

The Mosaic Landscape of Prescription Stimulant Misuse and Abuse

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Conflict of Interest Statement

- RADARS System is the property of Denver Health and Hospital Authority, a political subdivision of the State of Colorado
- Many manufacturers of prescription opioids or stimulants as well as federal agencies subscribe to RADARS System. No company has special privileges.
- Subscribers receive information, but do not participate in developing the System, data collection, or analysis of the data. They do not have access to the raw data.
- Employees are prohibited from having personal financial relationships with any company
- Future work on this topic is funded by FDA BAA Grant 2020-2021 #145



Prescription Stimulants: Why Should We Care?

• Increasing prescribing, even over past 5 years



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Source: FDA analysis of IQVIA National Prescription Audit 2019

Prescription Stimulants: Why Should We Care?

 Adolescent and young adult age groups most impacted by both use and non-medical use (NMU)



Age

Source: FDA-generated figure from the National Survey on Drug Use and Health, 2018



Prescription Stimulants: Why Should We Care?

• Increasing stimulant mortality, includes prescription products



https://www.cdc.gov/drugoverdose/pdf/pubs/CDC 2019 Surveillance-Report DataSummary presentation.pdf

What is Mosaic Research?



Zooming in by Prescription Stimulant Active Pharmaceutical Ingredients (APIs)



Stimulant Prescribing is Different by API



https://www.cdc.gov/nchs/data-visualization/drug-poisoning-mortality/#dashboard

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RADARS Drug Diversion Program Prescription Stimulant Diversion Trending Up



RADARS Poison Center Program Prescription Amphetamine Intentional Exposures Trending Up



RADARS NMURx Survey Rx Stimulant Nonmedical Use Impacts Large Population



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Zooming in by Routes of Use



RADARS NMURx Survey, Non-Oral Routes of Rx Stimulant NMU Are Fairly Common



RADARS NMURx Survey, Non-Oral Routes of Rx Stimulant NMU Differ by API



Putting It All Together

 Mosaic data should be triangulated to form more complete picture of trends

• Prescription stimulant prescribing continues to increase

• Large portion of the US population is impacted by prescription stimulant NMU



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Putting It All Together

- Non-oral stimulant NMU is fairly common and should be studied further
- Need product-specific data to evaluate risks
 - API differences
 - Immediate vs extended release
 - Unique formulations
- Relationship between prescription and illicit stimulants not yet known, but mortality trends are concerning





Thank you! Janetta L. Iwanicki, MD Chief Scientific Officer Rocky Mountain Poison & Drug Safety

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