PATRICIA BEST, JUILIA HARMAN, MARK FLOOD, KRISTY HENSON Dept of Natural Sciences, Forensic Science Program, Fairmont State University, Fairmont WV, 26554, and MATT SCANLON, Dept of Natural Sciences, Chemistry Program, Fairmont State University, Fairmont, WV, 26554. Arsenic Levels in American Brand and Chinese Counterfeit Eyeshadows.

Chinese makeup suppliers create knock-off makeup palettes of popular American brands and sell them online at a much lower cost. The Chinese makeup suppliers follow Chinese regulations according to the Chinese National Medical Products Administration (FDA equivalent) that place different restrictions on the chemicals that can be present in makeup. In this overarching experiment, we tested for the presence of four types of metals in Chinese and American eyeshadow palettes. For this project, I tested for the concentration of arsenic. To test for arsenic presence, three colors of eyeshadow from each American and Chinese made palettes were used. Samples of 0.8g - 0.9g of eyeshadows were digested in a Nitric and Hydrochloric Acid solution. The digested samples were analyzed for arsenic using a Shimadzu GFA – 7000A graphite furnace. Preliminary results show the presence of arsenic in some eyeshadow palettes. Arsenic can be found in water, industrial items, and tobacco especially in China. Long-term effects of arsenic exposure can lead to skin lesions, pulmonary illness, and cancer.