at a friend’s house or the candy jar during a meeting. Eliminating added sugar gives you a new baseline and forces you to make changes. Once you do, you’ll probably decide to keep some of your new habits.

Breakfasts, for example, have completely changed. Over the past few decades, typical breakfasts in this country have become “lower-fat versions of dessert,” as Gary Taubes, the author of a new book, “The Case Against Sugar,” puts it.

Most breakfasts revolve around cereal and granola, which are almost always sweetened. Eat a combination of eggs, nuts, fruit, plain yogurt and some well-spiced vegetables. It feels decadent, yet it’s actually healthier than a big bowl of granola.

How should you define sugar during your month? The sugar that occurs naturally in fruit, vegetables and dairy is allowed.

(Continued on Page 10)
A Month Without Sugar (Continued)

But every single added sweetener is verboten. No sugar, no corn syrup, no maple syrup, no honey, no fancy-pants agave. Read every ingredient list, looking especially for words that end in “-ose.” Don’t trust the Nutrition Facts table next to the ingredient list, because “0 g” of sugar on that list really means “less than 0.5 g.” Get comfortable asking questions in restaurants, and avoid the artificial sweeteners in diet sodas, too.

Part of the goal, remember, is to relearn how a diet that isn’t dominated by sweeteners tastes. You may have always liked fruit, but will be pleasantly surprised by how delicious it was during the month. When you need a midday treat, a Honeycrisp apple, a few Trader Joe’s apricots or a snack bar might fit the no-sugar bill.

Finally, be careful not to violate the spirit of the month while sticking to the formal rules: Have only one small glass of juice a day, and eat very little with added fruit juices.

There will be times when you don’t enjoy the experience. You will miss ice cream, chocolate squares, Chinese restaurants and/or cocktails. But you will also know that you will get to enjoy them all again.

The unpleasant parts of a month without sugar are temporary, and they’re tolerable. Some of the benefits continue long after the month is over. If you try it your new normal will feel healthier and no less enjoyable than the old.

Sources:
SugarScience.org
The Case Against Sugar, Gary Taubes
Centers for Disease Control and Prevention

Annual Kindergarten Roundup in Gridley
Submitted by Aimee Myles, CHDP Public Health Education Specialist, Senior

This year’s Gridley Kindergarten Roundup was another huge success! Over 100 perspective Kindergartners attended the Roundup with their parents, caregivers, and siblings.

Public Health staff always have a presence at the annual event and this year was no exception. Tou Chanh and Aimee Myles represented the Kids in Safe Seats Car Seat Safety program, the Public Health Clinic, and the CHDP program, also on hand were brochures promoting Childhood Lead Poisoning Prevention.

Aimee promoted the importance of oral hygiene by giving the children a toothbrush and Potter the Otter book courtesy of First 5 Butte County, and an oral health activity book. In addition, if the family needed a dental home, they were given the (CHDP created) dental resource list.

2018 Gridley Kindergarten Roundup
We would like to welcome Sharon “Sam” Randlett-Major, RN, BS, IBCLC, who is our new Nurse Care Coordinator. Sam started with Butte County Public Health Department’s CHDP Program in March, 2018.

Sam graduated from Saddleback College in Nursing, in Mission Viejo, CA in 1979, and obtained her Bachelor of Science in Business Management in 2000 from the University of Phoenix. She attended the UCSD Extension Program in 2003 for her Lactation Educator and International Board Certified Lactation Consultant certification.

Sam has had a wide variety of experience as a Registered Nurse, primarily in Women, Infants and Children’s healthcare, working in the hospital inpatient and outpatient clinics for Family Centered Care, Obstetrics/Gynecology, NICU, Newborn Nursery and Lactation Education and Consulting.

She also worked for 10 years as a Student Healthcare Specialist for San Diego Unified School District, providing specialized healthcare for special education students. This was a wonderful time when raising her son and daughter, to be able to have the same work and school schedules for quality family time.

She has worked in private practice as an IBCLC (International Board Certified Lactation Consultant) providing home visits and case management with high risk families, and also worked as an independent practitioner within a pediatrician’s office.

She and her husband recently moved to Northern California from Southern California and love living in Butte County. They have two grandchildren whom they adore and a Goldendoodle puppy named Maggie Mae.

Sam is very excited to be working with the CHDP Program team and looks forward to establishing relationships with all the wonderful providers. Sam can be reached at 530-538-7829 and looks forward to hearing from you!

There have been no new Provider Information Notices (PIN’s) released since our last newsletter.

Please contact the CHDP office at (530) 538-6222 if you need additional copies.

REMEMBER: Investigations by CPS and law enforcement into alleged child abuse are conducted separately.


Call the National Parent Hotline for help at 1-855-4A PARENT or 1-855-427-2736.