



# CHILD CARE HEALTH LINKAGES PROJECT

## Evaluation Summary

California Childcare Health Program  
UCSF School of Nursing  
September 2001 – June 2004

This report describes the preliminary results of the evaluation of the **Child Care Health Linkages Project**, funded by First 5 California. The **goal** of the Child Care Health Linkages Project was to improve the health and safety of children from infancy to 5 years of age attending early care and education programs in 20 California counties.

The Child Care Health Linkages Project (henceforth referred to as the Linkages Project) trained child care health consultants and child care health advocates, established 20 county-level health consultation programs, provided technical assistance to county programs, fostered linkages between local health and early care and education agencies, and conducted a formative and outcome evaluation of the child care health consultation programs.

## PROJECT GOALS

- To improve the health and safety of children attending early care and education programs in 20 California counties<sup>1</sup>
- To provide and support new or existing child care health consultation services
- To create and support the infrastructure to establish linkages between public health and early care and education agencies

## PROGRAM DESCRIPTION

The Child Care Health Linkages Project:

- Developed standardized training curricula for health and early care and education professionals on health and safety issues in early care and education (ECE) programs
- Supported 20 county-wide child care health consultation programs. Child care health consultants (CCHCs) provided health education, consultation, program and community development on key health and safety performance standards
- Provided technical assistance to the 20 county-wide child care health consultation programs
- Evaluated the training and service components of the project using a formative and outcome evaluation design

The Linkages Project was funded by First 5 California, California Department of Education Child Development, and the federal Maternal Child Health Bureau. The Linkages Project is part of the California Childcare Health Program (CCHP) administered by the University of California, San Francisco (UCSF) School of Nursing, Department of Family Health Care Nursing.

<sup>1</sup>Alameda, Colusa, Humboldt, Inyo, **Kern, Lake, Los Angeles**, Marin, **Mendocino**, Napa, Nevada, **Sacramento**, San Benito, San Francisco, San Luis Obispo, Santa Clara, Shasta, Siskiyou, Sonoma, and Yolo (research counties bolded).

## EVALUATION DESIGN

The evaluation was composed of three components:

### 1. Training Evaluation

Assessed the effectiveness of the California Training Institute (CTI) trainings.

#### Data collection procedures

Participants completed pre and post-knowledge tests and process evaluations for each session.

### 2. Formative Evaluation

Described the county needs, described the county child care health consultation services, and identified barriers and facilitators of the 20 county programs.

#### Data collection procedures

Interviews and focus groups were conducted with ECE directors and CCHCs, and surveys were completed by Linkages Project administrators in each county.

### 3. Baseline and Outcomes Evaluation

Measured health and safety changes in the intervention and control ECE programs and health status of children attending these programs in five Linkages counties.

#### Data collection procedures

ECE programs were matched in five research counties and centers were identified as intervention or control centers. Observations and record reviews were conducted to assess program adherence to key National Health and Safety Performance Standards (NHS standards) and to assess child health status using these standardized instruments:

The *CCHP Health and Safety Checklist* is a 66-item checklist based on the NHS standards with a 3-point rating scale (met, partially met, or did not meet standards) and nine subscales. (Available at <http://ucsfchildcarehealth.org/html/pandr/formsmain.htm#healthsafecheck>)

The *Child Care Evaluation Worksheet* collected child health data from on-site health records including primary care provider, health insurance, screenings conducted and results. The Worksheet was developed by the Quality Enhancement Project for Infants and Toddlers (University of North Carolina, Chapel Hill).

## EVALUATION RESULTS

### Training Evaluation Results

The Linkages Project trained 80 health professionals over four training cycles, each with nine days of training to become CCHCs. The curriculum was based on the National Training Institute's Child Care Health Consultation curriculum. ECE professionals were also trained to become Child Care Health Advocates (CCHAs).

- 64 CCHCs, primarily nurses, graduated after attending nine days of training.
- There was a statistically significant knowledge change for CCHCs, from 71% correct response on the tests to 80%,  $p < .05$ ,  $n=43$ .
- Trainees reported primarily positive feedback on the process evaluations after the trainings.

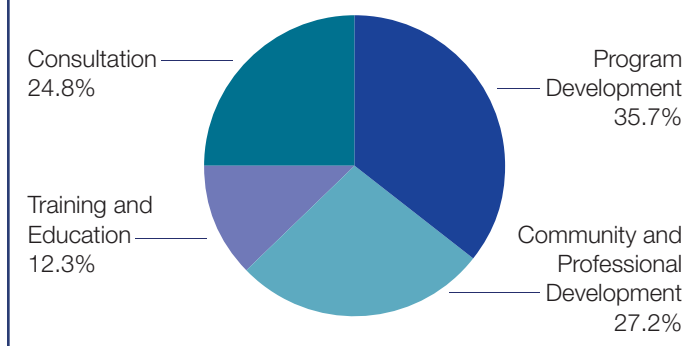
Source: 43 matched pre- and post-tests from 3 sessions and process evaluations

### Formative Evaluation Results

Child care health consultation services provided

- CCHCs provided services to approximately 120,000 children from 0-5 years old and their families in more than 4,561 child care centers and 1,398 family child care homes. CCHCs conducted over 450 workshops for parents and providers of 35,000 children.

Figure 1: Percent of Time Consultants Spent on Activities by Activity Category



- CCHCs covered a variety of topics from the NHS standards. Most common were: health promotion and protection (27%); staffing and health consultation (23%); and activities for healthy development (20%)

Source: 3,274 Daily Encounter Forms (DEFs) from 32 consultants in 20 counties, March 2001 – December 2002 (first 21 months of program)

## EVALUATION RESULTS (CONTINUED)

- *Primary health and safety needs* for ECE programs, identified by ECE director and lead agency administrators:

- parent education
- contagious illnesses
- childhood diseases and immunizations
- transportation safety
- oral health
- asthma and chronic illnesses

Source: 128 director interviews in 5 counties and 20 administrator surveys in 20 counties

- *Facilitators* to implementing child care health consultation programs, identified by CCHCs, directors, administrators, and technical assistants include:

- Linkages between community agencies and ECE programs must exist.
- Community characteristics unique to each county facilitate program implementation (e.g., a wealth of resources in urban settings and personal relationships in rural settings).
- The lead agency of the consultation program must invest and commit to the consultation program.

- *Barriers* to implementing child care health consultation programs, based on interviews and surveys with CCHCs, directors, administrators, and technical assistants, include:

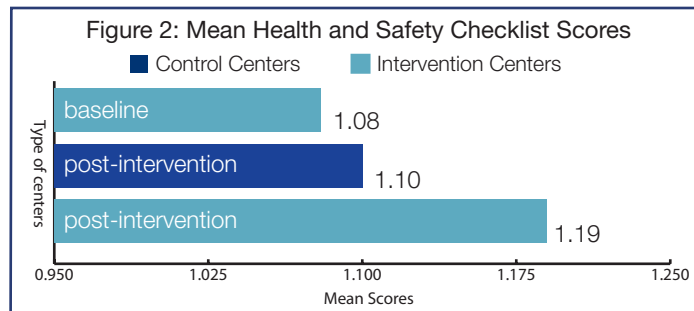
- A lack of health and safety resources and outreach in the community hinders the implementation of the program.
- ECE providers may not be informed about consultation programs or be able or willing to participate.
- Geographically expansive and isolated counties make provision of service difficult and access to consultation programs and health and safety resources difficult.

Source: 9 focus groups with 23 CCHCs in 3 sessions, 20 administrator surveys, and conference with 2 technical assistants

### Baseline and Outcomes Evaluation Results

#### Changes in Health and Safety of ECE Programs

- Significant increase in mean total score for intervention centers from baseline (1.08) to post-intervention (1.19),  $p < .05$ .
- Significantly higher mean total scores for intervention centers (1.19) than control centers post-intervention (1.10),  $p < .05$ .

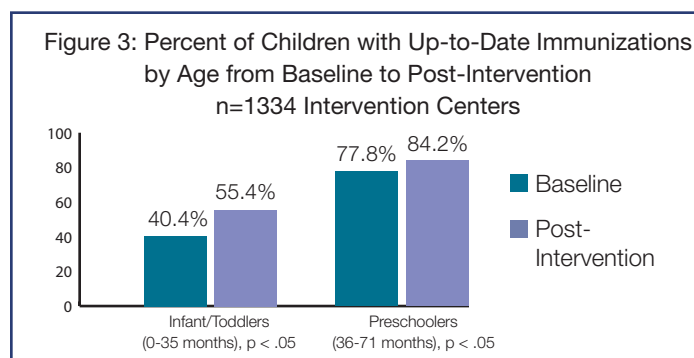


- Post-intervention improvements were observed in safe storage of staff and children's personal belongings, bathroom facilities, and handwashing in intervention centers,  $p < .05$ .
- Time spent consulting for centers was significantly associated with improvements in Health and Safety Checklist scores ( $r = 0.56$ ,  $n = 63$  centers in four counties).

Source: 127 Checklists from 82 intervention centers and 45 control centers in 5 counties, 3898 DEFs in 4 counties.

#### Changes in Health and Safety of Children

- There was a significant increase in the percent of infants/toddlers and preschoolers with up-to-date immunizations in intervention centers at post-intervention compared to baseline,  $p < .05$ . (Figure 3)
- The percents of children with special health care needs remained stable between baseline and post-intervention for control and intervention centers (24% and 25%).

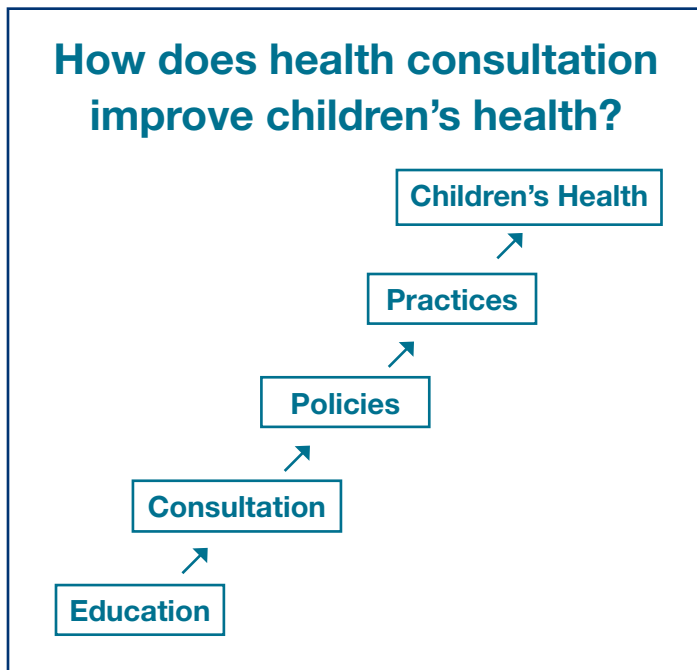


Source: 2698 child records in 5 counties

# CONCLUSIONS

A stepwise model of child care health consultation emerged from the Linkages Project:

- Education and training leads to increases in consultants' and advocates' knowledge.
- Consultants and advocates use their training to provide health consultation, which includes on-site visits, workshops, and technical assistance by phone.
- Consultants work with early care and education providers and directors to develop, revise and implement health and safety policies.
- When health and safety policies are implemented, it can lead to improvements in providers' practices and, ultimately, both staff and child health and safety.



Major Findings	Implications and Recommendations
<ul style="list-style-type: none"> <li>• Child care health consultants increased their knowledge of health and safety by participating in a standardized training program.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide more standardized trainings for health and ECE professionals on health and safety issues in ECE programs; establish standard CCHC and CCHA certifications and offer CCHA trainings in local community colleges.</li> </ul>
<ul style="list-style-type: none"> <li>• County-level child care health consultation programs were successful in establishing linkages between ECE and health providers and agencies, thus promoting health and safety in early care and education programs.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide continued funding and sustainability efforts for county child care health consultation programs to maintain linkages between ECE and health and safety agencies.</li> </ul>
<ul style="list-style-type: none"> <li>• Child care centers that received child care health consultation services had more complete and up-to-date health policies, met more NHS Standards for health and safety, and had higher child immunization rates after consultation services were provided compared to before services were provided.</li> </ul>	<ul style="list-style-type: none"> <li>• Regulations are needed to require early care and education programs serving infants and toddlers to have a child care health consultant visit regularly to help them improve and monitor program standards and provider competencies.</li> </ul>

For further information on the Child Care Health Linkages Project and California Childcare Health Program and other programs, contact:

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