



HIV Behavioral Interventions for Hispanics/Latinos in the US: A Meta-Analytic Review

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The findings and conclusions in this presentation are those of the author and do not necessarily represent the position of the Centers for Disease Control and Prevention.





Outline of Presentation

- Findings of systematic review & meta-analysis of HIV behavioral interventions for Latinos in the U.S. and Puerto Rico

Published in *AIDS and Behavior*, 2007; 11: 25-47

- Update review to include new studies published or reported in literature
- Describe CDC's "Tiers of Evidence" framework





Original systematic review & meta-analysis of HIV behavioral interventions for Latinos

AIDS Behav (2007) 11:25–47
DOI 10.1007/s10461-006-9151-1

REVIEW PAPER

A Systematic Review and Meta-Analysis of Behavioral Interventions to Reduce HIV Risk Behaviors of Hispanics in the United States and Puerto Rico

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Research Synthesis (PRS) Team**





Purpose & Goals of Review

- Identify and understand the efficacy of HIV behavioral interventions for Latinos
- Goals:
 - Quantitatively assess overall intervention efficacy
 - Identify factors that affect efficacy
 - Determine if culturally-appropriate content is associated with efficacy



Systematic Search

- Publications from 1988 through **2005**
- Automated search of 5 electronic databases
- Hand search > 35 relevant journals
- Search dissertation abstracts, international trial registries, national/international conference proceedings
- Search NIH CRISP database listing funded research studies
- Contacts with principal investigators/researchers

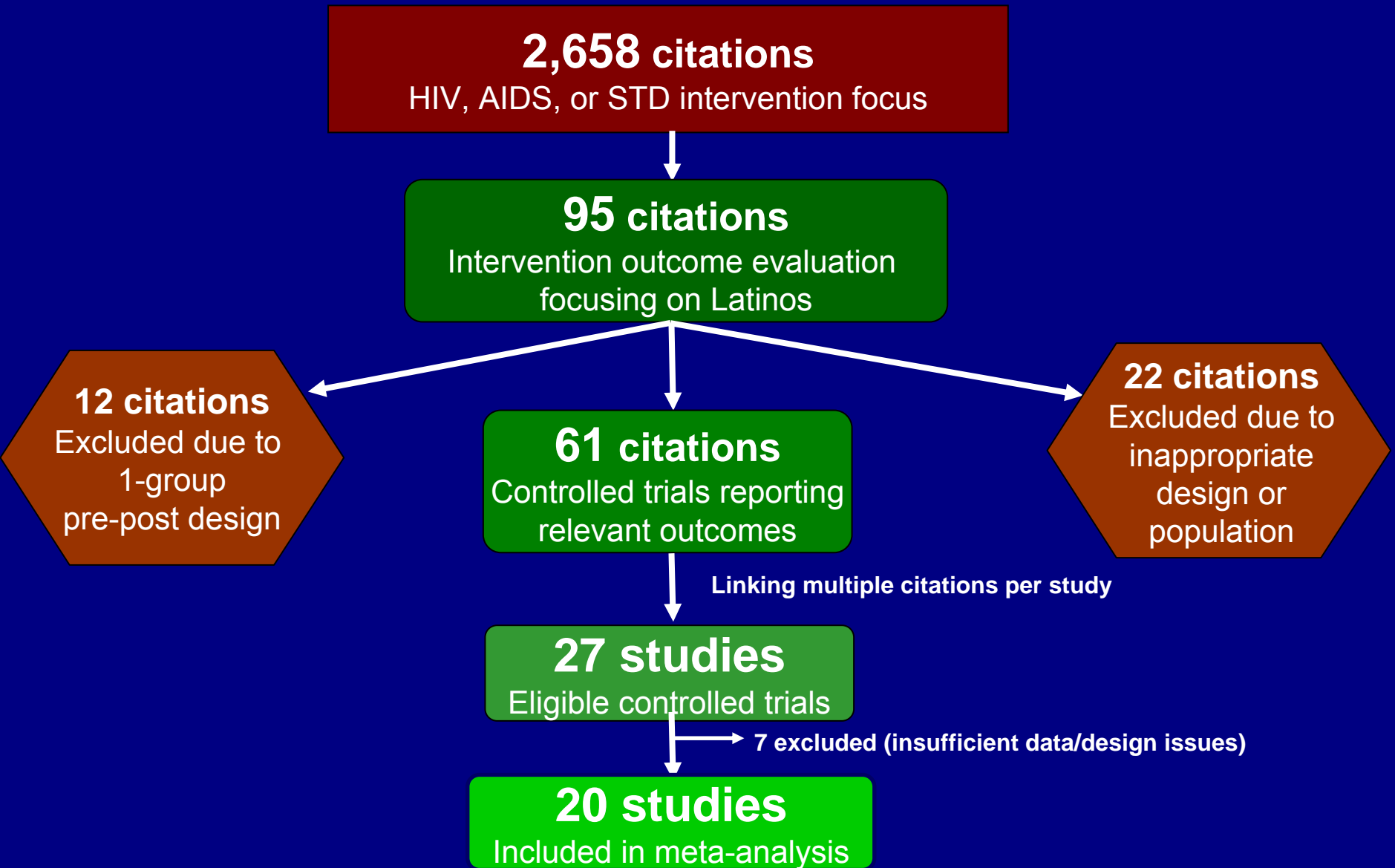


Review Inclusion Criteria

- **Controlled trial of intervention efficacy conducted in the U.S. or Puerto Rico:**
 - focused on Latinos, or
 - included a majority (> 50%) of Latinos, or
 - reported stratified data for a subgroup of Latinos
- **Reported at least *one* of the following outcomes:**
 - sex behavior
 - drug injection behavior
 - incident STDs



Results of Systematic Search Through 2005



Meta-Analysis Results

Sex Risk Behaviors:

Interventions significantly **reduced** the likelihood of any sex risk behavior (including CU, UPS or sex partners) **by 25%** [OR = 0.75; 95% CI = 0.66 – 0.85; $k = 19$]

- **Increased** condom use **by 56%**
[OR = 1.56; 95% CI = 1.33 – 1.85; $k = 11$]
- **Reduced** unprotected sex **by 25%**
[OR = 0.75; 95% CI = 0.63 – 0.89; $k = 10$]
- **Reduced** number of sex partners **by 25%**
[OR = 0.75; 95% CI = 0.66 – 0.86; $k = 8$]

Biologic Outcome:

Interventions significantly **reduced** the likelihood of incident STDs **by 31%** [OR=0.69; 95% CI = 0.54 – 0.88; $k = 3$]



Meta-Analysis Results:

Drug Risk Behaviors:

- Interventions significantly **reduced** the likelihood of:
 - Injection drug use **by 17%**
[OR = 0.83; 95% CI = 0.72 – 0.96; k = 6]
 - Sharing cotton/cookers **by 27%**
[OR = 0.73; 95% CI = 0.63 – 0.85; k = 3]
- Interventions did not significantly reduce the likelihood of needle sharing [OR = 0.92; 95% CI = 0.81 – 1.04; k = 4]





Stratified Analyses: Content (19 studies)*

Significantly greater efficacy in reducing *any sex risk behavior*:

- Delivered to men and women separately
- Delivered by health providers/counselors
- Included ≥ 4 sessions
- Taught condom use or problem solving skills
- Addressed:
 - barriers to condom use
 - sexual abstinence
 - peer norms

***Note: 1 study did not report sex outcomes**

Herbst et al. 2007





Stratified Analyses: Cultural Features

(12 studies targeting non-drug users)

Significantly greater efficacy in reducing
any sex risk behavior:

- Conducted ethnographic formative interviews
- Addressed gender norm: *machismo*
- Included Hispanic values: *familismo* & *respeto*

Caveat: Participants were primarily Mexicans,
Puerto Ricans, or Dominicans

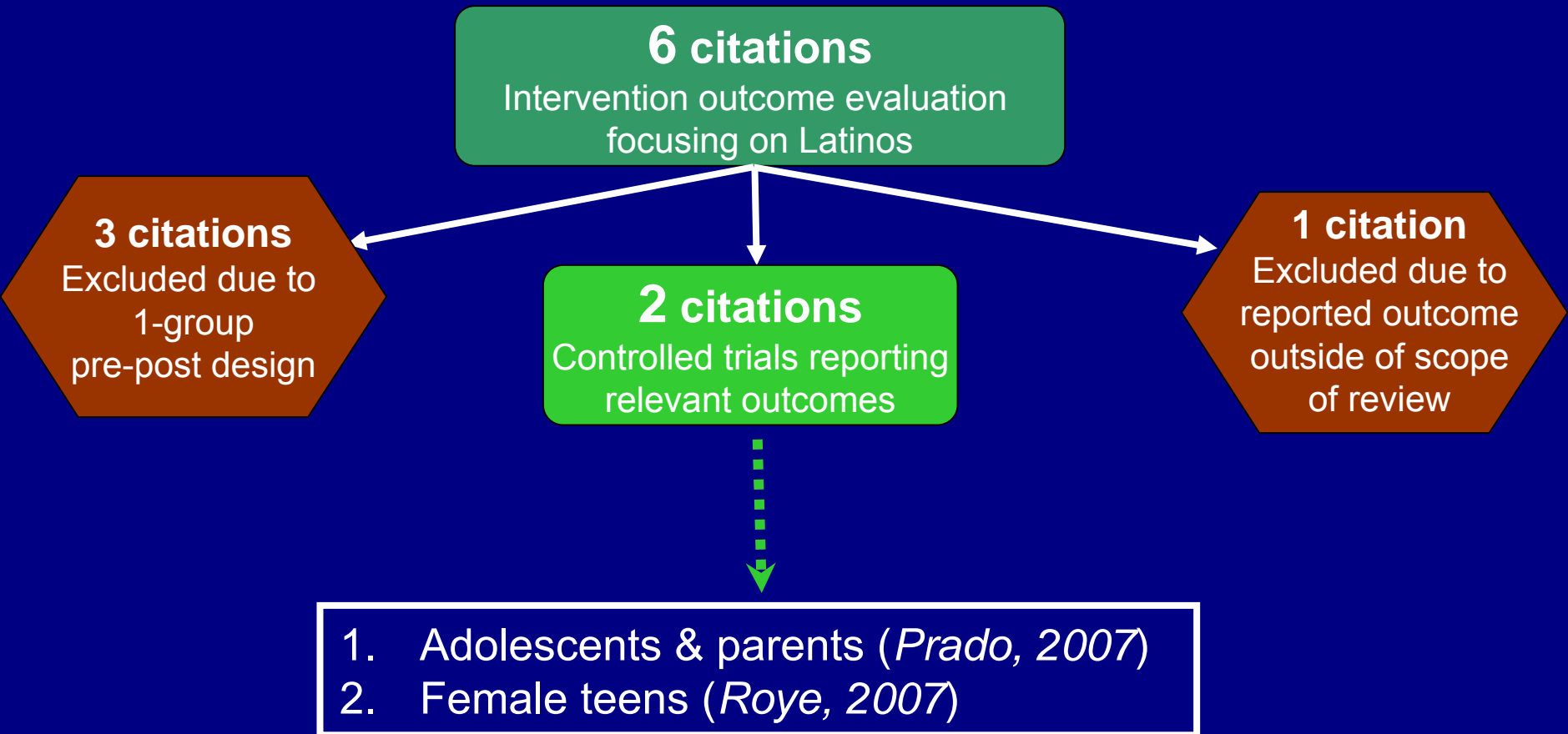


Conclusions

- HIV behavioral interventions for Latinos were efficacious in:
 - **reducing** sex-risk behaviors
(unprotected sex, multiple sex partners)
 - **increasing** protective behaviors
(condom use)
 - **reducing** incident STDs
 - **reducing** drug-risk behaviors
(frequency of injection & sharing works)
- Interventions not efficacious in reducing needle sharing



Update review through February 2008



Note: Neither study reported sufficient data to compute effect sizes for the meta-analysis.

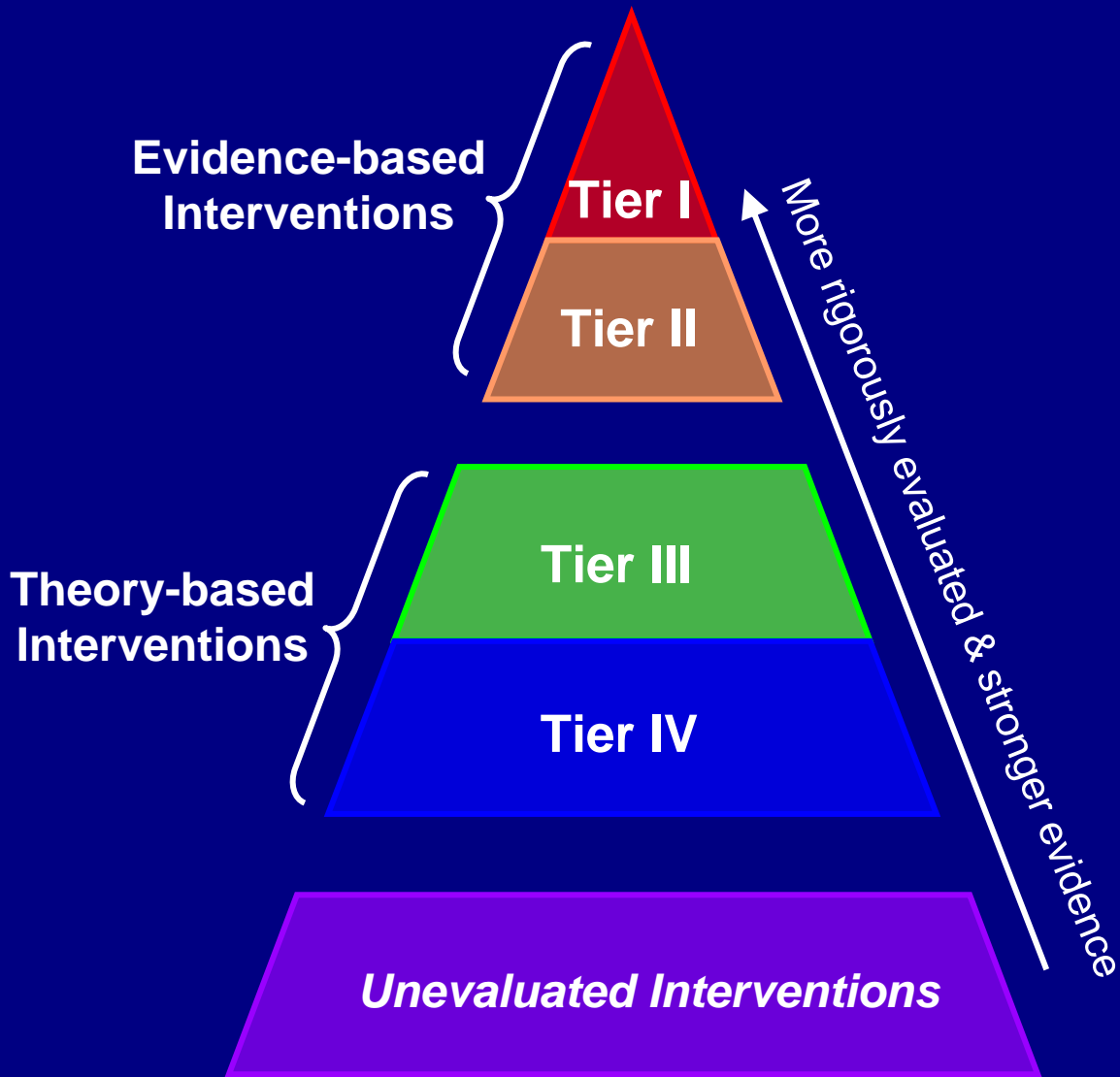


Implications of Review Findings

- Overall, behavioral interventions reduce HIV risk behaviors & increase protective behaviors among Latinos
- Findings inform intervention development by identifying elements associated with efficacy (e.g., deliverer, skills, & cultural content)
- Meta-analysis **does not** indicate which intervention is efficacious
- Need to identify “best” and “promising” evidence-based interventions for national dissemination



CDC's "Tiers of Evidence" Framework



Prevention Research Synthesis (PRS) Project

<http://www.cdc.gov/hiv/topics/research/prs/index.htm>



- *Identifies evidence-based interventions*
 - **Tier I** – 7 “Best-evidence” interventions for Latinos
 - *¡Cuídate!* – Youth
 - *Modelo de Intervención Psicomédica (MIP)* – IDU
 - *CONNECT* – Heterosexual couples
 - *S.A.F.E.* – Women
 - *Sisters Saving Sisters* – Adolescent females
 - *VOICES/VOCES* – STD clinic patients
 - *Women’s Health Promotion* – Women
 - **Tier II** – 1 “Promising-evidence” intervention for Latinos
 - *Salud, Educación, Prevención y Autocuidado (SEPA)* – Women


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HIV/AIDS Prevention Research Synthesis Project



The HIV/AIDS Prevention Research Synthesis (PRS) Project, through its ongoing efficacy review process, identifies evidence-based HIV behavioral interventions to help HIV prevention planners and providers in the U.S. select interventions most appropriate for their communities. These are listed in the [Updated Compendium](#).

All of the interventions to be cataloged on this site are evidence-based behavioral interventions for persons at high risk of acquiring or transmitting HIV. All cataloged interventions have been rigorously evaluated and have demonstrated efficacy in reducing HIV or STD incidence or HIV-related risk behaviors (e.g., unprotected sex, needle sharing) or promoting safer behaviors (e.g., being abstinent, using condoms).

The PRS review of community-level HIV behavioral interventions is currently in progress and will be added to the website once completed.

Parts of this website are still under construction. Please visit this site periodically for updates.

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Replicating Effective Programs (REP) Project

http://www.cdc.gov/hiv/topics/prev_prog/rep/index.htm



- *Packages evidence-based interventions*
 - Available for Latinos:
 - *VOICES/VOCES* – STD clinic patients*
 - Under development for Latinos:
 - *¡Cuídate!* – Youth*
 - *CONNECT* – Heterosexual couples*
 - *SEPA* – Women*
 - REP case study agencies serving Latinos:
 - *Project AIM* – Youth
 - *START* – Young incarcerated men

*Spanish translation

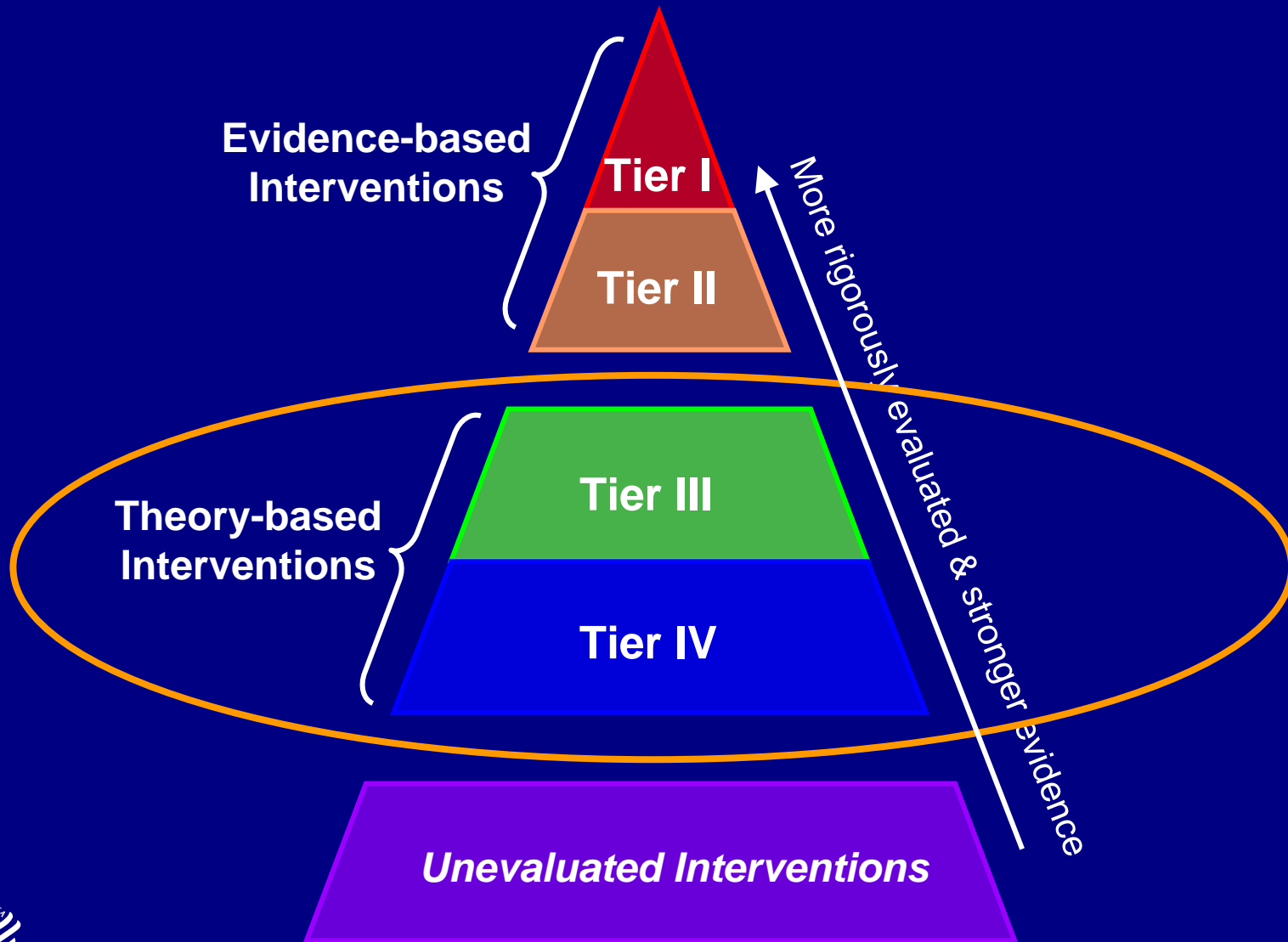
Diffusion of Effective Behavioral Interventions (DEBI) Project

<http://www.effectiveinterventions.org>

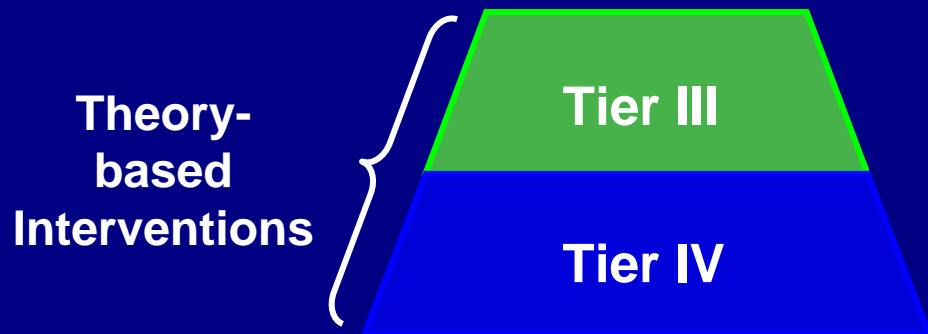


- *Disseminates evidence-based interventions*
 - Available for Latinos:
 - *VOICES/VOCES*
 - Under development for Latinos:
 - *Modelo de Intervención Psicomédica (MIP)*
 - Adapted in the field for Latinos:
 - *Safety Counts*
 - *Community PROMISE*
 - *Partnership for Health*
 - *SISTA . . .*
 - Available in Spanish (e.g., *Voices/Voces, Street Smart, Healthy Relationships, MPowerment, plus more...*)

Tiers of Evidence Framework



Tiers of Evidence Framework



- **Tier III:** Theory-based with positive outcome monitoring
- **Tier IV:** Theory-based with positive process evaluation
- CBOs are encouraged to conduct process monitoring & evaluation to:
 - Assess & improve their program
 - Collect evaluation data to strengthen evidence that program works
- One way to begin evaluating these programs is to collaborate with local researchers & academic institutions

Conclusions

- Overall, behavioral interventions work to reduce HIV risk behaviors & STDs among Latinos
 - Efficacious interventions have particular characteristics
 - Need additional research to develop & evaluate interventions for specific Latino subgroups (e.g., MSM, people living with HIV, migrants, etc.)
 - Need interventions to address societal, policy & economic factors that impact HIV risk
- CDC is packaging & disseminating behavioral interventions for Latinos through REP and DEBI





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