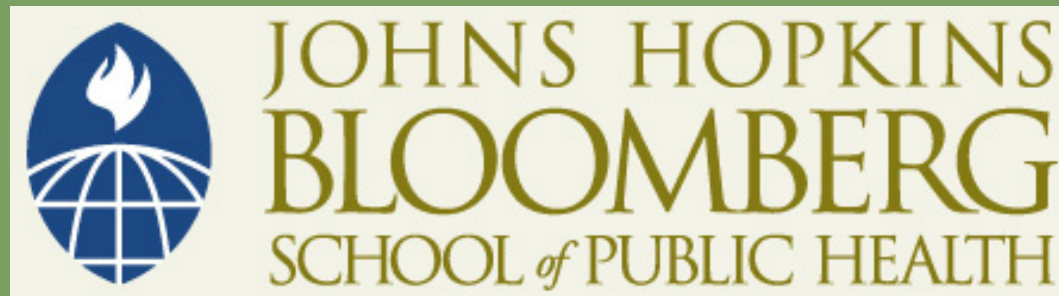


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JOHNS HOPKINS
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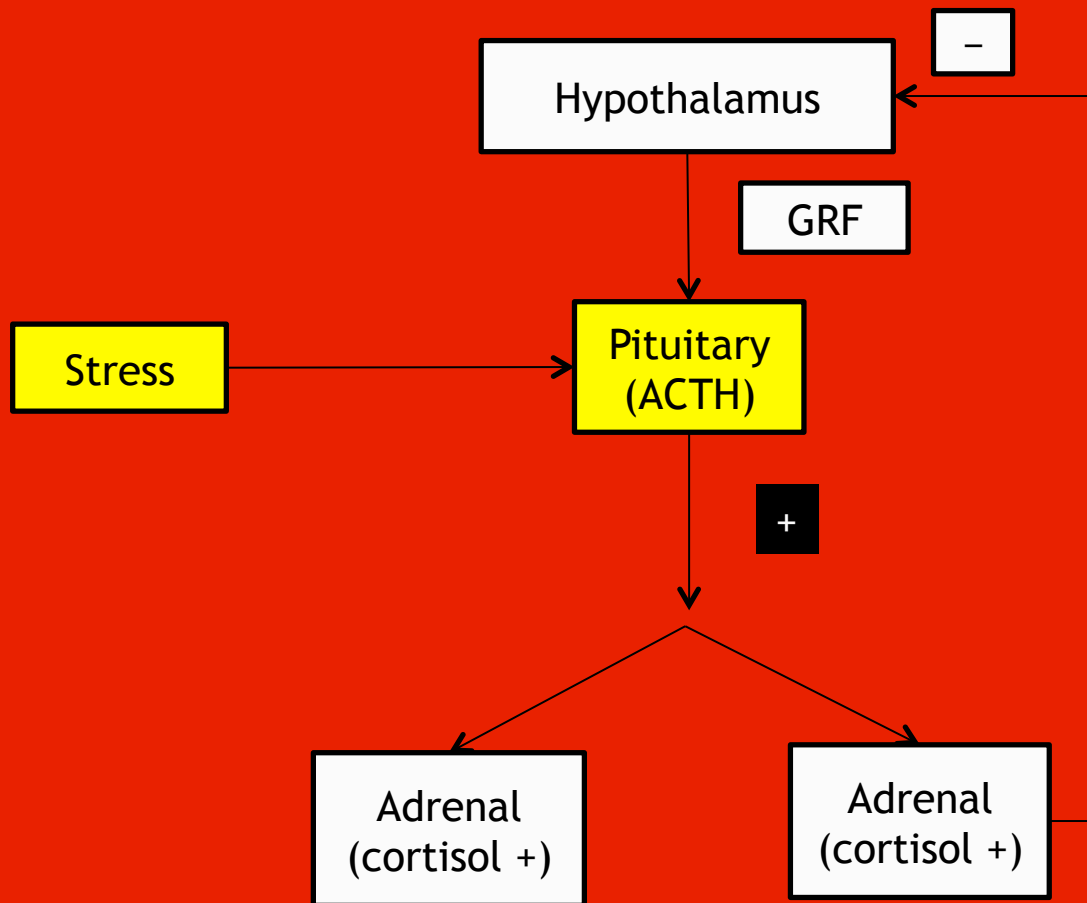
Section E

How Does Violence Impact Neurodevelopment of Children?

Development within Toxic Environments

- Brain development occurs within the context of the environment
- *Toxic environments* impede normal brain development

The Process of Toxic Stress



Persistently Elevated Cortisol in Childhood

- Decreased synaptic and dendritic density early in life
- Diversion of brain resources away from learning and to survival (e.g., fight or flight)
- Interruption of normal neurotransmitters (e.g., serotonin)

The Neurodevelopmental Impact of Chronic Abuse

- Diminished hippocampal volume
- Impaired development of the frontal lobe (executive functioning)
- Diminished emotional control
- Problems with social relations and academic performance

Neighborhoods and Child Development

- How do neighborhoods affect child development?

Collective Efficacy

- ***Social cohesion*** (which is trust + shared social values) and ***informal social controls*** (e.g., the extent that neighbors look out for each other) lead to the capacity for ***collective action***

The Gautreaux Court Case Experiment

- Does environment matter? (Chicago, 1976)
- 4,000 black families in low-income high-rise dwellings (“the projects”) were randomly assigned to a suburban white community or to an urban white community
- Outcomes for children

	Suburban	Urban
School dropout	5%	20%
College enrollment	54%	21%

Protective Factors

- What protects some young people in the face of growing up in toxic environments?

Vulnerability, Family Instability, and Negative Outcomes

- Vulnerability + family instability predispose to negative outcomes (Mednick, 1988)
- Arrest for violent crime

Family stable	Minor physical impairment	
	No	Yes
No	20%	70%
Yes	15%	15%

Resilience to Violence: What Makes a Difference?

- Caring adult (ideally a parent)
- A community “safe haven” (e.g., school)
- Child’s internal resources (shaped by the contexts in which they live)
 - Average intelligence
 - Attractiveness
 - Self-efficacy
 - Religious affiliation
 - Skills/talents
 - Financial advantage