INCREASING COVID-19 VACCINATION UPTAKE AMONG BLACK POPULATIONS IN GAINESVILLE, FL

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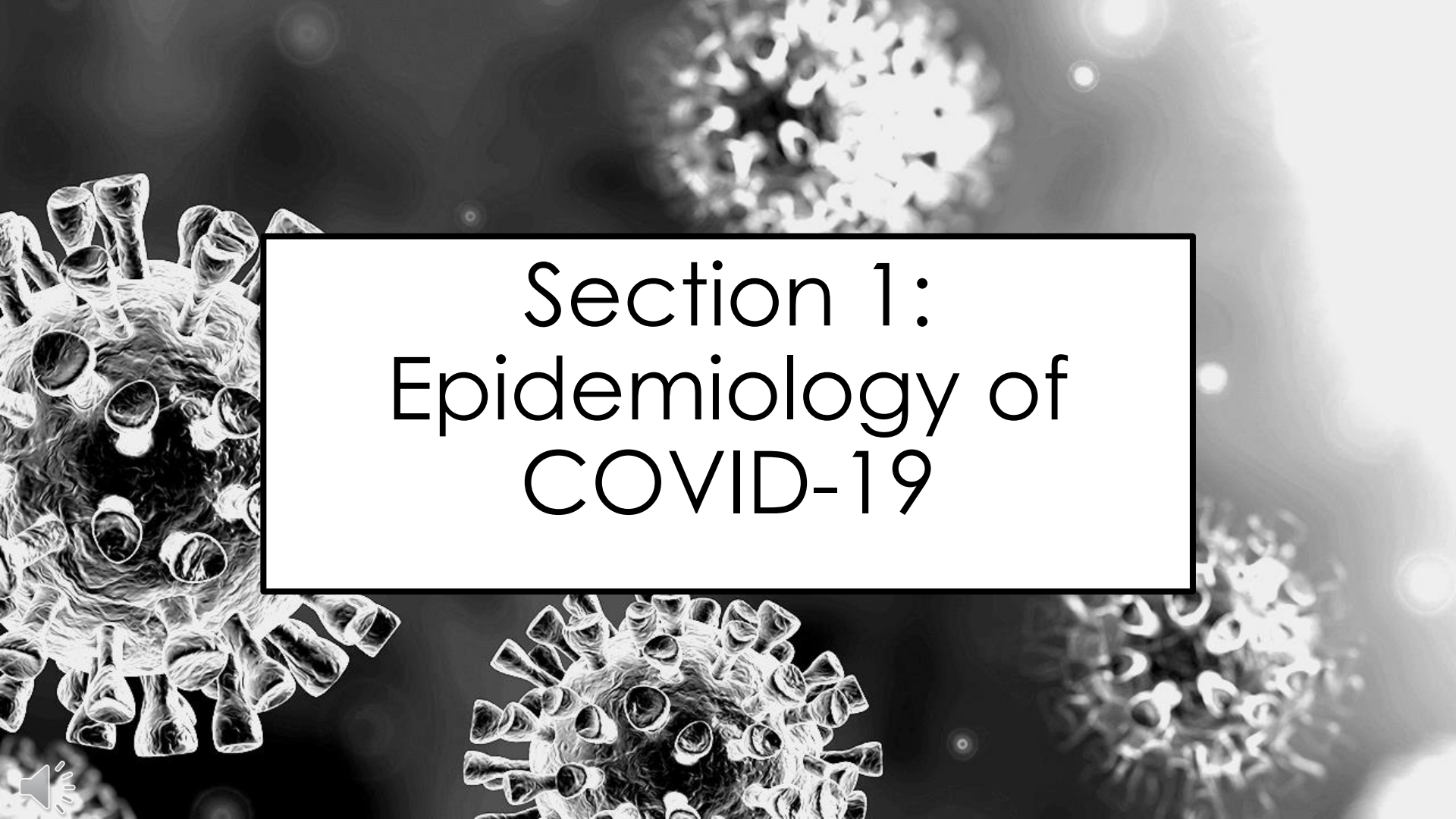
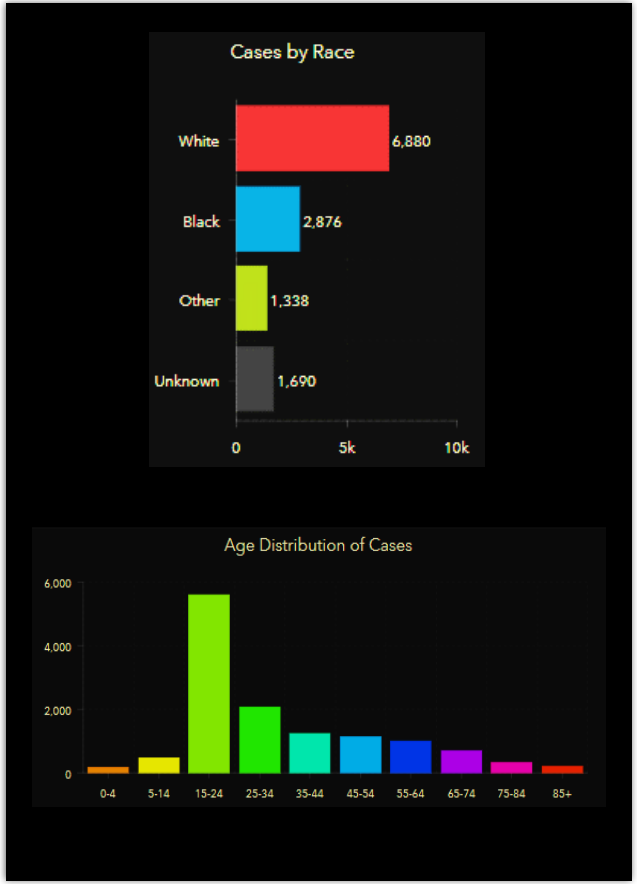


Section 1: Epidemiology of COVID-19

Healthy People 2030 Focus

- Main objective:
  - Reduce rates of infectious diseases and improve health for people with chronic infections.
- Sub-objective:
  - IID-D03 - Increase the proportion of adults age 19 years or older who get recommended vaccines

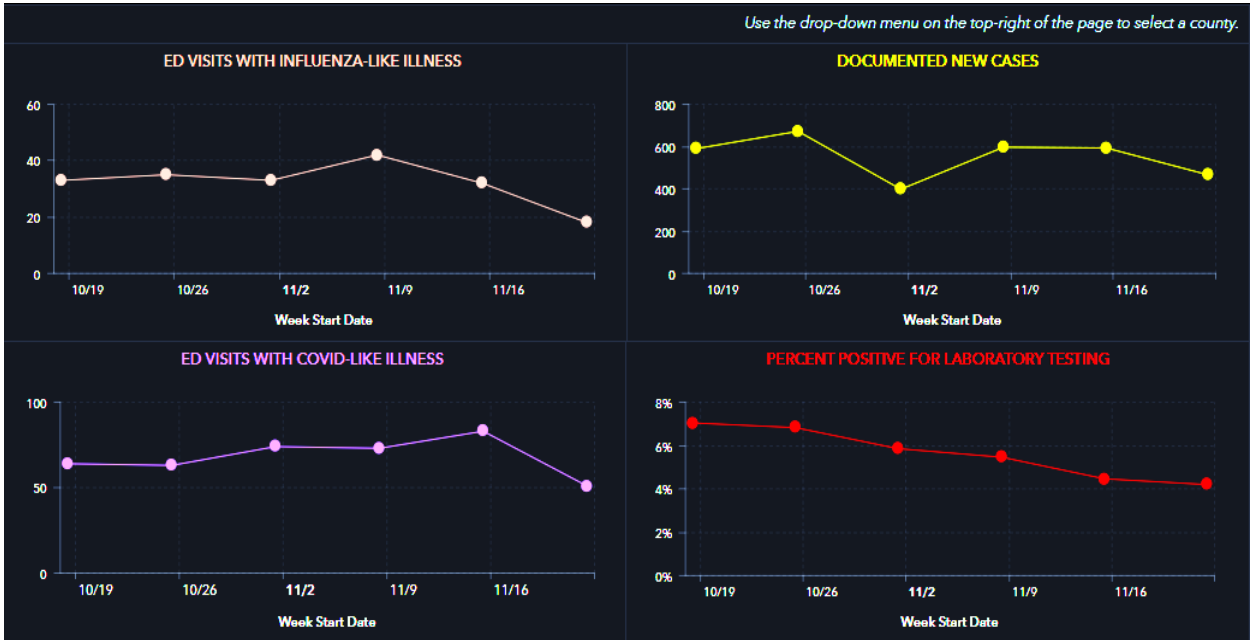
(ODPHP, n.d.)



(FDOH, 2020)

How Many People Are Affected?

- As of 12/6/2020:
  - Globally: 66 million cases, 1.5 million deaths (JHU, 2020)
    - Florida: 1,058,074 cases, 19,177 deaths
      - Alachua County: 12,784 cases, 102 deaths
        - 4,858 cases per 100,000



(FDOH, 2020)

HOW MANY PEOPLE ARE AFFECTED?

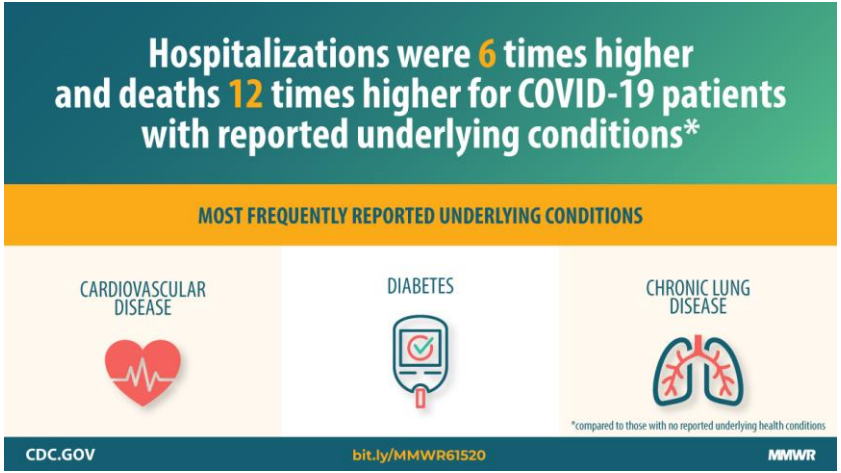
Outcomes Associated with COVID-19

- Most acute symptoms are similar to influenza
  - Exception of loss of taste/smell
- Severe outcomes in high-risk groups
  - Double burden of conditions
- Long term complications
  - Multiple organ effects
    - MIS-A
- "Long-hauler" syndrome

(CDC, 2020)

Severity of Health Outcomes

- Partially dependent on presence of risk factors
  - Age
  - Pre-existing conditions / co-morbidities
  - Social determinants of health…?
- Pneumonia
- Organ failure
- Heart problems
- ARDS
- And more…

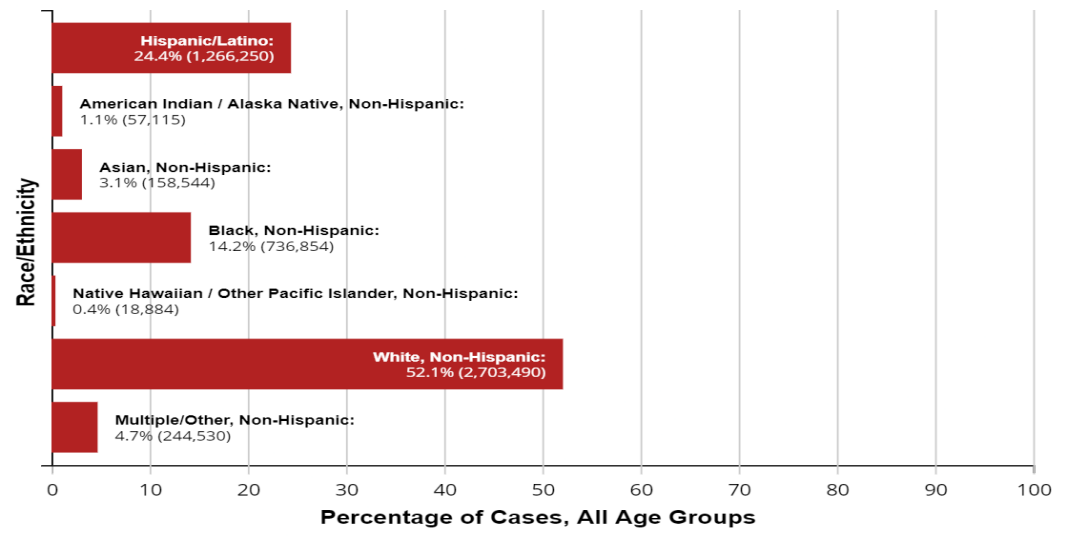


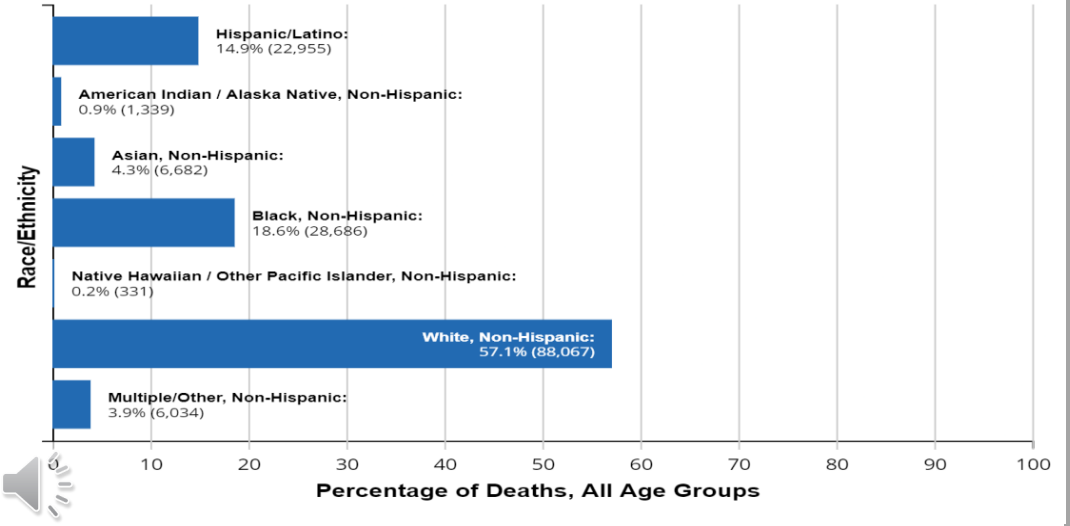
(CDC, 2020)

Rate ratios compared to White, Non-Hispanic persons	American Indian or Alaska Native, Non-Hispanic persons	Asian, Non-Hispanic persons	Black or African American, Non-Hispanic persons	Hispanic or Latino persons
Cases[1]	1.8x	0.6x	1.4x	1.7x
Hospitalization[2]	4.0x	1.2x	3.7x	4.1x
Death[3]	2.6x	1.1x	2.8x	2.8x

SUBGROUPS MOST AFFECTED

(CDC, 2020)





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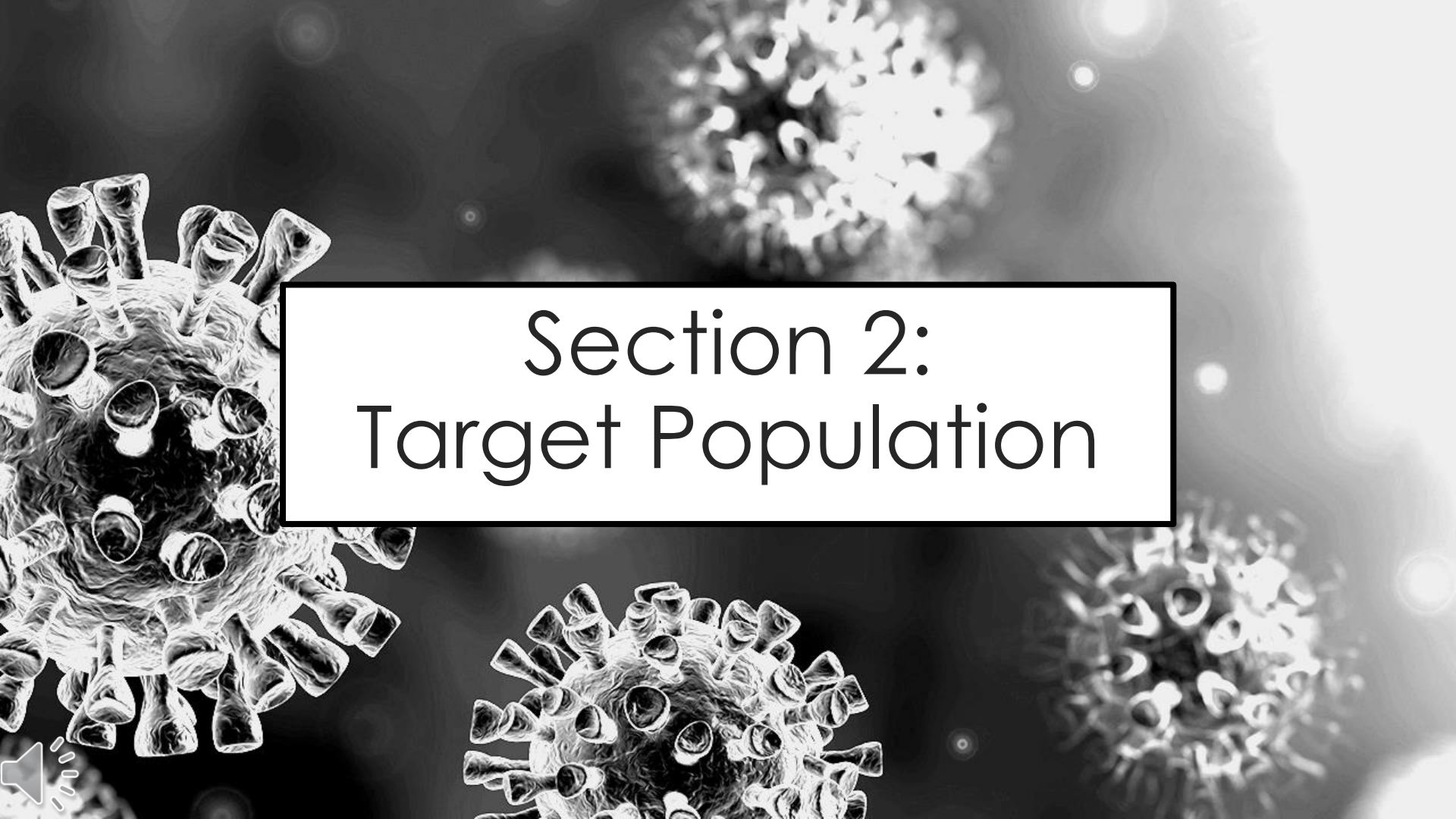
(CDC, 2020)



Section 2: Target Population

Who is the Target Population?

- **Black adults residing in Gainesville, FL**
  - **Aged 18+**
  - **Special emphasis on those 65+**
  - **Program goal: alter perceptions of vaccine safety in order to increase uptake of the crucial COVID-19 vaccine**

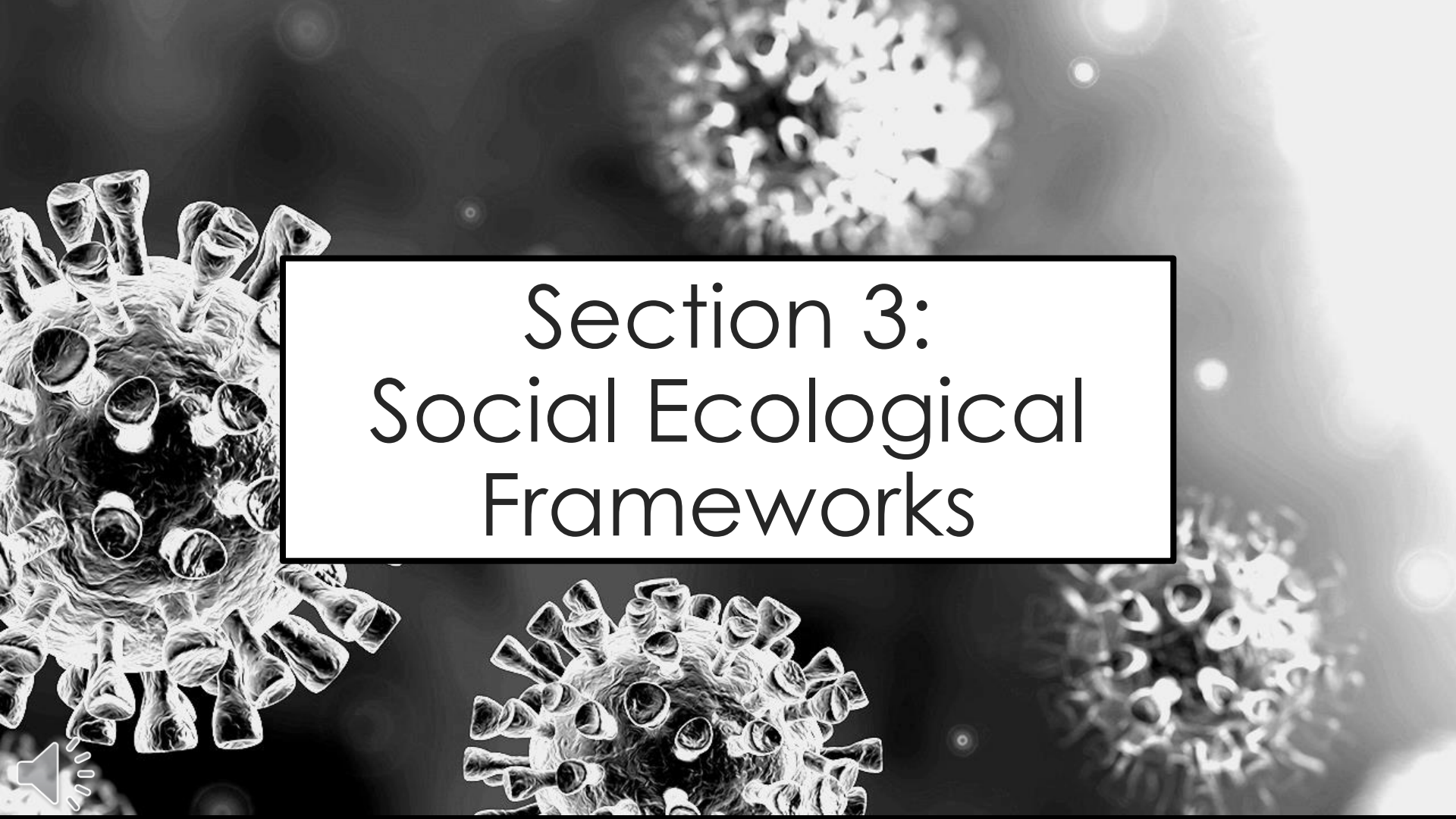
Why This Population?

- Second most prevalent population in Gainesville, FL (21.4%) (U.S. Census Bureau, 2019)
- History and persisting disparity in Alachua county (Knowles & Jarrett, 2017)
  - Housing
  - Education
  - Employment
- Vantage point:
  - Availability of community-based points of outreach

Strategies to Learn More About the Target Population

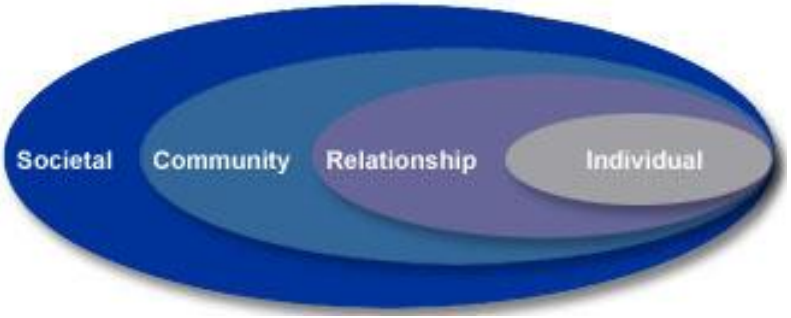
- Stakeholder and community-based approach
  - Needs assessment
    - Survey and focus groups
    - Capitalize on community centers as points of distribution/enrollment
      - SWAG Family Resource Center, Library Partnership, UF EAC, etc.

(CDC, 2013)



Section 3: Social Ecological Frameworks

CDC Social Ecological Model



Individual:

- age, education level, income/access to health care services, personal experience with healthcare system

Relationship:

- Family attitudes towards vaccination, relative importance of family opinion, peer influences

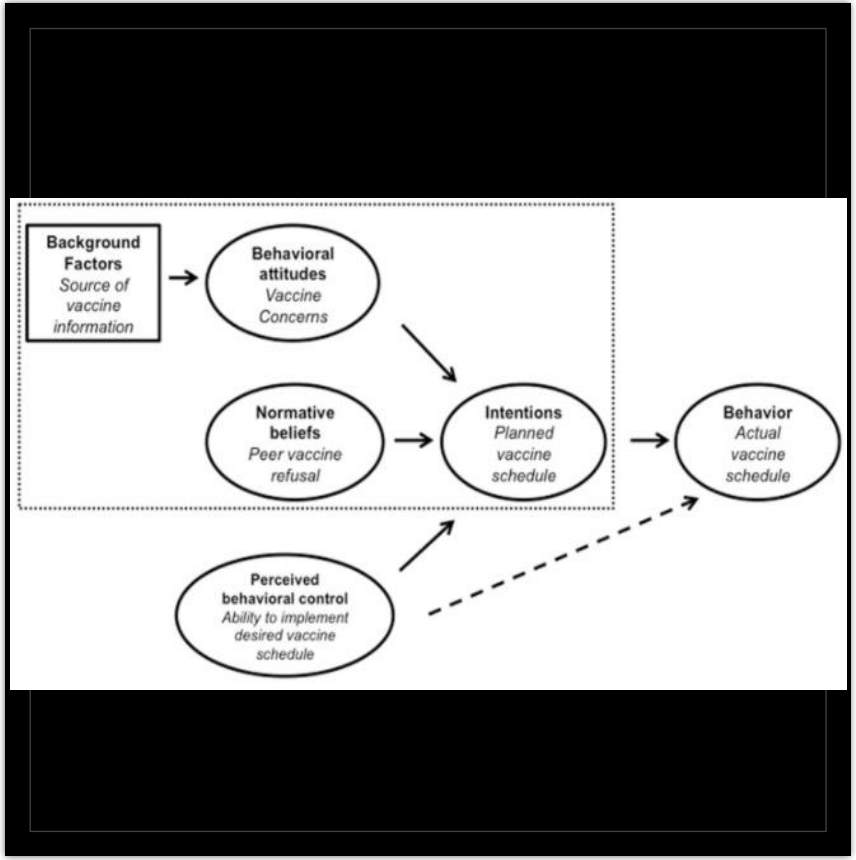
Community:

- School and workplace policies on vaccination, economic and housing stability

Societal:

- Cultural norms surrounding vaccination, persistence of social and racial inequalities

(CDC, 2020)



(Wheeler & Buttenheim, 2013)

Individual Level

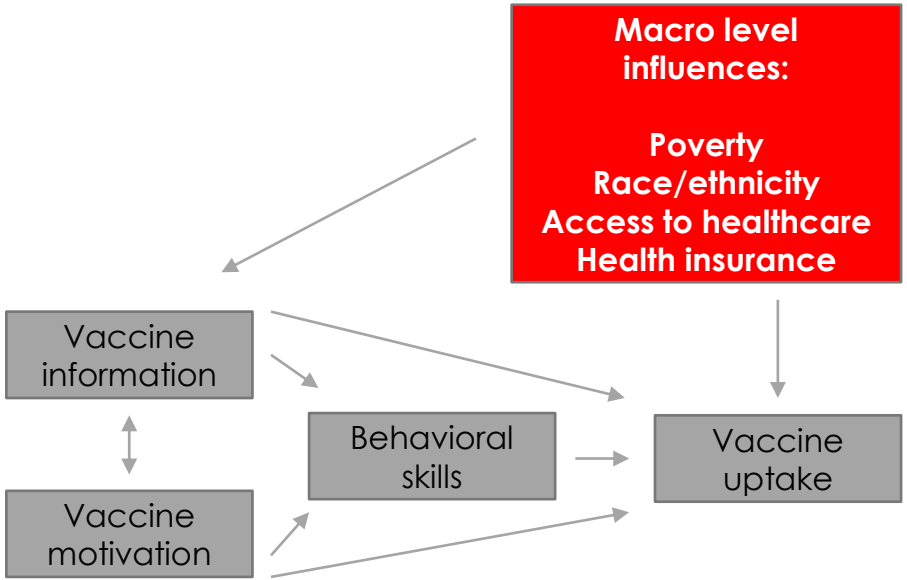
- Adaption of the Theory of Planned Behavior (TPB)
- Focus:
  - Sources of information
  - Behavioral attitudes
    - Distrust of the scientific community (Warren et al., 2020)
  - Normative beliefs
  - Perceived control and power
- Ultimate driver: intention

Relationship Level

- Stems from sociology: broad influences of being part of a (racial) group
  - Social cognitive theory:
  - Environmental - subjective norms: drivers?
    - Increasing relationship-level communication about flu vaccines may increase vaccination for flu (Quinn et al., 2017)
  - Cognitive - outcome expectations
  - Behavioral - self-efficacy
- Social influence theory

(Simons-Morton et al., 2012)

Community Level



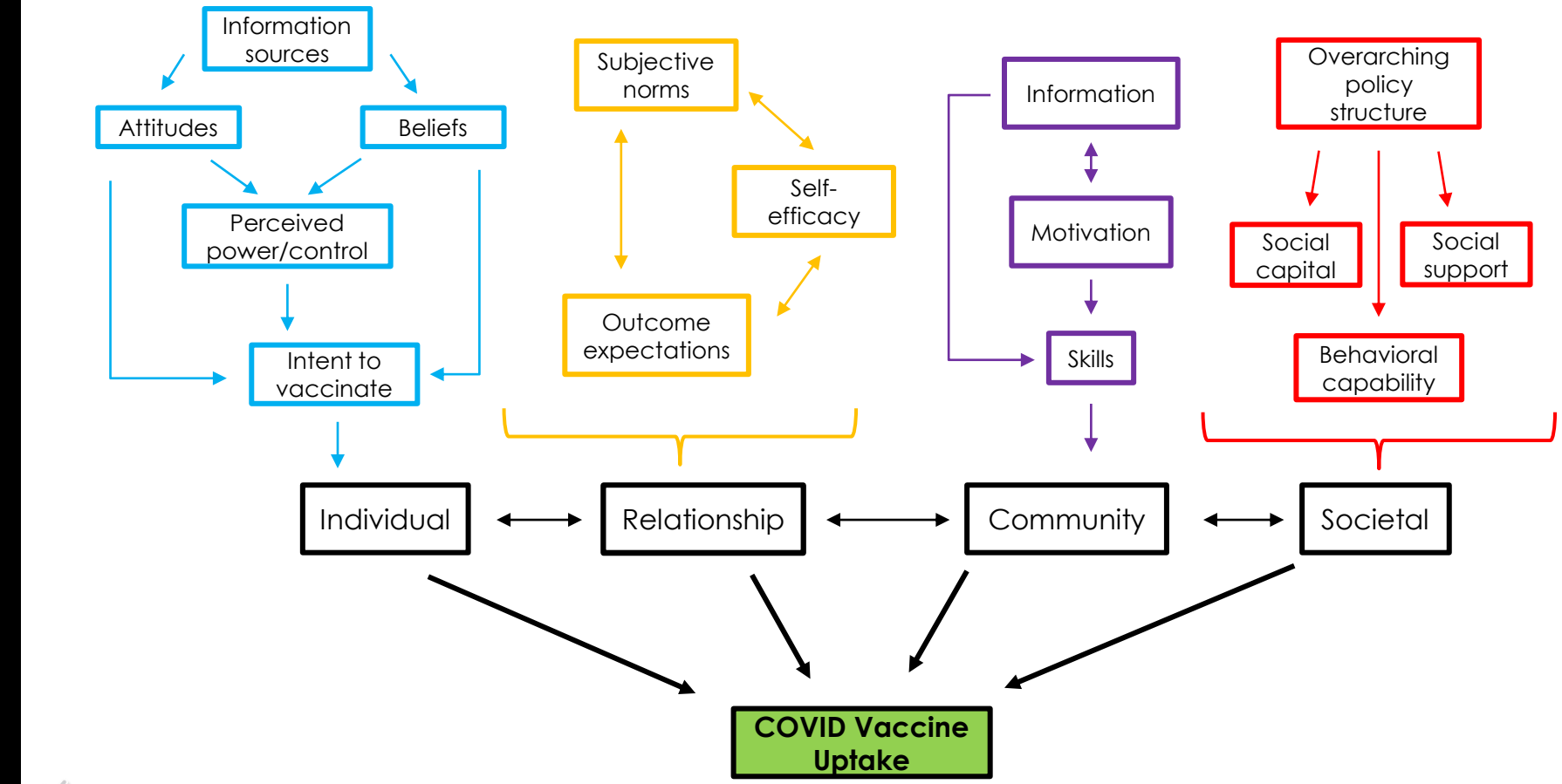
- Information-Motivation-Behavior
  - Social factors
    - Feed information, motivation
  - Structural environment
    - Feeds access to information, motivation, skills

Adapted from: (Bosch et al., 2014)

Societal Level

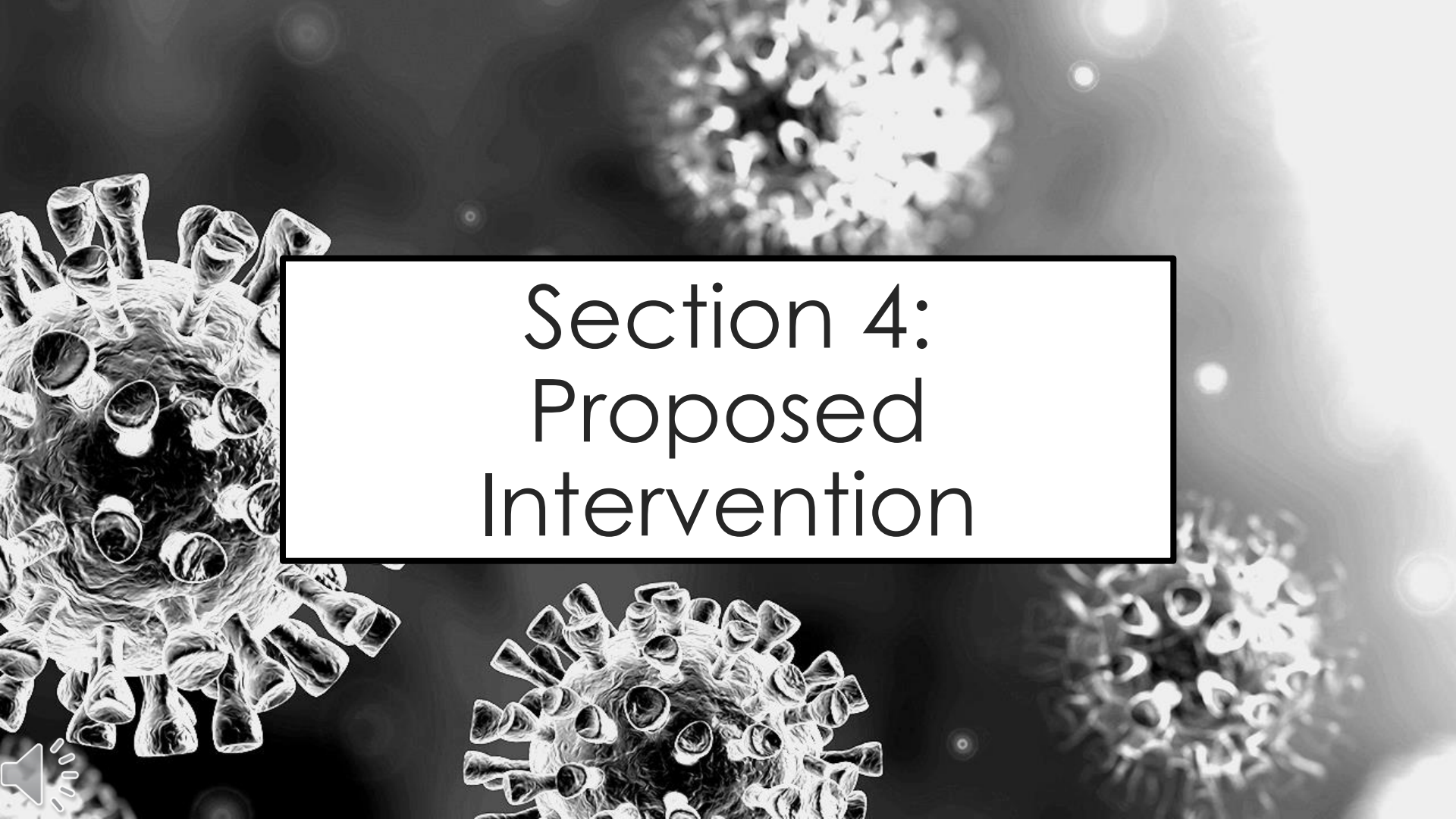
- Health, social, economic, educational policies (CDC, 2020)
  - Contribute to persisting inequality
- Social capital and support
  - Instrumental and informational
- Behavioral capability
  - Key differentiator: **opportunity***

(Simons-Morton et al., 2012)


Information sources
Attitudes
Beliefs
Perceived power/control
Intent to vaccinate
Subjective norms
Self-efficacy
Outcome expectations
Information
Motivation
Skills
Overarching policy structure
Social capital
Social support
Behavioral capability
Individual
Relationship
Community
Societal
COVID Vaccine Uptake

Impact of Racism as a Public Health Issue

- Racial consciousness in health care
  - Historical basis for mistrust
    - Tuskegee, Henrietta Lacks, etc.
  - Significant racial differences in vaccine attitudes, hesitancy, confidence (Quinn et al., 2017)
  - Impacts of discrimination on vaccine hesitancy
- Systemic level impacts of racism
  - Housing, education, access to healthcare
  - Upstream vs midstream effects



Section 4: Proposed Intervention

Design

- Key factor linking **individual**, **relationship**, **community** levels: INFORMATION
  - Health education based
  - Utilize participating individuals as spokesmen to spread the word to their social circles
- **Societal** level: circumvent the overarching policy structure via partnerships
  - Community resource centers
    - Provide havens of social support and tangible aid to mitigate effects of inequity
  - High foot traffic, established trust with community members
  - Increase social support and encourage new connections between members

Nature of the Intervention

- Health education-based curriculum
  - Focus groups supplemented by break out sessions
    - Mediated by community members
    - Address topics of concern specifically identified by needs assessment
  - Basis for intervention: <u>any and all</u> vaccine-related concerns brought up by community are relevant and valid
  - Individual counseling component available based on participant interest
  - "Pledge" campaign to maintain interest between now and wide dissemination
    - Follow-up to ensure continuity of intervention effect
- Accessible distribution campaign (Coady et al., 2011) via partnership once widely available

Assessment

- Pre-hoc objective: Increase proportion of study sample willing to receive COVID-19 vaccine by 10%
- Pre- and post-assessments
  - Trust in vaccine process
  - Trust in vaccine manufacturers
  - Belief in ability to obtain a COVID-19 vaccine
  - Primary barriers to vaccine uptake
  - Likelihood of receiving the COVID-19 vaccine ← primary indicator of interest
  - Likelihood of recommending the vaccine to others
- Analyze in the context of the RE-AIM framework

(Simons-Morton et al., 2012)

Addressing Systemic Racism

- Utilizing CBPR
  - Re-orienting the national climate at a community level
  - Increasing quality and prevalence of social support within community
  - Creating long-lasting partnerships that allow for sustainable growth
  - Addressing community labeled issues and deep-rooted concerns
  - Integrated framework for discussing privilege, power, race issues
- With actionable results:
  - **Translate and apply to other settings**

(Wallerstein and Duran, 2006)

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