The Population Assessment of Tobacco and Health (PATH) Study Data User Workshop: Biomarker Restricted-Use Files

ICPSR Summer Program, Ann Arbor, MI
August 13-14, 2018

Instructor:
- Katy Edwards, Ph.D., Westat

Co-instructors:
- Asia Khan, MPH
- Tasmia Naz, MSPH

The Population Assessment of Tobacco and Health (PATH) Study is a collaboration between the National Institute on Drug Abuse (NIDA), National Institutes of Health (NIH); and the Center for Tobacco Products (CTP), Food and Drug Administration (FDA). The PATH Study is a household-based, nationally representative, longitudinal cohort study of approximately 46,000 adults and youth (12 years old and older) in the United States. The Study was launched in 2011 to inform the FDA's regulatory activities under the Family Smoking Prevention and Tobacco Control Act that was signed into law in 2009. This workshop will focus on the Biomarker Restricted Use Files (BRUF) from the first wave of data (Wave 1), which was collected from September 2013 to December 2014. Wave 1 adult respondents were asked to provide urine and blood biospecimen samples in addition to questionnaire data on tobacco use, perceptions of tobacco products, health conditions, and other related topics. A subset of Wave 1 respondents was selected to have their biospecimens analyzed, generating biomarker data on exposure to nicotine and its metabolites, metals, polycyclic aromatic hydrocarbons, tobacco-specific nitrosamines, inorganic arsenic, and volatile organic compounds. These biomarker data comprise the Wave 1 BRUF.

Attendees will receive an introduction to the PATH Study, focusing on the study design, data collection procedures, adult instrument, and variables. With this information, participants will be able to formulate research questions appropriate for the PATH Study biomarker data. In addition, participants will gain a thorough understanding of the content and organization of the biomarker data files, interview data files, and weighting files. Participants will also gain knowledge and hands-on experience in linking biomarker data files with interview data files and weighting files, as well as in working with the data and understanding the weighted results.

The focus of this workshop will be on understanding and using the PATH Study data files, not on a specific analytic approach. The workshop will be a combination of lecture, discussion, and hands-on exercises.

The course is designed for academic faculty and research professionals as well as for graduate students interested in tobacco biomarkers of exposure and/or tobacco regulatory science. Participants should be comfortable with data analysis software and quantitative research methods. All examples and exercises will utilize SAS statistical software, although participants may use the software of their choice. The workshop will include two full days of instruction and exercises. To get the most out of the workshop, please plan to attend for the full day on both days.
Day 1 - Monday Aug. 13, 2018

9:00 - 9:30 AM: Introduction

9:30 - 10:30 AM: Session 1: Description of the PATH Study, data collection protocol, and data collection instruments

10:30 - 10:45 AM: Break

10:45 - 11:45 AM: Session 1 cont’d: Adult interview data file structure; Exercise 1: Adult interview (Tobacco user groups)

11:45 AM - 12:00 PM: Review Exercise 1

12:00 - 1:30 PM: Lunch

1:30 - 2:00 PM: Session 2: Biomarker data, linking data

2:00 - 2:40 PM: Exercise 2: Linking data (Adult Interview + Urine collection): Understanding NEQs

2:40 - 3:00 PM: Review Exercise 2

3:00 - 4:00 PM: Exercise 3: Linking data (add UNICM Lab Panel and Urine Weights), exploratory analyses (unweighted)

4:00 - 4:30 PM: Review Exercise 3

4:30 - 5:00 PM: Continue working on exercises as needed

Day 2 - Tuesday Aug. 14, 2018

9:00 - 9:30 AM: Breakfast/How to apply for the RUF

9:30 - 10:30 AM: Session 3: RUF and BRFU data documentation; Introduction to the PATH Study weights

10:30 - 10:45 AM: Break

10:45 - 11:00 AM: Session 3 cont’d: Using the weights: Interview weights or biomarker weights

11:00 - 11:30 AM: Complete course evaluation

11:30 AM - 12:00 PM: Continue working on exercises as needed

12:00 - 1:30 PM: Lunch

1:30 - 2:30 PM: Brief review, Exercise 4: Weighted exploratory analysis (urine only)

2:30 - 3:00 PM: Review Exercise 4

3:00 - 4:00 PM: Exercise 5: Weighted exploratory analysis (blood and urine)

4:00 - 4:30 PM: Review Exercise 5

4:30 - 5:00 PM: Final workshop Q&A