

The Y Factor: **You've Got Male**

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From Here to Paternity

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Get Ready to Get Pregnant

Your Complete Prepregnancy Guide to
Making a Smart and Healthy Baby



**Relationality is primary,
All else is derivative.**

- Ronald David

Black babies are dying because their mothers are dying in dead relationships.

- Sister Byllye Avery

**Where is the “F”
In MCH?**

Where is the “F” in MCH?

- Preconception care for men
 - Male involvement
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Preconception Care for Men

Key Components of Preconception Care for Men

1. Reduce unintended pregnancies
 2. Improve pregnancy outcomes
 3. Improve reproductive health for women
 4. Improve reproductive health behavior
 5. Prepare for fatherhood
 6. Improve men's health
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Key Components of Preconception Care for Men

1. Reproductive life plan
 2. Past medical and surgical history
 3. Medication use
 4. Infections & immunizations
 5. Family history & genetic risks
 6. Healthy weight & nutrition
 7. Risk behaviors
 8. Mental health
 9. Occupational & environmental exposures
 10. Physical examination & laboratory testing
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1. Reproductive Life Plan

Reproductive Life Plan

- ❑ A set of personal goals about having (or not having) children based on personal values and resources
- ❑ A plan to achieve those goals

Examples of a Reproductive Life Plan

1. Do you hope to have any (more) children?
 2. How many children do you hope to have?
 3. How long do you plan to wait until you (next) become pregnant?
 4. How much space do you plan to have between your pregnancies?
 5. What do you plan to do until you are ready to become pregnant?
 6. What can I do today to help you achieve your plan?
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Do Men Have A Biological Clock, Too?

- Increased sperm DNA damage with increasing age
 - Accumulation of genetic mutations
 - Accumulation of environmental insults
 - Decline in cell repair & apoptosis (programmed cell death)
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Do Men Have A Biological Clock, Too?

- More than 20 diseases correlated with paternal age
 - Achondroplasia
 - Marfan syndrome
 - Autism
 - Schizophrenia (1:110 in men > 40)
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2. Past Medical & Surgical History

Past Medical & Surgical History

- Diabetes mellitus
 - Obesity
 - Varicocele
 - Sexually transmitted infections
 - History of radiation or chemotherapy
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Men's Health

- Review of systems
 - Chest pain
 - Headaches
 - Change in bowel habits or blood in stool
 - Testicular swelling or lump
 - Painful urination or urethral discharge
 - Genital rash, bumps or ulcers
 - Erectile dysfunction
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3. Medication Use

Examples of medications that can lower sperm count & quality

- Alkylating agents
 - Calcium channel blockers
 - Cimetidine
 - Colchicine
 - Corticosteroids
 - Cyclosporine
 - Erythromycin
 - Gentamicin
 - Methadone
 - Neomycin
 - Nitrofurantoin
 - Phenytoin
 - Spironolactone
 - Sulfasalazine
 - Tetracycline
 - thioridazine.
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4. Infections & Immunizations

Infections & Immunizations

Infections

- Sexually transmitted infections
- Periodontal infections

Immunizations

- Recommendations updated annually by the CDC Advisory Committee on Immunization Practices
<http://www.cdc.gov/vaccines/recs/ACIP/default.htm>
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5. Family History & Genetic Risks

Genetic Risks

Family history

- ✓ Obtain a 3-generation history

Age

Ethnic background

- "Ashkenazi Jewish Panel"
 - ✓ Gaucher disease Type 1,
 - ✓ Tay-Sachs,
 - ✓ Cystic fibrosis,
 - ✓ Familial dysautonomia (Riley-Day syndrome),
 - ✓ Canavan disease,
 - ✓ Niemann-Pick disease,
 - ✓ Fanconi anemia group C,
 - ✓ Bloom syndrome
 - ✓ Mucopolysaccharidosis IV

Known genetic disorder

- ✓ Klinefelter syndrome
 - ✓ Cystic fibrosis
 - ✓ Kartagener syndrome
 - ✓ Polycystic kidney disease
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6. Healthy Weight & Nutrition

Promote Healthy Weight

- In 2004, 62% of U.S. men aged 20-39 were overweight or obese (BMI >25)

 - Overweight/obesity
 - Lower testosterone level
 - Poorer sperm quality
 - Reduced fertility
 - Odds of infertility increases by 10% for every 20 lbs overweight
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Promote Healthy Weight

- Set realistic goals for healthy weight based on BMI
 - For weight loss,
 - Decrease caloric intake
 - Exercise
 - Keep track of weight & nutrition
 - Referral to nutritionist and/or structured weight loss program
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Promote Healthy Nutrition

- Promote balanced diet
 - Encourage healthy food choices
 - www.MyPyramid.gov
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7. Risk Behaviors

Risk Behaviors

- Tobacco use
 - Heavy alcohol use
 - Drug use
 - Marijuana
 - Cocaine
 - Anabolic steroids
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The 5 A's Approach to Smoking Cessation

1. *Ask* about tobacco use

2. *Advise* to quit

3. *Assess* willingness to make a quit attempt

4. *Assist* in quit attempt

5. *Arrange* follow-up

Smoking Cessation: Helpful Strategies

- ❑ Set quit date within 30 days and sign a contract
 - ❑ Develop approaches to manage withdrawal symptoms
 - ❑ Remove all tobacco products from her home
 - ❑ What to do in situations in which she usually smokes
 - ❑ Follow up to monitor progress and provide support
 - ❑ Encourage the patient
 - ❑ Express willingness to help
 - ❑ Ask about concerns or difficulties
 - ❑ Invite her to talk about her success
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CAGE Questions

- Cut-down:** Have you ever felt you should cut down on your drinking?
 - Annoyed:** Have people annoyed you by criticizing your drinking?
 - Guilty:** Have you ever felt bad or guilty about your drinking?
 - Eye-opener:** Have you ever had a drink first thing in the morning (as an “eye opener”) to steady your nerves or get rid of a hangover?
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8. Mental Health

Screen for Depression

- Postpartum Depression Screening Scale (PDSS)
 - Edinburgh Postnatal Depression Scale (EPDS)
 - Beck Depression Inventory (BDI)
 - Center for Epidemiologic Studies Depression Scale (CES-D)
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Stress Resilience

- Exercise
 - Eat right
 - Get a good night's sleep
-

Stress Resilience

- ❑ **Relaxation techniques**
 - ❑ Breathing exercises
 - ❑ Progressive relaxation
 - ❑ Meditation
 - ❑ Mindfulness
-

Stress Resilience

Problem Solving

- Recognize the problem
- Define the problem and identify the cause(s)
- Propose solutions
- Decide on a solution and plan out action steps
- Evaluate the effectiveness of problem-solving

Conflict Resolution

- Emotional intelligence (EQ)
 - Communication skills
 - Negotiation skills
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Stress Resilience

- ❑ Positive Mental Health
 - ❑ A sense of meaning
 - ❑ Self-acceptance
 - ❑ Autonomy
 - ❑ Positive relations with others
 - ❑ Satisfaction with life
 - ❑ Optimism
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9. Occupational & Environmental Exposures

Potential Male Reproductive Toxicants

- Lead
- Dibromochloropropane
- Carbaryl
- Toluenediamine
- Dinitrotoluene
- Ethylene dibromide
- Plastic production (styrene and acetone)
- Ethylene glycol monoethyl ether
- Welding
- Perchloroethylene
- Mercury vapor
- Heat
- Military radar
- Kepone (in large doses)
- Bromine vapor (in large doses)
- Radiation (in large doses)
- Carbon disulfide,
- 2, 4-dichlorophenoxy acetic acid
- Chlordecone
- Beta-chloroprene
- Lead azide
- Lead II thiocyanate
- Manganese
- Manganese tetroxide
- Tetraethyl lead
- Tetramethyl lead

Occupational & Environmental Exposures

- **MSDS** (Material Safety Data Sheet)
 - **OTIS** (Organization of Teratology Information Services)
 - <http://www.otispregnancy.org>
 - 1-800-532-3749
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Occupational & Environmental Exposures

- **1,2-dibromo-3-chloropropane**
 - Avoid pesticides, fungicides, fumigants
 - **Nonylphenol**
 - Avoid super-strength detergents
 - **Polycyclic aromatic hydrocarbons (PAHs)**
 - Quit smoking & avoid second-hand smoke
 - **Polychlorinated biphenyls (PCBs)**
 - Avoid working with old appliances & follow advisories on fish & wildlife consumption
 - **Dioxins**
 - Reduce intake of animal fat
 - **Phthalates**
 - Avoid microwaving plastic & plastic bottle (e.g #3, #7)
 - **Acrylamide**
 - Avoid overcooking food
 - **Radiation**
 - Exercise precaution
 - **Hyperthermia**
 - Avoid prolonged cycling, sauna, or laptop use
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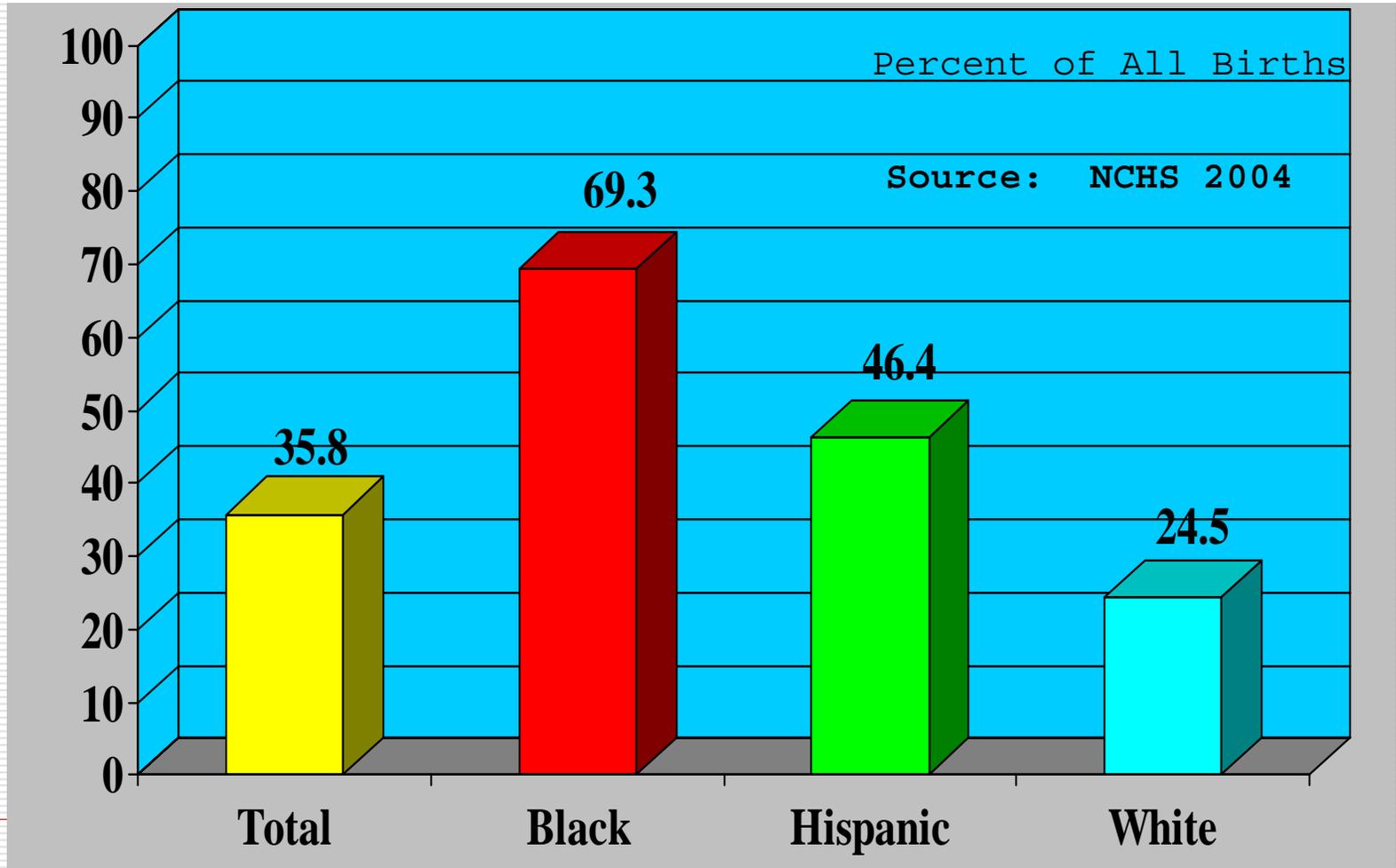
10. Physical Examination & Laboratory Testing

Physical Exam & Labs

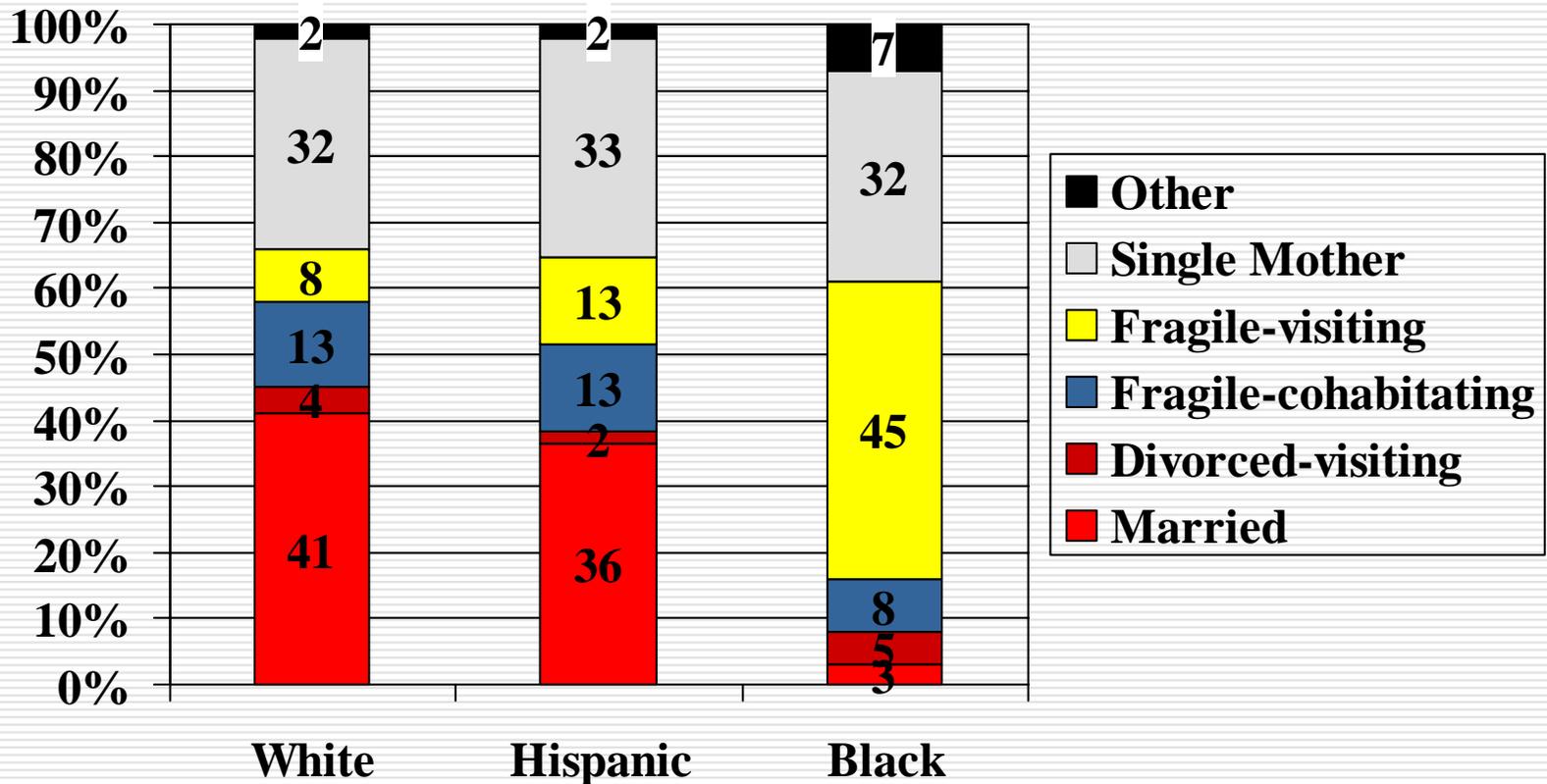
- Routine blood pressure
 - BMI
 - Lipid panel
 - Men > 35
 - Men 20-35 with diabetes or multiple CVD risk factors family hx of CVD or hyperlipidemia
 - Fasting glucose or glucose tolerance test
 - Hx of hypertension
 - Hx of hyperlipidemia
 - Testicular exam
 - Prostate exam
 - Men > 50
 - Colorectal cancer screening
 - Men > 50
 - Men > 45 at increased risk
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Male Involvement

Births to Unmarried Mothers, By Race and Ethnicity

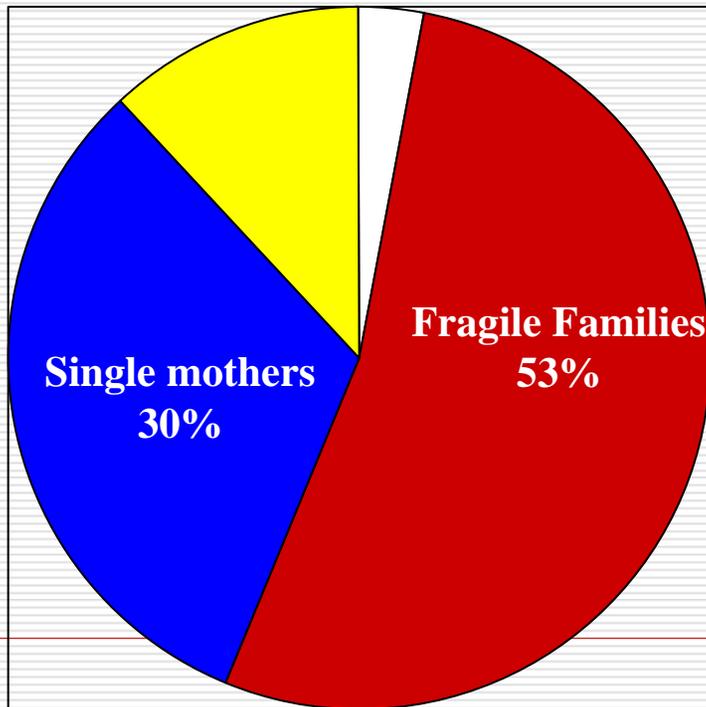


“Family” Arrangements of Poor Infants by Race (NSAF, 1999)

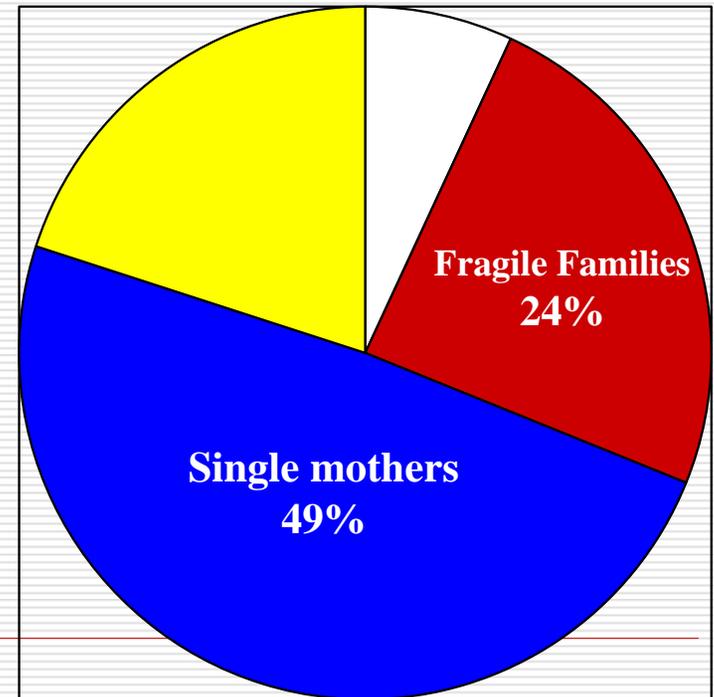


Fragile Families

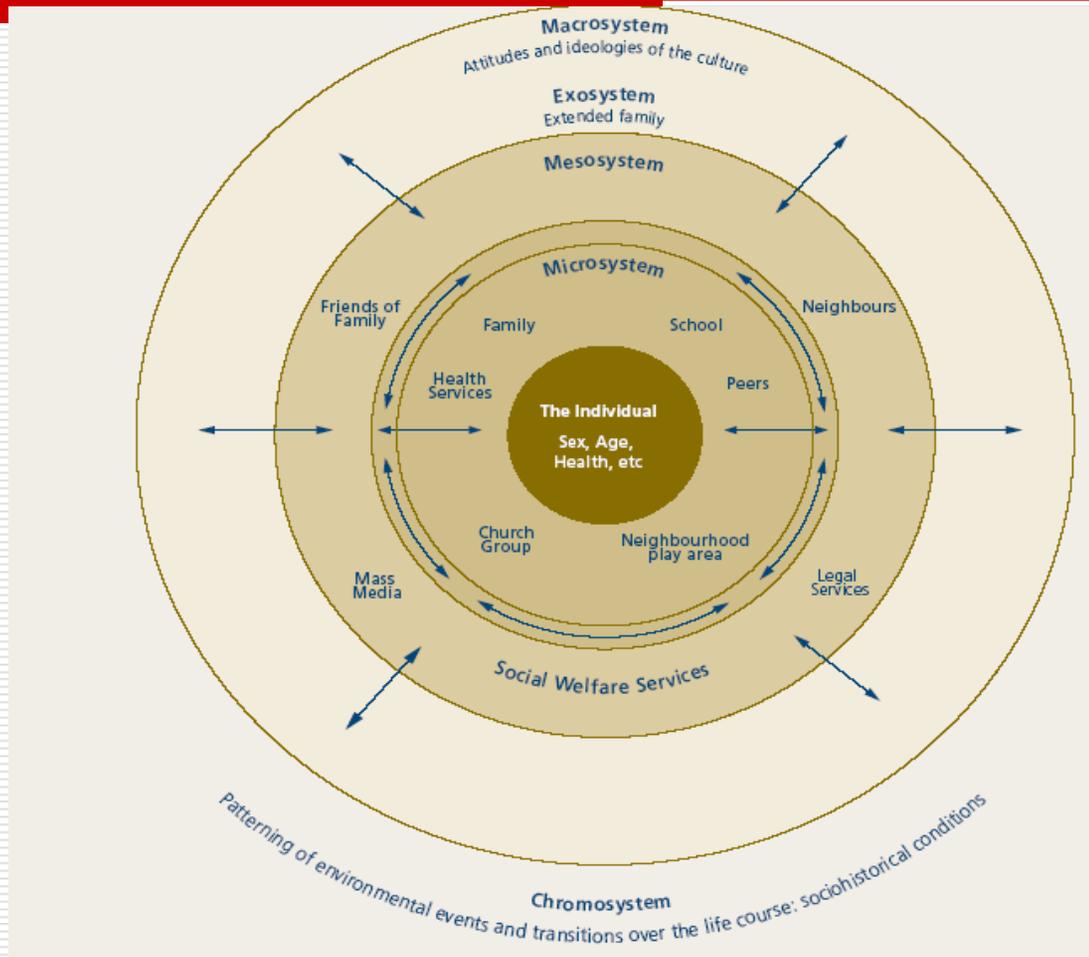
**Living arrangements of
poor Black infants, 1999**



**Living arrangements of
poor Black children, 1999**



Ecological Model



Bronfenbrenner U. Ecology of Human Development: Experiments by Nature and Design. Cambridge MA: Harvard University Press. 1979.

Father Involvement

Determinants

- Intrapersonal
 - Knowledge, attitudes, behaviors
 - Human capital
 - **Educational & employment status**
-

Father Involvement

Determinants

- Interpersonal
 - Father's relationship with
 - Mother
 - Maternal grandmother
 - Others
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Father Involvement

Determinants

- Neighborhood & community
 - Lack of employment opportunities
 - High rates of incarceration
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Father Involvement

Determinants

- Cultural & societal
 - Stereotypes
 - Racial stratification
-

Father Involvement

Determinants

- Public policy
 - Earned Income Tax Credit (EITC)
 - Temporary Assistance for Needy Families (TANF)
 - Child Support Enforcement
-

Father Involvement

An Ecological Approach

- **Individual**
 - Educational programs
 - Employment related services
 - Legal & social services
 - **Interpersonal**
 - Gender relations
 - **Institutional & community**
 - Norms, values, expectations
 - Full employment economy
 - Criminal justice system
 - Undo racism
 - **Society & policy**
 - Temporary Assistance for Needy Families
 - Earned Income Tax Credit
 - Child Support
-

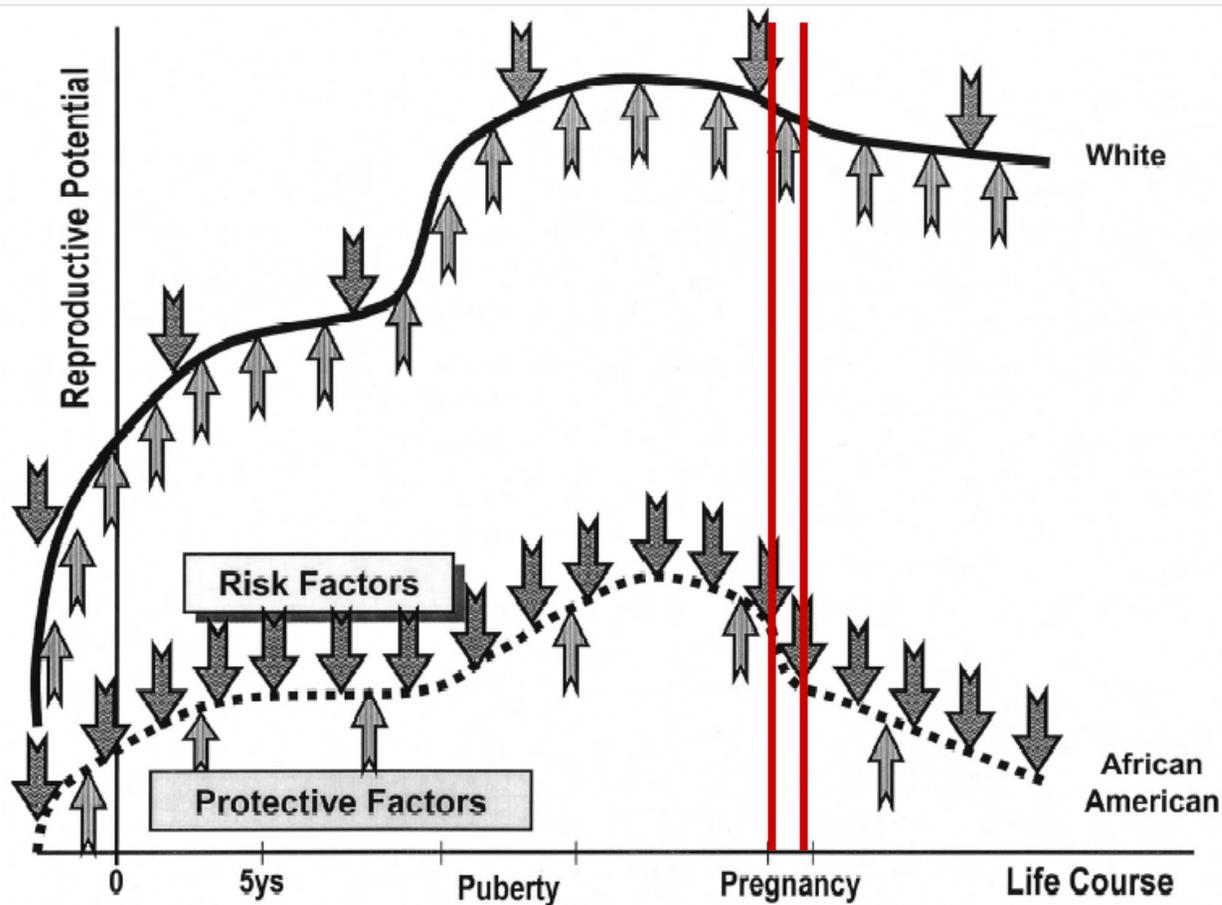
Father Involvement Programs

- Programs to discourage the formation of father-absent families
 - Sex & HIV education
 - e.g. Reducing the Risk
 - Youth development
 - e.g. Teen Outreach Program
 - Multi-component
 - e.g. Children's Aid Society – Carrera Program
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Father Involvement Programs

- Programs to encourage greater father involvement
 - Child Access Demonstration Projects
 - Parents' Fair Share Projects
 - Welfare-to-Work programs
 - HHS' Fatherhood Initiative
 - Responsible Fatherhood programs
 - TANF
 - Abstinence Education
 - Early Head Start
 - Fathers in the criminal justice system
 - Community- and Faith-Based Initiatives
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Racial and Ethnic Disparities in Birth Outcomes: A Life Course Perspective



Lu MC, Halfon N. Racial and ethnic disparities in birth outcomes: a life-course perspective. *Matern Child Health J.* 2003; 7:13-30.

Father Involvement

A Life-Course Perspective

- How do boys become men, and how do men become fathers?
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