



Participatory Workplace Health Interventions in Corrections

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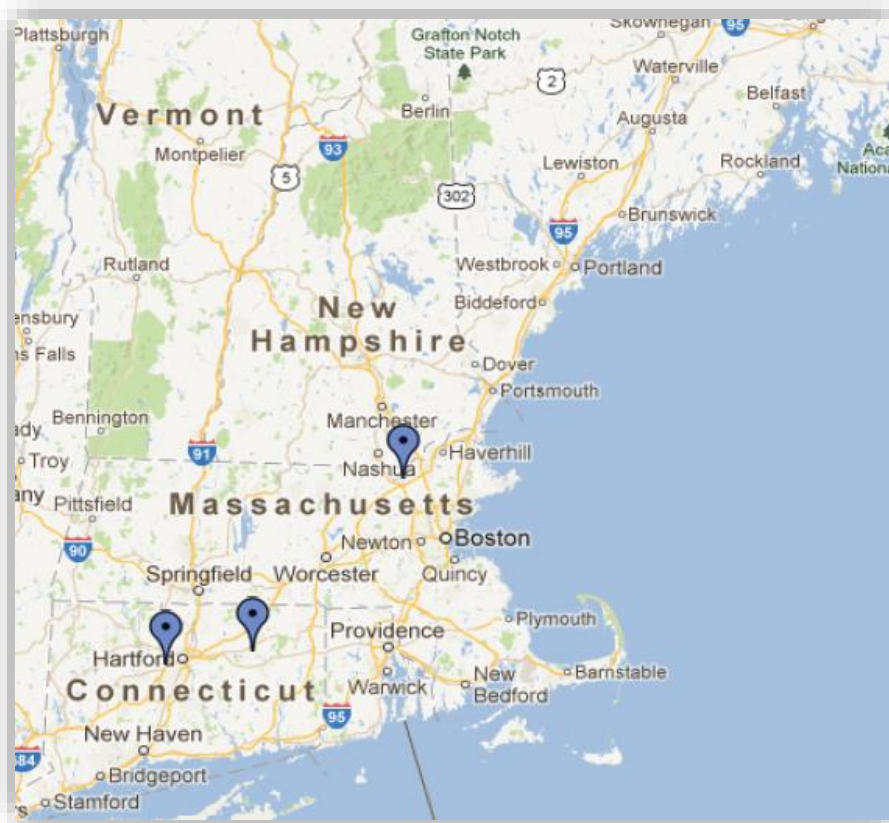
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Participatory Workplace Health Interventions in Corrections

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 - Background & Context-The Why
 - Participatory Interventions Approaches and Process
- Intervention, Design, and Analysis Scorecard (IDEAS Tool)
 - Indoor Air Quality
- Strengths & Limitations
- Conclusion & Summary



Center for Promotion of Health in the New England Workplace



- University of MA Lowell
- Occ. Health & Safety
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- Biostatistics
- Economics
- Nursing



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- Ergonomics
- Medicine
- Health Policy



- University of CT Storrs
- Psychology
- Health Promotion



CPH-NEW's goals include

(From NIOSH Total Worker Health™ Mission)

www.cdc.gov/niosh/twh

1. Implement and evaluate models for improving worker health by combining:
 - Worksite health promotion (WHP)
 - Workplace safety & health (OSH)
2. To promote **participatory approaches** that engage all levels of an organization in the design of effective, **sustainable** workplace interventions.



CPH-NEW Healthy Workplace Toolkit: Program Goals

Promote PARTICIPATION of the workforce in the design of interventions

- Enhances job control, reduces stress
- Uncover root causes of injury, illness, poor health behavior

Design interventions that INTEGRATE workplace health protection (safety) and health promotion.

- Healthier work environment supporting healthier employee behavior



HITEC 1 (2006-2011)

1. Compared 2 approaches for integrating OSH and health promotion:
 - Professional -- Administratively directed (top down)
 - Participatory -- Employee initiated, with joint employee-management oversight
2. Tested at 2 Department of Correction (DOC) facilities
2. Professional site interventions included a weight loss program, a fitness program and health counseling
3. Participatory site interventions included 2 weight loss programs, a cushioned insole program, and a civility program



HITEC 2 (2011-2016)

Two Participatory Intervention Approaches

Design Team	Kaizen Team
<i>Design team (DT)</i> line officer lead intervention planning	Multi-level <i>kaizen event team lead (KET)</i> intervention planning
Unlimited time to plan and refine interventions	Limited time to plan and refine interventions (120 days)
Structure-COs only with Study Team Facilitator	Structure-COs, facility managers (Warden Captain), DOC upper management
Can plan multiple interventions simultaneously	Plan 1 intervention at a time
Use IDEAS TOOL	



HITEC 2 Interventions

Name of Intervention	Description
Building Improvement Linked to Design (BILD)	An ergonomic intervention addressed to procurement policies, and building design to support exercise and relaxation
Structured Work-related Injury Prevention through Ergonomics (SWIPE)	A safety intervention addressing CO injury related to inmate incidents .
Work to be Fit (W-2 BFIT)	A CO-developed program for fitness for duty
Better Food through Education and Design (BFED)	A weight management program aimed at improved nutrition and altering the environment to affect eating patterns at work



HITEC 2 (2011-2016)

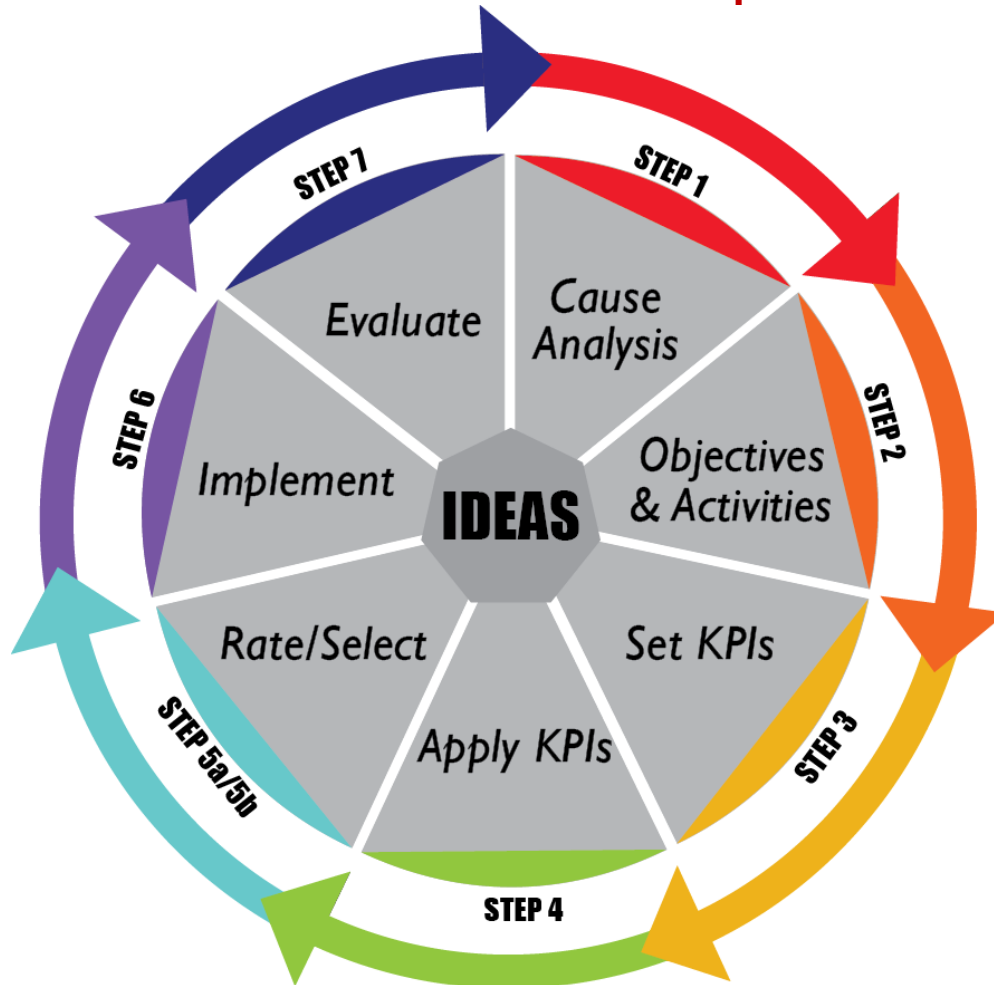
New CO Initiative

- 2 cohorts created from new recruit classes
 - One cohort received standard follow-ups post-academy:
 - electronic contact & periodic program activity
 - Other cohort received personalized follow-up and an assigned health mentor



Intervention, Design, and Analysis Scorecard: *a participatory intervention planning method*

Designing interventions with IDEAS is an iterative process



Step 1

Understanding the problem

Step 2

Creating full set of possible solutions

Steps 3,4

Analyzing costs, benefits, barriers
Formulate alternatives

Step 5

Rating, selecting best option

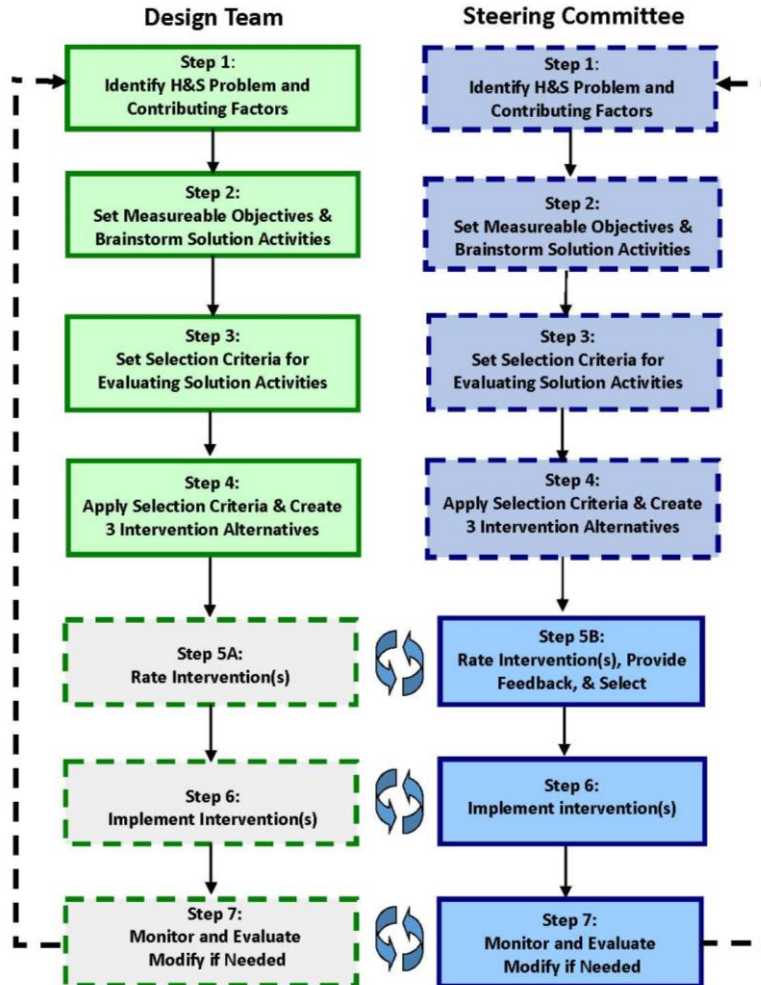


IDEAS tool



Intervention, Design, and Analysis Scorecard (IDEAS)

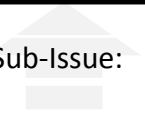
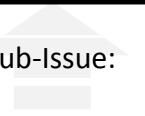





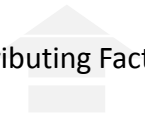
A planning tool for integrated worksite health protection/health promotion interventions



Developed by Center for Promotion of Health in the New England Workplace with support from NIOSH grant #U19-OH008857

Step 1: Identify a Health & Safety Concern and Contributing Factors

General Health & Safety Concern:

 Sub-Issue:	 Sub-Issue:	 Sub-Issue:	 Sub-Issue:
 Contributing Factors:	 Contributing Factors:	 Contributing Factors:	 Contributing Factors:

Step 2: Set Measurable Objectives & Brainstorm Solution Activities

Major Health & Safety Objective:

Solution 1:

Solution 2:

Solution 3:

Solution 4:

Specific Activities / Components of Solution 1:

Specific Activities / Components of Solution 2:

Specific Activities / Components of Solution 3:

Specific Activities / Components
of Solution 4:

Step 3: Establish the Criteria for Evaluating Interventions

Scope/Impact	Benefits/Effectiveness	Resources/Costs	Obstacles/Barriers
Who do you want to reach (e.g. one unit or the entire organization)? How many people should be affected? (describe both short term and long term)	What are the positive outcomes you want to achieve? (describe both short and long term) Short term examples: increased knowledge, behavior change, increased participation and satisfaction Long term examples: improvements in health, lower insurance claims, more health care utilization	What resources are currently available within the organization that should be considered? (e.g. time, money, personnel, etc.) Design Teams may propose interventions that exceed the currently available resources if the benefits justify the resources needed/costs. Resources available should not limit Design Team brainstorming	What obstacles/barriers exist that may interfere with intervention success?

Step 4: Apply Selection Criteria to Solution Activities and Create At Least 3 Interventions

Intervention:

Solution Activities <i>List the activities that you want to include in this intervention</i>	Scope/Impact <i>Who will this activity reach? How many people will be affected? Who do you want to reach (describe both short term and long term)</i>	Benefits/Effectiveness <i>What positive outcomes will be achieved through this activity? (describe both short and long term)</i>	Resources/Costs <i>What are the resources needed/costs of this activity? (e.g. time, money, personnel, etc.)</i>	Obstacles/Barriers <i>What obstacles/barriers could interfere with the success of this activity?</i>

Step 5A: Rate Intervention(s)

Rate the three intervention alternatives as High (H), Medium (M), or Low (L) relative to the selection criteria from Step 3.

	Intervention 1	Intervention 2	Intervention 3
	Title:	Title:	Title:
Anticipated Scope/Impact (L/M/H)			
Anticipated Benefits (L/M/H)			
Resources Needed (L/M/H)			
Anticipated Obstacles (L/M/H)			

Priority ranking of interventions (optional):

Additional notes to the Steering Committee (optional):

Step 5B: Rate & Select Intervention(s)

Rate the three intervention alternatives as High (H), Medium (M), or Low (L) relative to the selection criteria from Step 3 and select an intervention for implementation.

**Anticipated Scope/Impact
(L/M/H)**

Anticipated Benefits (L/M/H)

Resources Needed (L/M/H)

**Anticipated Obstacles
(L/M/H)**

Intervention 1	Intervention 2	Intervention 3
Title:	Title:	Title:

Topics to discuss with Design Team regarding proposed intervention (optional):

Intervention(s) selected for implementation:

Design Team Intervention Approach- IAQ (BILD)

	Design Team
Location	A medium security-level correctional facility in Connecticut
Type of activity/ Intervention	<p><u>BILD:</u> IAQ intervention</p> <p>Poor indoor air quality (IAQ) in a workplace can affect personal and organizational health</p> <p>Plan IAQ interventions can help reduce employee discomfort and increase worker productivity.</p>
Structures	<p>The Design Team consists of 5 Correctional Officers (COs) who participate in a one hour weekly meeting with a facilitator from the HITEC- II study team</p> <p>The Site Steering Committee consists of supervisors (captains and deputy wardens) at the correctional facility.</p>
Duration of Interventions	IAQ (BILD) intervention – 1 year (Started August 2013) still in progress
Number of meetings	IAQ Intervention – 19 meetings.

IAQ (BILD) Intervention-Measures

- Comprehensive walkthrough of the facility by an industrial hygienist who observed conditions and spoke with staff at their posts.
- Connecticut Department of Public Health's "Tools for Office Buildings Program" workstation checklist.



IAQ (BILD) Intervention-Results

Facility Walkthrough findings of the industrial hygienist pertained to:

- Accumulated debris on air supply, vents, and return air grills.
- Poor IAQ in mechanical rooms and tunnels.

Recommendations from the industrial hygienist included:

- Increased frequency in cleaning of the HVAC system and of the stand-alone air circulation systems in order to minimize health and safety issues.
- Address IAQ related activities through a larger program, such as the DPH Tools for Office Buildings, to ensure sustainability and ongoing oversight.



IAQ (BILD) Intervention-Results

Workstation Checklist-Surveys were collected from 43 staff members who completed the checklist. Results demonstrated that:

- 43% had concerns about general cleanliness (e.g. dust accumulation on horizontal surfaces and HVAC supply and return grills, and weekly vacuuming).
- 67% had concerns about excess moisture (e.g. condensation and stains on indoor surfaces, walls and ceiling tiles).
- 75% had concerns about thermal comfort (e.g. temperature not maintained at acceptable levels, drafts).



IAQ (BILD) Intervention-IDEAS

Step 1:

General Health & Safety

Problem/Issue:

Indoor Air Quality (IAQ) problems throughout the Correctional Facility reported by staff contributes to absenteeism and presenteeism.

Sub-issues:

- Temperature swings and dust accumulation contributes to health and productivity problems (e.g. sinus infection, wheezing, asthma, absenteeism, and presenteeism).
- Humidity problems contribute to concerns (e.g. slips and falls during code response).

Step 2:

Health & Safety Goal/Objective:

Improve air quality to reduce staff and inmate complaints.

Solutions:

- Improve temperature control to reduce temperature swings between shifts and areas.
- Improve air quality by reducing circulating levels of allergens and irritants.
- Review maintenance schedule to develop solutions to improve pre-existing schedule, and remove sources of dust.



IAQ (BILD) Intervention-IDEAS

<u>Intervention A</u>	<u>Intervention B</u>	<u>Intervention C</u>
Improve temperature control to reduce temperature swings between shifts and areas	Improve air quality by reducing circulating levels of allergens and irritants	Review maintenance schedule to develop solutions to improve pre-existing schedule, and remove source of dust
<ul style="list-style-type: none">Keep AC running steady year around, which can help keep humidity levels constant.Have a designated officer in Housing Control Units trained and able to adjust the thermostat (Activity already adopted).	<ul style="list-style-type: none">Create a vent cleaning schedule or adjust pre-existing maintenance schedule.Incorporate annual dust cleaning as part of preventative maintenance.Elicit regular cleaning of already existing filters.	<p>Create publically displayed maintenance log sheet.</p> <p>Teach inmates how to clean vents and utilize existing machinery (i.e. Duct cleaning equipment).</p> <p>Review and optimize maintenance schedule along with maintenance staff.</p>



IAQ (BILD) Intervention-IDEAS

	<u>Intervention A</u>	<u>Intervention B</u>	<u>Intervention C</u>
	Improve temperature control to reduce swings between shifts and areas	Improve air quality by reducing circulating levels of allergens and irritants	Review maintenance schedule to come up with solutions to improve pre-existing schedule, and remove sources of dust
Anticipated scope/impact (L/M/H)	H	H	H
Anticipated benefits (L/M/H)	M	H	H
Resources needed (L/M/H)	M	H	H
Anticipated obstacles (L/M/H)	M	H	M
Intervention B is first priority. DT would like to implement this with support from management. Intervention C is also important and some activities could be adopted. Intervention A is last priority because one of the activities under the intervention has already been adopted.			
<u>Rating Key:</u> H: Activities that make up an intervention alternative meets or exceeds what is stated in the selection criteria. M: Activities that make up an intervention alternative only partly accomplish what is stated in the selection criteria. L: Activities that make up an intervention alternative fails to accomplish what is stated in the selection criteria.			



IAQ (BILD) Intervention-IDEAS

<u>Step 5 (a)</u>	<u>Step 5 (b)</u>
Intervention (Solution) Chosen by DT members	Intervention (Solution) Chosen by Site Steering Committee members
Improve existing schedule in order to better remove sources of dust that get circulated.	



IAQ (BILD) Intervention-Lesson Learned

- Concerns are significant for the correctional facility staff.
- A participatory framework allows for worker involvement in design and implementation of interventions that are specific to their workplace settings and needs.
- The IDEAS tool:
 - Promotes ownership of, engagement with, and sustainability of proposed and implemented interventions, and may guide other studies that address health-based interventions in the workplace setting.
 - Allows for the opportunity of workers and management to work together to develop interventions to reduce exposure to poor IAQ.
- The findings of this intervention study could be applied to other workplace settings looking at improving IAQ.

CPH-NEW Healthy Worksite Participatory Program Website Interactive Tools

CPH-NEW Readiness Survey

Please answer any of the assessments in this survey. When you are finished, click Generate Summary to generate a summary document.

Generate Summary

Assessment 1

Senior Management Commitment

- ☐ Senior management is willing to commit to a participatory safety, health and wellness program for 9-12 months.
- ☐ Senior management has not yet made a commitment.

Comments

Assessments

Assessment 1

Assessment 2

Assessment 3

Assessment 4

Assessment 5

Assessment 6

Assessment 7

Worksheets and Quick Reference Guides for Facilitators

Online readiness survey

The screenshot displays a web browser window with the URL http://129.63.176.149/docs/IDEAS%20-%20Step%201%20Form_tc.pdf. The page title is "Please fill out the following form." and it includes a "Highlight Existing Fields" button. The main content area is titled "Step 1: Identify Health & Safety Problem/Issue and Contributing Factors". It features a hierarchical form structure with a top box for "General Health & Safety Problem/Issue:", three boxes for "Sub-issue:", and three boxes for "Contributing Factors:". The CPH-NEW logo is visible at the bottom of the form area. The browser's taskbar at the bottom shows various application icons and the system clock indicating 10:29 AM on 10/2/2013.

Overall Study Strengths & Limitations

- Participatory nature of the design:
 - Union and Management support
 - 10 years of engagement
- Awareness
- Retirement and transfers
- Scheduling, staffing and overtime
- Budget



Summary & Conclusion

- Too early to conclude
- Severity of health risks among COs
- Willingness to change
- Organizational Culture
- Engagement & Sustainability
- National Effort



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CPH-NEW

- Center Objectives
- HITEC II Study
 - Fitness
 - Lifestyle
 - Nutrition
 - Work Environment
- Partners
- Projects

Health Improvement Through Employee Control II Study

Health Improvement Through Employee Control II (HITEC II), also known as the UConn Department of Correction (DOC) study, is a continuation of a study that began seven years ago called "HITEC I." In HITEC I, the health and wellness of correctional staff was assessed along with two different methods of health promotion interventions. HITEC II is an intervention study that builds on the findings of our previous work and consists of a mentoring program for new recruits and two different participatory intervention activities. The study is planned to run until August 2016.

An interesting finding about the health of correctional staff was that, while new officers began their careers physically fit, within their first three years on the job their health deteriorated to a level similar to that of an officer who had been on the force for 15 or more years. Their rates of high blood pressure, obesity and depression were comparable to more experienced officers. These findings raised the questions, "Why does this occur?" and "Can something be done in those first

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Newsletter

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The HITEC team would like to wish

CORRECTIONAL HEALTH AND WELLNESS

Issue 3



Health Improvement Through Employee Training and Control II



Fall 2013

IN THIS ISSUE

What is the study all about?

by Jeff Dussetschleger

Health Improvement Through Employee Control II (HITEC II), also known as the UConn DOC study, is a continuation of a study begun seven years ago, called, "HITEC I." In HITEC I, the health and wellness of correctional staff was assessed along with two different methods of health promotion interventions. HITEC II is an intervention study that builds on the findings of our previous work and consists of a mentoring program for new recruits and two different participatory intervention activities. The study is planned to run until August 2016.

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To address these questions, HITEC II implements two interventions with new officers: a web-based education site that will provide information and self-paced learning modules about health and wellness, and a mentor program, which pairs a senior officer with a new officer. The mentor's role is not to teach the new officer the job but rather to assist the new officer to develop healthy ways of handling the stressors of the job.

HITEC I addressed health promotion in two ways: a top-down, "best practices" approach, and a participatory approach in which correctional officers designed the interventions. Because the participatory approach proved to be the better one, HITEC II is expanding on it. The officer-lead intervention program stays in place while a new approach is introduced. The new approach, "Kaizen," brings together correctional officers, facility management, and DOC management to address the issues of nutrition, fitness, on-the-job injury and ergonomics. They will work intensely for a few months to develop and implement a program to address each of the target areas.

What is the study all about?
An overview

The Mentoring Program
An update

Cheshire Design Team Update
An update

Corrigan-Radgowski Kaizen Event Update
An update

DOC Family Night - HITEC-II Participation
Page 6-5

DOC Safety Tips!

Driving Out the Healthier Way

Physical Activity Facts

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Q&A



Discussion Questions

- DOC/Facility level approach to health and safety.
- What is the current structure/governance to address health and safety at the DOC/Facility levels.
- Communication process at the DOC/Facility levels about health and safety issues.
- What is the process for identifying health and safety issues.
- Staff availability and knowledge of health and safety issues and interventions
- Managerial culture: time, resources, involvement in decision making , etc.

Health Improvement through Employee Control (HITEC)

Research Team

UConn Health/ UConn Storrs

- Dr. Martin Cherniack (Principle Investigator)
- Dr. Jeff Dussetschleger
- Dr. Alicia Dugan
- Dr. Janet Barnes-Farrell
- Dr. Robert Henning
- Dr. Pouran Faghri
- Ms. Sara Namazi, PhD Candidate

UMass- Lowell

- Dr. Mazen El Ghaziri



תודה
Dankie Gracias
Спасибо شکرًا
Merci Takk
Köszönjük Terima kasih
Grazie Dziękujemy Děkojame
Ďakujeme Vielen Dank Paldies
Kiitos Täname teid 谢谢
Thank You Tak
感謝您 Obrigado Teşekkür Ederiz
Σας ευχαριστούμε 감사합니다
Бодхон
Bedankt Děkuje vám
ありがとうございます
Tack





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