Get to the Point:

Increasing Influenza Vaccination Rates for Under-represented Minorities

Dr. Susanne Montgomery

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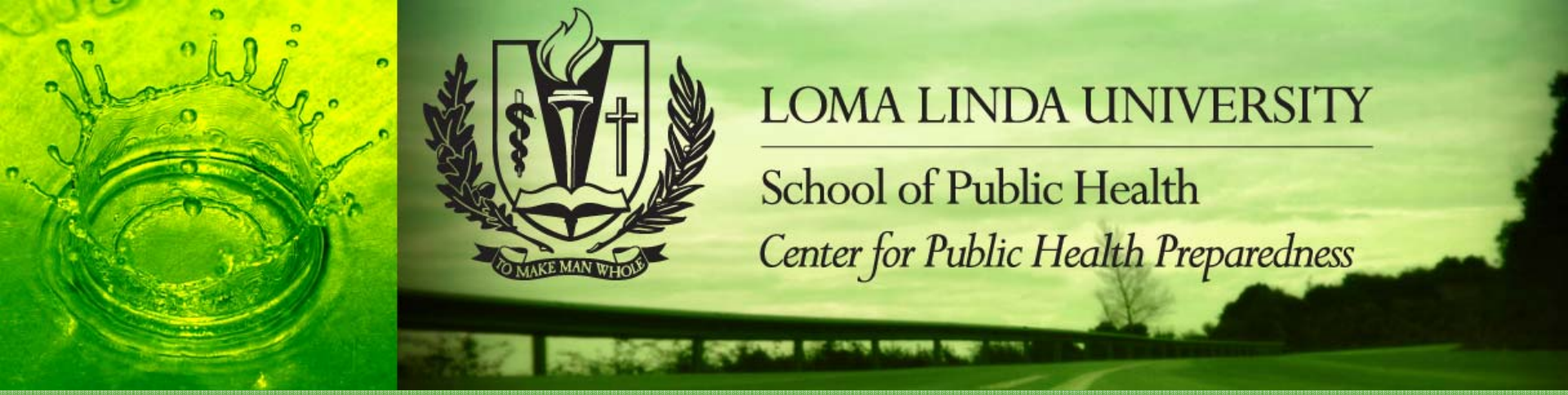
U.S. Centers for Public Health Preparedness



- Mission
  - To cultivate a culture of preparedness…
- Purpose
  - Provide guidance and support to organizations through the interaction of academia, research, and practice …
- Programs and Initiatives
  - Trainings and educational materials are developed for and offered to diverse audiences.

Complexity of Flu Vaccination

- Caused by at least 3 different viruses
  - Unstable (shift & drift)
  - No “one size fits all” vaccine
  - 3 – 6 months to develop vaccine
- Debate on transmission
  - Droplet nuclei
  - Latent virus hypothesis
- Clinical signs
  - Nonspecific
- Different strains impact different age groups

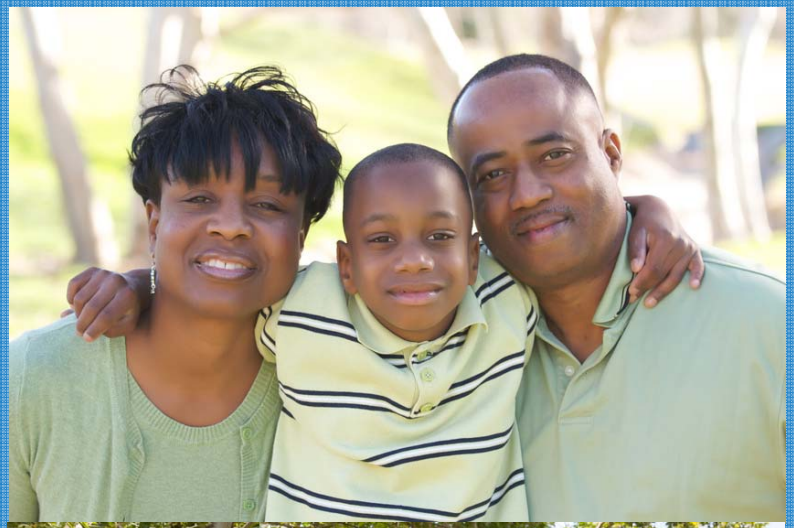
Why Vaccinate Against Influenza?

- Causes 36,000 deaths annually in US
- Costs $71 – 167 annually
- Vaccination is a most effective intervention
- Vaccination intervention could attain a large impact without being administered to the entire population
- Pandemic mitigation strategy

Analyses of published studies:

- Healthy People 2010 goal: 60% of those at-risk
- US Preventive Service Task Force: 65+ or with chronic medical conditions
- Advisory Committee on Immunization Practices 50+
- Overall increasing immunization rates but racial/ethnic disparities remain

Flu: Under-Vaccinated Minorities



- 2005 Medicare Beneficiaries survey
  - African Americans
  - Latinos
- 2007 FBO Flu Survey in LA and Honolulu
  - African Americans
  - Filipinos
  - Latinos

- 2002 National HH survey: 30% of adults 65+ not immunized (69% Whites, 55% Latinos, 51% AA)
- Follow up studies found similar patterns –adding data on Asians– Japanese 71% Filipinos 58%
- Overall main reasons: not knowing
- AA: Household income, perceived severity, concern over possible negative consequences, little trust in government agencies--Very low income AAs at particularly high risk
- Latinos: more structural barriers (health insurance, transportation)
- Strategies: targeted, ethnic specific, i.e. AA: emphasize possible severe consequences; Latinos: linguistically appropriate outreach re free/low cost vaccinations

Other high risk groups: Persons with chronic medical conditions

- Whites with diabetes, chronic heart condition and cancer had higher vaccination rates for influenza than Blacks for both 65+ and 18-64 year olds (esp. bad); Whites with 2+ chronic conditions had same patterns
- i.e. Whites with Cancer: 46% vs. 20% Blacks
- Highest coverage : those with diabetes
- Unequal access <2%
- Issue: lost opportunities re provider/patient encounters– even if 5+ encounters/year 69% of whites and 44% of Blacks
- In another study (same pattern) it was found that this was due to Whites "asking"
- Needs to improves esp. as MD recommendation is strongest predictor of getting vaccinated
- Need creative strategies that are aimed at younger persons with chronic conditions

Other barriers vs. reasons:

- Older (65+): friends /relatives recommended; going to provider more
- younger (<65): personal susceptibility (i.e. history >); will cause disease: <; fear of pain <;
- Overall best if provider recommended
- Convenience and free vaccines less important; apart from Latinos most get it in provider office

What works? Example of inner city health care clinics

- Test menu: provider (chart) reminder system, reduced/free fee, patient education posters (site and community), mailed reminder cards, staff education; standing orders to vaccinate as part of intake, on site walk-ins
- Both significantly increased vaccination rates
- Best if patient/provider, system oriented interventions
- Best if clinic staff involved on how to get it done– higher compliance – higher vaccination rates
- Best: patient education- clarification of risk , esp. for younger risk patients
- Best of provider recommends

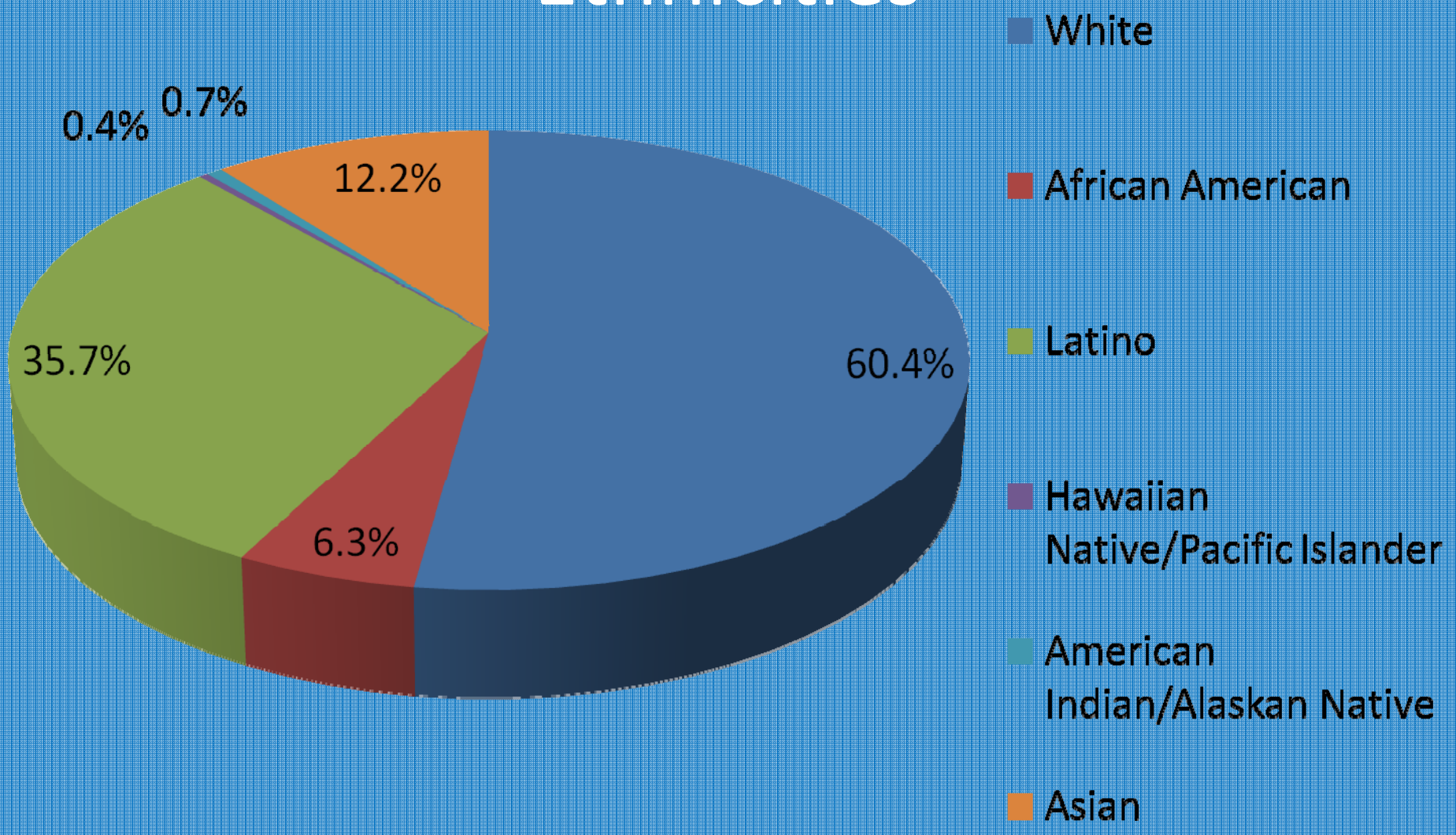
Barriers to Flu Vaccination

- Access
- Attitudes
- Cost of vaccine
- Household incomes
- Language (non-English speaking)
- Resistance to Vaccine
- Underinsured/ Uninsured status

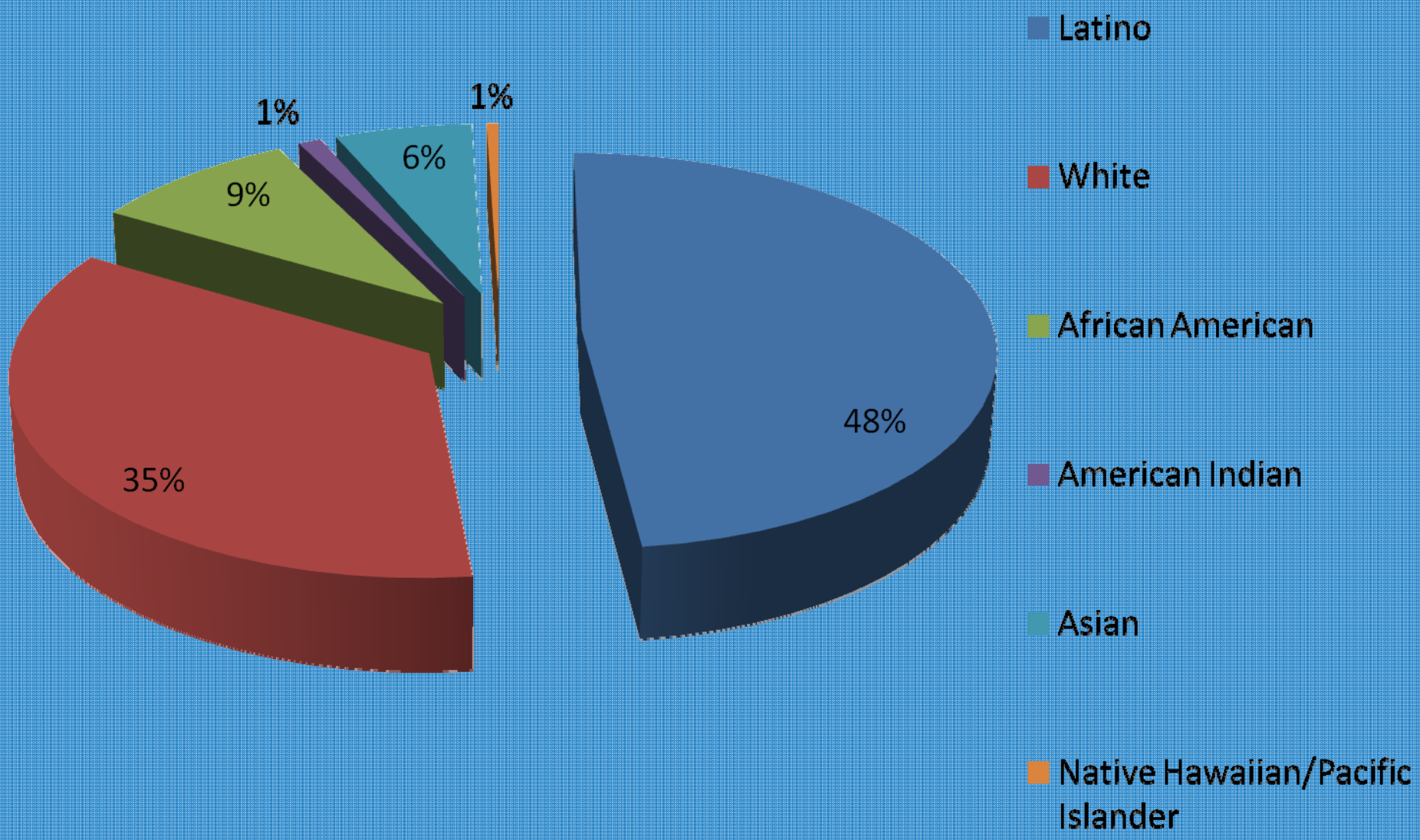
Evaluation of Mass Flu Vaccination

- Evaluated four regional county influenza mass vaccination clinics for:
  - Process
  - Throughput
- Post clinic assessment
  - Client demographics

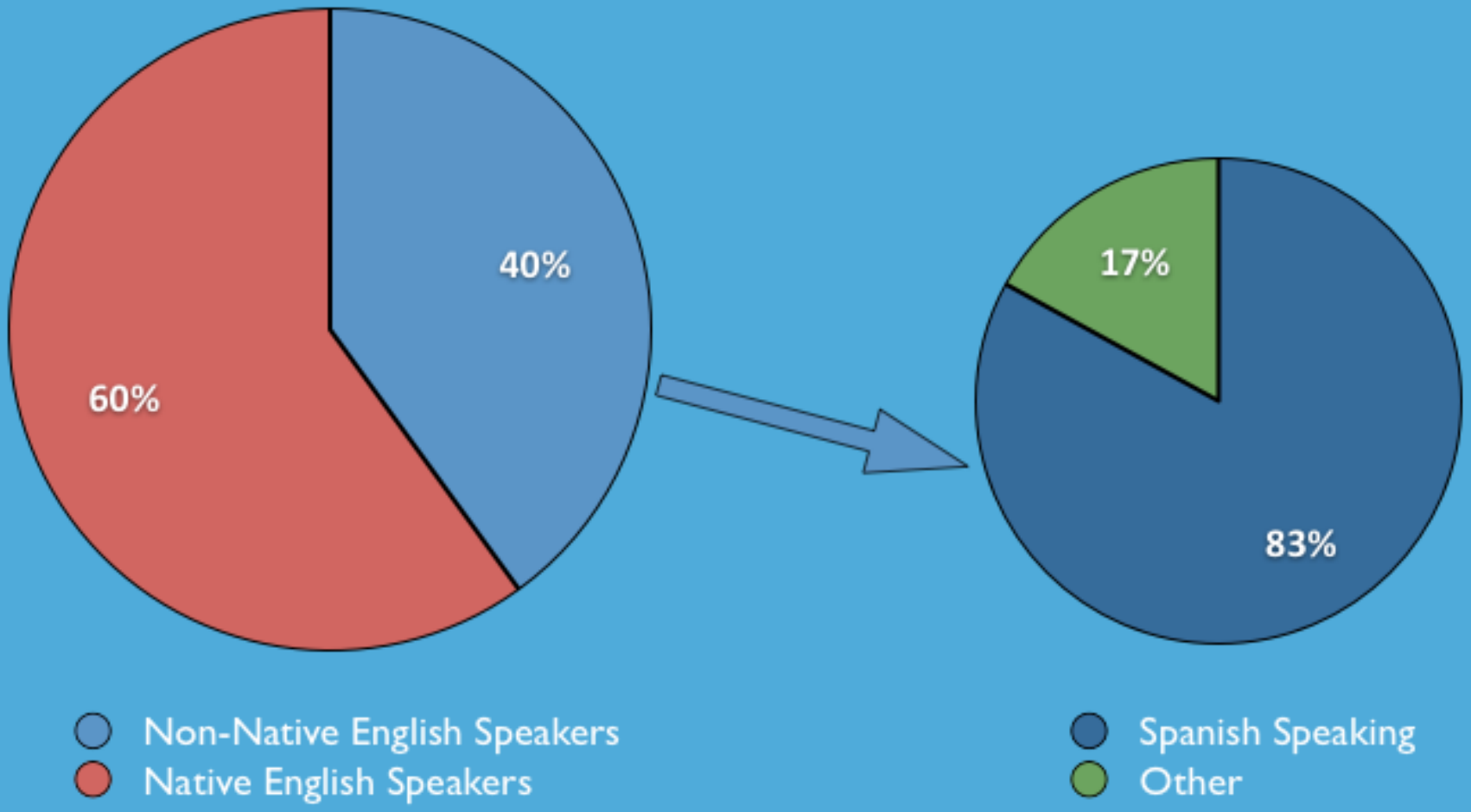
2007 California Demographics: Ethnicities



2008 County Demographics: Ethnicities



2008 County Demographics: Language



2008/2009 Mass Flu Vaccination Clinics

- 4 1- hour long clinics at different locations within county
- Free to public
- Advertised
- LHD provided command staff
- Clinic staff:
  - volunteers provided JIT

Mass Flu Vaccination Clinic Models

	Clinic One	Clinic Two	Clinic Three	Clinic Four
Venue	Mall	Fairgrounds	Mall	Park rec. center
Sole event	No	Yes	No	Yes
Advertised by LHD	Yes	Yes	Yes	No
Free	Yes	Yes	Yes	Yes
Public Transportation Accessible	Yes	Yes	Yes	No
Handicapped Accessible	Yes	Yes	Yes	Yes
Designed by LHD	Yes	Yes	Yes	Yes
Managed by LHD	Yes	Yes	Yes	Yes*
Use of volunteer staff	Yes	Yes	Yes	Yes

Clinic Results

Evaluation Results	Clinic One	Clinic Two	Clinic Three	Clinic Four
Throughput (# of clients)	770	531	417	253
Bottlenecks	yes	yes	yes	None
Process				
Screening language pref.	Not met	Not met	Met	Met
Screening for age	Not met	Not met	Met	Met
Screening for contraindications (allergies)	Not met	Not met	Not met	Met
Flu mist/vaccine preference	Not met	Not met	Met	Met
Arm preference asked	Met	Met	Not Met	
Signed consent	Met	Met	Met	Met
Vaccination				
Type of vaccination ascertained		Not observed	Not met	Not met
Consistent use of universal precautions	Met	Not met	Not Met	Not met
Mobile vaccination provided	Met	Met	Not met	Met
Monitoring for contraindications	Not observed	Not met	Not met	Met
Tracking				
Age of clients served	n/a	n/a	n/a	n/a
Language of clients served	n/a	n/a	n/a	n/a
Ethnicity of clients served	n/a	n/a	n/a	n/a

Lessons Learned

- Location, Location, Location
  - Public
  - Centrally located
  - Public transportation/ handicap accessible
- It pays to advertise
- Practice makes perfect

Recommendations

- Implement demographics screening
- Outreach to underrepresented minorities
  - Partner with faith based organizations
  - Advocacy organizations that represent minority populations (i.e. consulates, tribal councils, etc).
- Volunteer clinical staff
  - Receive standardized training
  - Be “certified” by LHD subsequent to training
  - Maintain a cadre of trained, certified clinical volunteers

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Contact Information

LOMA LINDA UNIVERSITY

School of Public Health

Center for Public Health Preparedness

Main: (909) 558-8382

www.llucphp.org