Carbon Monoxide from Hookah Smoking:
An Unusual Source of Poisoning

– Public Health Alert –

(Newark, NJ) – Warning. Do NOT smoke hookah pipes in small and/or poorly ventilated spaces (i.e. basements, sheds, dorm rooms, vehicles, attics, boat cabins).

Case: A young adult male passed out after smoking hookah in a small, poorly ventilated room. The patient was transported to the emergency room and was diagnosed with severe carbon monoxide (CO) poisoning; received oxygen and was transferred to a hyperbaric oxygen chamber for further medical care. The long-term neurologic effects are not yet known.

While most people think of gas appliances, heating systems, portable gas generators, charcoal or gas grills, and chimney flues as potential sources of carbon monoxide, smoking hookah is quickly gaining recognition among the healthcare community as a potential source. There are approximately 100 cases reported in the medical literature discussing the risk for CO poisoning to hookah smokers and those around them. The risk of carbon monoxide poisoning depends on the size of the space you are smoking in, the number of people smoking in that space and how well ventilated the space is.

“As we see every heating season, carbon monoxide can and does kill,” says Diane Calello, MD, NJ Poison Control Center Executive and Medical Director, Rutgers NJ Medical School’s Department of Emergency Medicine. Carbon monoxide is known as the “Silent Killer” for a reason. It is a gas that gives no warning – you cannot see it, smell it or taste it. “While the risk of CO poisoning from hookah smoke is recognized among healthcare providers, the risk seems less familiar to hookah smokers themselves.”

Hookah pipes, also known as waterpipes, use charcoal in the process of producing vapor. Unfortunately, charcoal also produces carbon monoxide gas. This potentially deadly gas is inhaled along with the tobacco smoke, possibly leading to severe CO poisoning, particularly if ventilation is poor. Symptoms may include headaches, sleepiness, fatigue, confusion and irritability at low levels. At higher levels, it can result in nausea, vomiting, irregular heartbeat, impaired vision and coordination, brain damage, and death. Unfortunately, symptoms of carbon monoxide poisoning can easily be confused with symptoms of viral illnesses like the common cold or seasonal flu.

“Prevention and early detection are crucial in preventing injury and even death from carbon monoxide,” says Calello. “The well-being of hookah smokers and those around them depend on it.”

Call to Action: Any tobacco use, particularly any use associated with an additional risk of carbon monoxide poisoning, is not recommended. Individuals who nevertheless choose to use hookah pipes should only do so in well-ventilated areas. Have battery-operated carbon monoxide detectors on every level of the building and near every sleeping area. Replace your CO detector every five to seven years.
because the sensors can degrade. Remember to check the batteries of both detectors (fire and CO) when changing the clocks twice a year for daylight savings time.

CO poisoning is serious and should be handled as a medical emergency. Get help immediately if you suspect someone was exposed to carbon monoxide. Call the NJ Poison Control Center unless the person is unconscious, not breathing, hard to wake up, or seizing, then call 9-1-1. Poison control centers are a great resource for information and emergencies. Keep us at your fingertips. Save the Poison Help number (1-800-222-1222) as a contact in your cell phone.

Help is Just a Phone Call Away!

We are social. Join us on Facebook (@NJPIES) and Twitter (@NJPoisonCenter) for breaking news, safety tips, trivia questions, etc.

Real People. Real Answers.

Available for Media Interviews
Diane P. Calello, MD, Executive and Medical Director, New Jersey Poison Information and Education System (NJPIES)
Bruce Ruck, Pharm.D., Managing Director, New Jersey Poison Information and Education System (NJPIES)

About NJPIES
Chartered in 1983, the New Jersey Poison Information & Education System (NJPIES) is New Jersey's only poison control center. Medical professionals such as physicians, registered nurses and pharmacists offer free consultation through hotline services (telephone, text and chat) regarding poison emergencies and provide information on poison prevention, drugs, food poisoning, animal bites and more. In addition, it tracks incidences of adverse reactions to food, drugs and vaccines in order to monitor potential public health issues and provide data to the New Jersey Department of Health, U.S. Food and Drug Administration and the Centers for Disease Control and Prevention. NJPIES’ confidential services are available 24 hours a day, seven days a week, every day of the year. When needed, NJPIES responds to other emergent health issues by expanding hotline services.

NJPIES is designated as the state's regional poison control center by the New Jersey Department of Health and the American Association of Poison Control Centers. It is a division of the Department of Emergency Medicine of Rutgers New Jersey Medical School. NJPIES has a state-of-the-art center located at Rutgers Health Sciences in Newark. NJPIES is funded, in part, by the NJ Department of Health, NJ Hospitals and the United States Department of Health and Human Services.

New Jersey residents should save the Poison Help number, 1-800-222-1222, in their mobile phones and post the number somewhere visible in their home. NJPIES is also available via text 8002221222@njpies.org and chat www.njpies.org.

About Rutgers
Established in 1766, Rutgers, The State University of New Jersey, is America's eighth oldest institution of higher learning and one of the nation's premier public research universities. Serving more than 65,000 students on campuses, centers, institutes and other locations throughout the state, Rutgers is the only public university in New Jersey that is a member of the prestigious Association of American Universities.

Rutgers Biomedical and Health Sciences (RBHS) is the health care education, research, and clinical division of Rutgers University, comprising nine schools and their attendant faculty practices, centers, institutes and clinics; New Jersey’s leading comprehensive cancer care center; and New Jersey's largest behavioral health care network.

###