

# Poisoning Prevention Change Package

## Purpose

The Poisoning Prevention change package includes: 1) a sample aim statement, 2) a driver diagram and 3) a measurement strategy for achieving the aim of reducing injuries and deaths to infants, children, and adolescents ages 0 through 19 from neonatal abstinence syndrome, household poisonings, and substance misuse.

The Poisoning Prevention change package is intended to implement and spread well-established practices across a large number of pilot sites in states/jurisdictions. We expect the aim to be achieved if you are working across the entire driver diagram (e.g., all drivers, using multiple change ideas) and state/jurisdiction wide. If you are only working in selected areas of the driver diagram, we recommend that you strategically choose reinforcing drivers and change ideas to achieve the greatest impact and then revise your aim statement and goals accordingly.

# Poisoning Prevention Change Package

## Driver Diagram

Primary Driver	Secondary Driver	Change Ideas	Recommended Measures
<b>PD1:</b> Societal level  Culture of poisoning prevention	<b>SD1:</b> Knowledgeable partners and policymakers	<ol style="list-style-type: none"> <li>Educate policymakers about best practices for poisoning prevention programs and policies, including those developed by Poison Control and the Centers for Disease Control and Prevention</li> <li>Educate policymakers about Prescription Drug Misuse Prevention Programs</li> <li>Work with the state hospital association to require hospitals and birthing facilities to provide prenatal, perinatal, and postpartum education for expecting and new mothers on neonatal abstinence syndrome and household poisoning prevention</li> </ol>	1, 2, 3, 4, 5
	<b>SD2:</b> Multi-stakeholder dialogue and partnerships	<ol style="list-style-type: none"> <li>Establish dialogue and partnerships with state Poison Control Center(s)</li> <li>Establish dialogue and partnerships with state hospital association(s)</li> <li>Partner with local communities and public-private organizations (e.g., private health care, academia, business)</li> </ol>	1, 2, 3, 4, 5, 9
<b>PD2:</b> Organizational level  Organizational policies and procedures support the practices and	<b>SD1:</b> Coordination with partners and communities	<ol style="list-style-type: none"> <li>Implement and spread education on safety practices provided by poison control centers and the American Academy of Pediatrics (e.g., anticipatory guidance, written materials, videos, tips)</li> <li>Implement evidence-based programs to increase awareness about proper storage and disposal of prescription drugs, household cleaners, and toxic substances throughout the state or jurisdiction (e.g., National Prescription Drug Take-Back Day)</li> <li>Increase awareness and use of Naloxone and Medication-Assisted Treatment (MAT) with providers and first responders in the community</li> </ol>	4, 5, 9

# Poisoning Prevention Change Package

<p>culture of poisoning prevention</p>	<p><b>SD2:</b> <b>Health, social service, emergency, and school personnel supported and trained in poisoning prevention</b></p>	<ol style="list-style-type: none"> <li>1. Work with hospitals, clinics, and community health centers to ensure consistent use of PDMPs throughout the state or jurisdiction (e.g., education to health care providers on PDMPs, organizational policy development, training on use of PDMPs, integration of PDMPs into electronic health records)</li> <li>2. Work with health practitioners to implement and spread alcohol and drug screening and brief intervention for youth</li> <li>3. Engage and educate health care providers on providing anticipatory guidance on poisoning prevention in places where people live, work, and play (e.g., adolescent wellness visits)</li> <li>4. Train pediatricians, family practitioners, home visitors, emergency medical services (EMS), ED staff, substance use treatment providers, chronic disease providers, and community and behavioral health workers on referral processes (e.g., warm hand off to another professional, etc.)</li> <li>5. Train pediatricians, family practitioners, home visitors, EMS, ED staff, substance use treatment providers, chronic disease providers and community and behavioral health workers on evidence-based assessment of mental health problems</li> <li>6. Engage and educate school personnel on providing poisoning prevention education</li> <li>7. Promote and support evidence-based guidelines for preventing opioid overdose, including the CDC's guidelines for Prescribing Opioids for Chronic Pain</li> </ol>	<p>1, 2, 3, 4, 5, 6, 7, 8, 9</p>
<p><b>PD3:</b> Relational/ individual level  Families and care givers knowledgeable in poisoning prevention</p>	<p><b>SD1:</b> Families and caregivers educated in poisoning prevention</p>	<ol style="list-style-type: none"> <li>1. Implement and spread evidence-based parenting/caregiving programs throughout the state or jurisdiction (e.g., Generation PMTO, Incredible Years, Strengthening Families for Parents and Youth 10-14, Triple P Positive Parenting Program<sup>1</sup>®, Positive Family Support/Family Check-Up)</li> <li>2. Provide families and caregivers with culturally and linguistically appropriate resources about poisoning prevention (e.g., information about Poison Control in multiple languages)</li> <li>3. Provide families and caregivers with resources about adverse childhood experiences (ACES), including prevention and seeking help</li> </ol>	<p>3, 4, 6, 7, 8, 9</p>
	<p><b>SD2:</b> Children and adolescents</p>	<ol style="list-style-type: none"> <li>1. Implement and spread evidence-based substance misuse prevention programs for adolescents throughout the state or jurisdiction (e.g., All Stars, Keepin' It REAL, Life Skills Training, Teen Intervene)</li> </ol>	<p>3, 4, 5, 6, 7</p>

# Poisoning Prevention Change Package

educated in  
poisoning  
prevention

# Poisoning Prevention Change Package

## Measurement Strategy

Select the measures that will give you the best indication of improvement from working on your drivers and change ideas. Your state/jurisdiction is encouraged to choose up to 5 - 7 (or more if needed) measures. More than one change idea may be necessary to move a given measure. We encourage all states/jurisdictions to track 3 state/jurisdiction process measures, monthly or quarterly, and to explore the ability to collect data that is more current.

Note: The measurement strategy does not include a specific measure for each change idea. When selecting measures, consider the set of change ideas that will be necessary to move a measure. This may include change ideas that do not have a “recommended measure” listed in the driver diagram. If you would like guidance on selecting or adding measures, please contact CSN for technical assistance.

State/Jurisdiction Outcome Measures	Process Measures
1. Rate of poisoning related fatalities	1. Number of organizations providing education on substance misuse prevention to expectant and new mothers
2. Rate of poisoning related hospitalizations	2. Number of health care organizations developing and implementing protocols to screen expectant and new mothers for prescription drug misuse during routine prenatal, perinatal, and maternal visits
3. Rate of poisoning related emergency department visits	3. Number of organizations implementing evidence-based poisoning prevention education programs to children and adolescents
	4. Number of organizations implementing evidence-based poisoning prevention education programs
	5. Number of health care organizations implementing practices to ensure consistent use of Prescription Drug Monitoring Programs
	6. Number of schools and organizations implementing evidence-based substance misuse prevention programs
	7. Number of health care organizations providing anticipatory guidance on the risks of prescription drug misuse during adolescent wellness visits
	8. Number of organizations implementing evidence-based parenting/caregiving programs
	9. Number of professionals (e.g., pediatricians, physicians, home visitors, community health workers, social workers, etc.) trained on the assessment of substance misuse risk

## State/Jurisdiction Outcome Measures

Measure	Numerator	Denominator	Data Collection Methods	Reporting Frequency
Rate of poisoning related fatalities	Total number of poisoning deaths among infants, children, and adolescents ages 0 through 19	Total number of infants, children, and adolescents ages 0 through 19	Work with state epidemiologist, using the Poisoning Prevention Outcome Data Worksheet	Monthly or Quarterly depending on what is feasible for your state/jurisdiction
Rate of poisoning related hospitalizations	Total number of poisoning hospitalizations among infants, children, and adolescents ages 0 through 19	Total number of infants, children, and adolescents ages 0 through 19	Work with state epidemiologist, using the Poisoning Prevention Outcome Data Worksheet	Monthly or Quarterly depending on what is feasible for your state/jurisdiction

# Poisoning Prevention Change Package

	adolescents ages 0 through 19			feasible for your state/jurisdiction
<b>Rate of poisoning related emergency department visits</b>	Total number of poisoning emergency department visits among infants, children, and adolescents ages 0 through 19	Total number of infants, children, and adolescents ages 0 through 19	Work with state epidemiologist, using the Poisoning Prevention Outcome Data Worksheet	Monthly or Quarterly depending on what is feasible for your state/jurisdiction

## Process Measures

**Note:** Review the data collection column for guidance on process measures. You may need to conduct assessments or administer questionnaires to determine your population of interest.

Name	Goal	Data Collection	Reporting Frequency
<b>1. Number of organizations providing education on substance misuse prevention to expectant and new mothers</b>	Total number of organizations/agencies you aim to reach	<p>Establish your goal.</p> <p>Define “providing education on substance misuse prevention” and “expectant and new mothers.”</p> <p>Track the aggregate number of organizations/agencies that provide education on substance misuse prevention to expectant and new mothers.</p> <p>Additional data you may find useful to track: Number and type of sites/organizations in your state. Number of expectant and new mothers who receive education on substance misuse prevention.</p>	Monthly
<b>2. Number of health care organizations developing and implementing protocols to screen expectant and new mothers for prescription drug misuse during</b>	Total number of health care organizations you aim to reach	<p>Establish your goal.</p> <p>Define “developing and implementing protocols to screen expectant and new mothers.”</p> <p>Track the aggregate number of healthcare organizations developing and implementing protocols.</p> <p>Additional data you may find useful to track: Type of organization; type of protocol; copy of protocol; the number of expectant and new mothers who are referred for treatment after being screened</p>	Monthly

# Poisoning Prevention Change Package

<p>routine prenatal, perinatal, and maternal visits</p>		<p>for prescription drug misuse during routine prenatal, perinatal, and maternal visits.</p>	
<p>3. Number of organizations implementing evidence-based poisoning prevention education programs</p>	<p>Total number of organizations you aim to reach</p>	<p>Establish your goal.</p> <p>Track the aggregate number of organizations implementing evidence-based poisoning prevention education programs.</p> <p>Additional data you may find useful to track: Type of organization; type of education program; the number of individuals reached through implementing evidence-based poisoning prevention education programs.</p>	<p>Monthly</p>
<p>4. Number of organizations providing education (e.g., anticipatory guidance, written materials, videos) on the services provided by poison control centers</p>	<p>Total number of organizations you aim to reach</p>	<p>Establish your goal.</p> <p>Define “education.”</p> <p>Track the aggregate number of organizations providing education on the services provided by poison control centers.</p> <p>Additional data you may find useful to track: Type of organization(s); organizations offering the service; type of education provided (e.g., anticipatory guidance, written materials, videos); the number of individuals receiving education on the services provided by poison control centers</p>	<p>Monthly</p>
<p>5. Number of health care organizations implementing practices to ensure consistent use of Prescription Drug Monitoring Programs</p>	<p>Total number of health care organizations you aim to reach</p>	<p>Establish your goal.</p> <p>Define “healthcare organizations.” Define “practices.”</p> <p>Track the aggregate number of health care organizations implementing practices to ensure consistent use of Prescription Drug Monitoring Programs.</p> <p>Additional data you may find useful to track: Type of organization; demographics of population reached; type of practices implemented; number of health care providers receiving training and education on the use of PDMPs.</p>	<p>Monthly</p>
<p>6. Number of schools and organizations implementing</p>	<p>Total number of schools and organizations you aim to reach</p>	<p>Establish your goal.</p>	<p>Monthly</p>

# Poisoning Prevention Change Package

evidence-based drug misuse prevention programs		<p>Define “schools and organizations.” Define “drug misuse prevention.”</p> <p>Track the aggregate number of schools and organizations implementing evidence-based drug misuse prevention programs.</p> <p>Additional data you may find useful to track: Type of site(s); type and name of program(s), number of adolescents receiving drug misuse prevention programs.</p>	
<b>7. Number of health care organizations providing anticipatory guidance on the risks of prescription drug misuse during adolescent wellness visits</b>	Total number of health care organizations you aim to reach	<p>Establish your goal.</p> <p>Define “health care organizations.” Define “anticipatory guidance.”</p> <p>Track the aggregate number of organizations providing anticipatory guidance on the risks of prescription drug misuse during adolescent wellness visits.</p> <p>Additional data you may find useful to track: Type(s) of health care organizations; type(s) of anticipatory guidance; the number of health care providers giving anticipatory guidance on the risks of prescription drug misuse during adolescent wellness visits; the number of adolescents receiving anticipatory guidance on the risks of prescription drug misuse during adolescent wellness visits.</p>	Monthly
<b>8. Number of organizations implementing evidence-based parenting/caregiving programs</b>	Total number of organizations you aim to reach	<p>Establish your goal.</p> <p>Define “organizations.”</p> <p>Track the aggregate number of organizations implementing evidence-based parenting caregiving programs.</p> <p>Additional data you may find useful to track: Type(s) of organizations; type(s) of parenting/caregiving programs; number of parents/caregivers receiving parenting/caregiving programs; number of children and adolescents reached through parenting/caregiving programs.</p>	Monthly
<b>9. Number of professionals (e.g., pediatricians, physicians, home visitors, community health workers,</b>	Number of professionals trained on the assessment of substance misuse risk	<p>Establish your goal.</p> <p>Define “training.”</p>	Monthly



# Poisoning Prevention Change Package

<p>social workers, etc.) trained on the assessment of substance misuse risk</p>		<p>Track the aggregate number of professionals trained on the assessment of substance misuse risk.</p> <p>Additional data you may find useful to track: Type(s) of organization offering the training; type(s) of training; type(s) of professional; number of each type of professional; partial or complete training by professional.</p>	
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# Poisoning Prevention Change Package

## References and Resources

- Alexander G. C., Frattaroli S., & Gielen A. C. (2015). The prescription opioid epidemic: An evidence-based approach. [https://www.ihsph.edu/research/centers-and-institutes/center-for-drug-safety-and-effectiveness/research/prescription-opioids/JHSPH\\_OPIOID\\_EPIDEMIC\\_REPORT.pdf](https://www.ihsph.edu/research/centers-and-institutes/center-for-drug-safety-and-effectiveness/research/prescription-opioids/JHSPH_OPIOID_EPIDEMIC_REPORT.pdf)
- All Stars Prevention. (2020). All Stars building bright futures. Retrieved July 21, 2020, from <http://www.allstarsprevention.com/>
- Association of Maternal and Child Health Programs. (2017). The opioid epidemic: Implications for MCH populations. [http://www.amchp.org/Policy-Advocacy/health-reform/resources/Documents/The%20Opioid%20Epidemic\\_Implications%20for%20MCH%20Populations.pdf](http://www.amchp.org/Policy-Advocacy/health-reform/resources/Documents/The%20Opioid%20Epidemic_Implications%20for%20MCH%20Populations.pdf)
- Association of State and Territorial Health Officials. (2015). How state health departments can use the spectrum of prevention to address neonatal abstinence syndrome. <http://www.astho.org/Prevention/Rx/NAS-Framework/>
- Blueprints for Health Youth Development. (2020). Life Skills Training. Retrieved July 21, 2020, from <https://www.blueprintsprograms.com/factsheet/lifeskills-training-lst>
- Centers for Disease Control and Prevention. (2019, August 28). CDC guideline for prescribing opioids for chronic pain. Retrieved July 21, 2020, from <https://www.cdc.gov/drugoverdose/prescribing/guideline.html>
- Centers for Disease Control and Prevention. (2017, June 10). Prescription drug monitoring programs (PDMPs). Retrieved July 21, 2020, from <https://www.cdc.gov/drugoverdose/pdmp/states.html>
- Children's Safety Network. (2019). Resources for preventing poisonings among children and youth from electronic cigarettes. <https://www.childrenssafetynetwork.org/resources/resources-preventing-poisonings-among-children-youth-electronic-cigarettes>
- Connell, A. M., Dishion, T. J., Yasui, M., & Kavanagh, K. (2007). An adaptive approach to family intervention: Linking engagement in family-centered intervention to reductions in adolescent problem behavior. *Journal of Consulting Clinical Psychology*, 75(4), 568-579. <https://doi.org/10.1037/0022-006X.75.4.568>
- Dishion, T. J., & Kavanagh, K. (2005). *Intervening in adolescent problem behavior: A family-centered approach*. The Guilford Press. <https://www.guilford.com/books/Intervening-in-Adolescent-Problem-Behavior/Dishion-Kavanagh/9781593851729/contents>
- Dishion, T. J., Kavanagh, K., Schneiger, A., Nelson, S., & Kaufman, N. K. (2002). Preventing early adolescent substance use: A family-centered strategy for the public middle school. *Prevention Science*, 3, 191-201. <https://doi.org/10.1023/A:1019994500301>
- Drug Enforcement Administration. (n.d.). Take back day. Retrieved July 21, 2020, from <https://takebackday.dea.gov/>

# Poisoning Prevention Change Package

Generation PMTO. (2016). GenerationPMTO Steps to successful planning. Retrieved July 21, 2020, from <https://www.generationpmto.org/>

Hansen, W. B., & Graham, J. W. (1991). Preventing alcohol, marijuana, and cigarette use among adolescents: Peer pressure resistance training versus establishing conservative norms. *Preventive Medicine*, 20(3), 414-430. [https://doi.org/10.1016/0091-7435\(91\)90039-7](https://doi.org/10.1016/0091-7435(91)90039-7)

The Incredible Years. (2013). The Incredible Years. Retrieved July 21, 2020, from <http://www.incredibleyears.com/>

REAL Prevention. (2019). Keepin It REAL. Retrieved July 21, 2020, from <https://real-prevention.com/keepin-it-real/>

McNeal, R. B., Jr., Hansen, W. B., Harrington, N. G., & Giles, S. M. (2004). How All Stars works: An examination of program effects on mediating variables. *Health Education & Behavior*, 31(2), 165-178. <https://doi.org/10.1177/1090198103259852>

National Institute on Alcohol Abuse and Alcoholism. (2019). Alcohol screening and brief intervention for youth: A practitioner's guide. <https://www.niaaa.nih.gov/sites/default/files/publications/YouthGuide.pdf>

Ontario Public Health Association. (2015). Strengthening families for parents and youth (SFPY). Retrieved July 21, 2020, from <http://sfpy-pad.org/>

SafeKids Worldwide (2020). Keeping kids safe around medicine: Insights and implications. [https://www.safekids.org/sites/default/files/medicine\\_safety\\_study\\_2020-v14.pdf](https://www.safekids.org/sites/default/files/medicine_safety_study_2020-v14.pdf)

Slater, M. D., Kelly, K. J., Edwards, R. W., Thurman, P. J., Plested, B. A., Keefe, T. J., Lawrence, F. R., & Henry, K. L. (2006). Combining in-school and community-based media efforts: Reducing marijuana and alcohol uptake among younger adolescents. *Health Education Research*, 21(1), 157-167. <https://doi.org/10.1093/her/cyh056>

Triple P International. (n.d.). Triple P positive parenting program. Retrieved July 21, 2020, from <https://www.triplep.net/glo-en/home/>