

**The Mystery of Risk**  
*Drugs, Alcohol, Pregnancy and the Vulnerable Child*

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**Biological Basis of the Effects of Prenatal Drug Use: The Catecholamine System**

*Catecholamines*

(C) NTI Upstream, 2015

The diagram illustrates the catecholamine system. It shows two blue rectangular boxes representing neurons. The left box has a white arrow pointing right towards a cluster of small white circles representing neurotransmitters. The right box has a white arrow pointing right away from another cluster of small white circles. In the center, between the two boxes, there are several small white circles, some of which are being taken up by the right neuron, indicated by a red arrow pointing towards it.

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**Biological Basis of the Effects of Prenatal Drug Use: Methamphetamines**

*Catecholamines*

(C) NTI Upstream, 2015

This diagram is similar to the one above, showing two blue rectangular boxes representing neurons. The left box has a white arrow pointing right towards a cluster of small white circles. The right box has a white arrow pointing right away from a cluster of small white circles. In the center, there are several small white circles. However, instead of a red arrow pointing towards the right neuron, there are three red arrows pointing away from the right neuron towards the neurotransmitters in the center, indicating that methamphetamine is blocking the reuptake of neurotransmitters.

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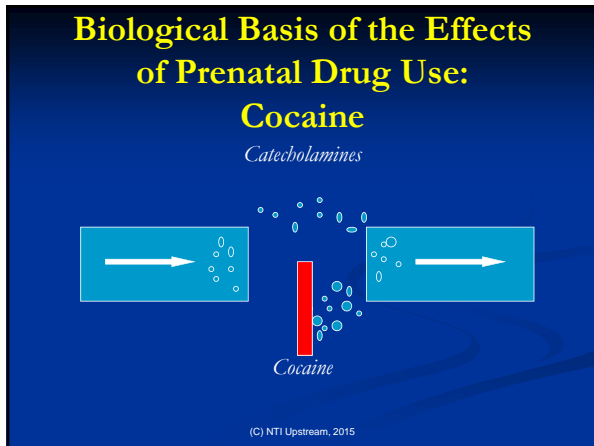
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- ### Maternal Complications
- Pre-term labor
  - Intrauterine growth retardation
  - *Abruptio placentae*
- (C) NTI Upstream, 2015

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## Predictors of Low Birth Weight

Tobacco had a **3x** greater impact than cocaine on predicting low birth weight.

(C) NTI Upstream, 2015

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## Neonatal Complications

- Prematurity
- Low birth weight
- Failure to thrive
- SIDS
- Dysmorphology

(C) NTI Upstream, 2015

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**Neonatal Complications**

- Low birth weight
- Prematurity
- Failure to thrive
- SIDS
- Dysmorphology
- NAS
- CNS damage

(C) NTI Upstream, 2015

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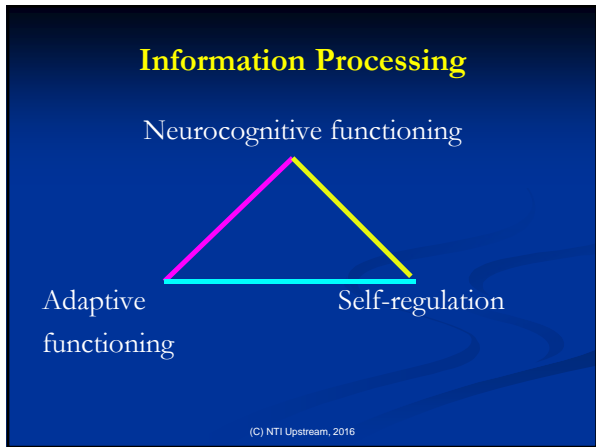
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