Provider News

A Newsletter for Shasta County Clinicians

Summer 2015

Shasta County Health and Human Services Agency - Public Health

Local healthcare provider returns from treating Ebola patients; surveillance goes smoothly

While West Africa's and the larger world's medical and public health communities' efforts have greatly decreased the largest Ebola epidemic in history, and Liberia has reported only 6 new cases from March thru July 7, 2015, the fact that some areas in Sierra Leone and Guinea are still Ebola "hotspots" remains of concern and potential threat. Due to this, Shasta County Public Health is pleased with the results of our recent monitoring of a returning asymptomatic traveler from an Ebola-affected country. This brave local healthcare provider worked treating Ebola patients for nine grueling weeks and had to be monitored for the mandatory period of 21 days, the longest incubation period, upon returning home.

Public Health had been meeting since August 2014 to develop a comprehensive plan to monitor returning travelers and how to safely care for someone exposed to or suspected of having Ebola. Communicable disease Public Health Nurses contacted this person twice a day, keeping track of their temperature, other symptoms (if any developed) and made note of any visitors they received in the event symptoms materialized. Public Health staff developed history forms and utilized a number of unique tools during the monitoring, including video phone calls and specialized thermometers.

The returning traveler was very cooperative, and completed monitoring without incident. We applaud their great humanitarian work and know that this opportunity has made us even more confident in the plans we have in place, should we have to monitor another person for MERS, Ebola, or other infectious diseases of public health concern.

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Also in this issue

Post Traumatic Stress Disorder

By Shepard Greene, MD,
Chief Psychiatrist
Shasta County HHSA

About 8% of the US population will develop symptoms of Post Traumatic Stress Disorder (PTSD) at some point in their lives — usually as the result of a traumatic event, such as combat, a natural disaster, accident or physical or sexual assault. Primary care settings tend to be the principal point of contact for patients with PTSD, although such patients rarely identify themselves as suffering from the disorder.

What is PTSD?

PTSD symptoms can be grouped into three categories:

Avoidance/Negative alterations in cognitions and mood/Arousal and reactivity

- Staying away from places, events, or objects that are reminders of the experience
- Feeling emotionally numb
- Feeling strong guilt, depression, or worry
- Losing interest in activities that were enjoyable in the past
- Having trouble remembering the dangerous event

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Post Traumatic Stress Disorder, by Dr. Shepard Greene...

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- Acting or feeling as if the traumatic event were recurring. This could include **hallucinations** and **dissociative flashback episodes** often misdiagnosed as schizophrenia or bipolar disorder
- Being easily startled
- Feeling tense or "on edge"
- Having difficulty sleeping, and/or having angry outbursts

Primary care screen for PTSD

The PC-PTSD is a four-item screen designed for use in primary care and other medical settings, and is used to screen for PTSD in veterans at the VA. If a patient answers "yes" to any three items, those screening positive should then be assessed with a structured interview for PTSD by referring to a mental health consultant.

Have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you:

- Have had nightmares about it or thought about it when you did not want to?
- Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?
- Were constantly on guard, watchful, or easily startled?
- Felt numb or detached from others, activities or your surroundings?

PTSD differential and the brain

Although the core symptoms of PTSD differ from the core symptoms of major depression or other anxiety disorders, there is a great deal of overlap. Overlapping symptoms include problems with sleep, concentration, arousal and dysphoria. PTSD is also commonly comorbid with other conditions that include depression, panic disorder, obsessive-compulsive disorder, substance abuse disorders and many characterological disorders.

Thus, a psychopharmacological symptom-based strategy is most useful as the brain is not organized according to ICD/DSM codification. The biological disturbances in PTSD can be conceptualized as a dysregulation of the hypothalamic pituitary adrenal (HPA) axis and the balance between excitatory and inhibitory brain neurocircuitry circuitry within many different areas. The amygdala plays a central role in the fear response. Researchers have found differences between patients with PTSD and those without in both brain structures and brain circuits that process threatening input. The fear circuitry becomes hypersensitive in PTSD and is no longer integrated well with the executive planning and judgment centers in the prefrontal cortex. Even minor stresses may then trigger the "fight or flight" response, which leads to increased heart rate, sweating, rapid breathing, tremors, and other symptoms of hyperarousal in patients with PTSD.

An understanding of hypothetically malfunctioning brain circuits that are regulated by specific neurotransmitters is often useful in selecting a pharmacological treatment strategy. A conceptual understanding of these circuits can guide individual pharmacological treatment choices based upon the patient's complaints, symptoms and presentation.

Psychotherapy

If PTSD is thought to be present, refer to a mental health professional for psychotherapy, which can be clinically effective in treating PTSD.

Medication choices

The FDA has only approved two medications for the treatment of PTSD: sertraline and paroxetine. The strongest empirical evidence for reducing PTSD symptoms are SSRIs, the preferred initial class of medications used in PTSD treatment. While not FDA approved, another first-line pharmacological option is the use of SNRIs, such as venlafaxine XR, desvenlafaxine or duloxetine. Exceptions may occur for patients based upon their histories of side effects, response, comorbidities and personal preferences. Second-line agents can include tricyclic antidepressants, benzodiazepines and alpha 2 delta ligands (gabapentin, pregabalin). Third-line agents include mirtazapine, alpha 1 antagonist such as prazosin (appears favorable for diminishing nightmares), beta blockers (pre-emptive, as strong evidence exists that the use of a beta blocker immediately subsequent to trauma exposure may prevent the onset of PTSD), and atypical antipsychotics (eg, quetiapine XR).

Reference: Stahl's Essential Psychopharmacology, Neuroscientific Basis and Practical Applications, fourth edition, by Steven Stahl, M.D.

Help patients protect themselves from overseas diseases with a travel consultation

Mercy Family Health Clinic is offering comprehensive travel consult appointments that will include:

- Country specific counseling on recommended and required immunizations with appropriate documentation for entry into country
- Administration of those vaccines to the patient at the time of service
- Country-specific antimalarial chemoprophylaxis
- Prescriptions for stand-by antibiotics for traveler's diarrhea
- Large group travel appointments

The clinic also offers country-specific information and preventive measures that travelers can take to prevent other diseases for which there are no vaccines. Information on crime, safety, food and water precautions, consulate information, mosquito bite prevention, disease outbreaks, security issues, altitude illness, and flight health and also provides maps to the traveler from a website called Travax (paid subscription).

Travelers should make appointments at least two months before their departure dates. To make an appointment, call 225-7800.

Ebola... *Continued from page 1*

Additionally, our Public Health Laboratory has been awarded a grant to increase our staff and testing capabilities to prepare for and respond to infections diseases, including Ebola and malaria.

Having a shorter turnaround time to locally test for these diseases will directly improve the quality of care for the residents of Shasta County. It's expected that the Public Health Laboratory will have these changes in place and fully operational by Fall 2016.

In brief

Tobacco cessation: The U.S. Department of Health and Human Services has clarified requirements for health insurers on covering tobacco cessation services: They must cover all seven FDA-approved cessation drugs and all three forms of counseling.

HPV protection: The newly FDA-approved Gardasil 9 adds protection against five additional HPV types—31, 33, 45, 52 and 58 — which cause approximately 20 percent of cervical cancers and are not covered by previously FDA-approved HPV vaccines.

Upcoming trainings

Childhood trauma and its health effects are the focus of an Adverse Childhood Experiences conference for medical providers on **Sept. 11** at the Gaia Hotel with free lunch and CME. To register, visit www.acesconnection.eventbrite.com or call (530) 999-6839.

The gonorrhea epidemic will be the topic of a special four-hour Grand Rounds on Oct. 16 at Mercy Medical Center with free CME and lunch. Shasta County Health Officer Andrew Deckert, M.D., M.P.H., will cover statistics, share gonorrhea outbreak awareness activities and introduce physicians from UCSF/California Pacific Training Center, who will talk about CDC's updated STD treatment guidelines, best practices, taking sexual histories and more.

Dangers of cigarettes

Cigarettes have been linked to 60,000 more deaths each year than previously thought - a total of about 480,000 per year, according to the U.S. Surgeon General. Shasta County Public Health continues to work on educating the public about the dangers of tobacco and e-cigarettes. Shasta County, Redding and Anderson recently amended their tobacco ordinances to include e-cigarettes.

Want to know more about these topics? Go to www.shastahhsa.net and click "Provider News" in the right hand column under "News and Publications."

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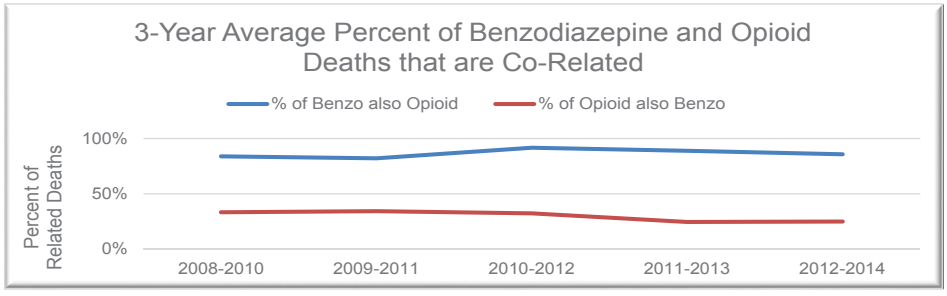
Return Service Requested

In brief

Benzodiazepine and opioid-related deaths



Shasta County's three-year average annual number of benzodiazepine-related deaths has declined slightly (from 10 to 7 per year), while the average number of opioid-related deaths has remained fairly steady (between 22 and 26 per year). From 2008 through 2014, 58 deaths in Shasta County listed one or more specific benzodiazepines as the underlying cause of death (COD).

Deaths related to both benzodiazepine and opioid are shown in the accompanying graph. In 13 of these cases, alcohol was also included in the underlying COD. The numbers may be undercounted, as an additional 109 deaths were excluded because the underlying COD didn't specify the drug involved. Examples include polypharmacy, mixed drug intoxication, mixed drug and alcohol intoxication, drug overdose, etc.

80-90% of local benzodiazepine-related deaths also had opiates involved (top, blue line). **Don't prescribe benzodiazepines and opiates together unless absolutely necessary.**

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Compiled by Jeff VanAusdall, Senior Staff Analyst, Shasta County Health and Human Services Agency. Source: Electronic Death Registration System Database.