



# **The Dow Chemical Company**

## **Health Strategy**

### ***Case Study: LightenUP***

***IHPM Annual International Conference***

***September 28, 2006***

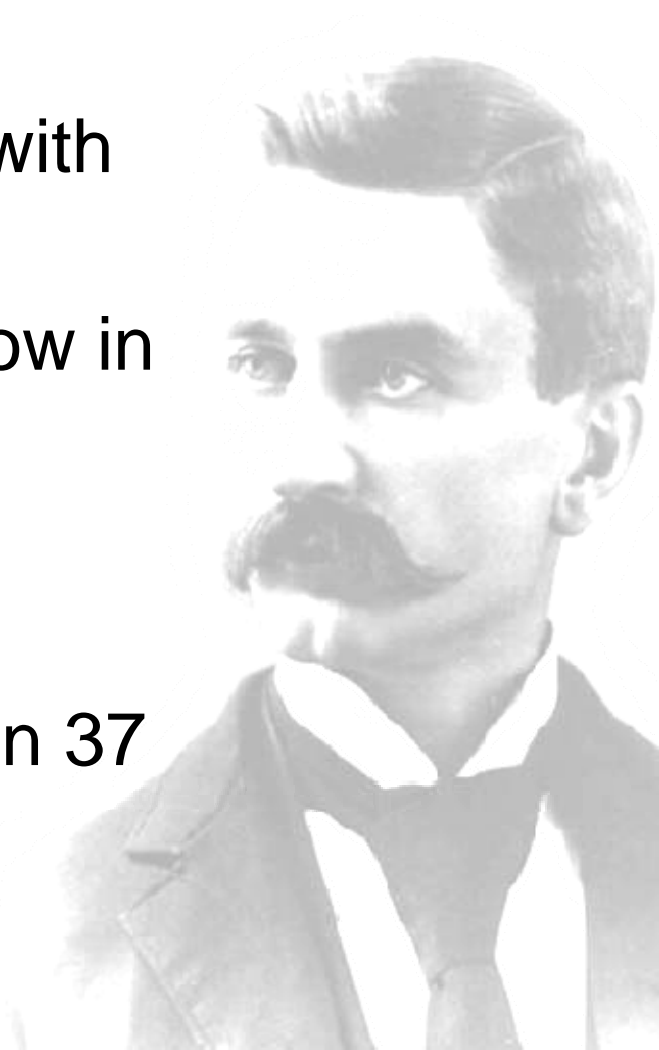
***Karen Tully***

***Global Health Promotion Leader***



# About Dow ...

- A science and technology leader with annual sales of \$40 billion.
- Founded in 1897 by Herbert H. Dow in Midland, Michigan.
- 54% of all employees are in manufacturing roles
- Operate 180 manufacturing sites in 37 countries.
- Employs 43,000 people globally.



## Where We are Today

- Dow Health Strategy approved by top management August 2004
- Business analysis of the Total Economic Impact of Health to Dow
  - Defined outcomes of interest which must be balanced
- **Integrated cross functional approach to strategy and implementation**
- **Examining cultural aspects of success**
- Prominent participant in Partnership for Prevention's Leading By Example CEO-to-CEO initiative
- **Participation in NIH funded 4 year overweight & obesity study: *LightenUP***
- Third-party recognition



## **The Dow Health Impact Opportunity: To Address a Total Economic Impact of > \$750 Million/Year Globally**

Design and implement a strategic approach to managing health at Dow that supports an improved financial position relative to the economic impact from health

AND

creates a climate of support, engagement, and satisfaction on the part of key stakeholders.\*

*\*plan participants (employees/families), health care providers, vendors, and Dow leadership*

*Note: Taken from the Dow Health Strategy approved by the OCE in August 2004.*

# Dow Health Strategy

## Purpose

To provide **cross-functional expertise** and leadership to ensure that Dow "**Total Health**" related programs and services are established, prioritized, leveraged and implemented on a global basis, in the most **cost effective** and **efficient** way, resulting in improved **health**, reduction of **health risks**, management of health-related **costs** of Dow People, and improved **employee performance**.

# A Strategic Approach to Building a Culture of Health

- “I believe we need a sustained focus on **prevention** to maintain and improve the health of our people. **Prevention** has the power to make a real and lasting difference in our individual quality of life...
- ...Our analysis shows that prevention can improve both our direct and indirect health related costs. Our profit potential is inextricably linked to the capability and performance of our employees....
  - ...We have recently strengthened our commitment to this effort by adopting a strategic approach to building a culture of health with **prevention** as a major pillar in our overall plan.”

*Andrew N. Liveris, President and CEO*

# Dow Health Strategy

## Prevention Element

### Objectives

- Reduce health risk of our population 10% over the next 10 years.
- Measure and track health status to direct and manage investments in programs/services and monitor outcomes.
- Integrate all related departments and efforts to achieve successful implementation and stimulate a healthy Dow culture.

### Health Targets

- **Overweight and Obesity**
- **Physical Inactivity**
- Tobacco
- Stress, Anxiety and Depression



# **NHLBI Worksite Overweight and Obesity Study**

*Environmental Approaches to Overweight and Obesity Prevention and Management at The Dow Chemical Company*

# **LIGHTENUP**



# Research Project Objectives

- Design and demonstrate the feasibility of implementing *moderate-* and *high-intensity* environmental and ecological interventions directed at overweight and obesity prevention at Dow worksites.
- Test the multifaceted hypothesis that, relative to individual interventions, environmental interventions:
  - reduce the prevalence of obesity and overweight,
  - reduce the prevalence other weight-related risk factors,
  - improve health, reduce healthcare utilization and expenditures,
  - improve an array of indicators known to be related to employee productivity.
- Test whether savings outweigh program expenses, thus producing a positive return-on-investment (ROI).

# Project Team

- Cornell University Institute for Health and Productivity Studies – Washington, DC
- The Medstat Group – Ann Arbor, MI
- University of Georgia – Athens, GA
- National Business Group on Health – Washington, DC
- The Dow Chemical Company – Midland, MI

# Study Design

- Quasi-experimental:
  - Moderate vs. high intensity treatment/pre-post design
  - Four year study with three data points: baseline, year 1, year 2
- Intervention sites – matched then randomly assigned to moderate or high intensity
- Number of eligibles = 10,618 (12 sites)
- Intervention sites = 9 (Intense = 5; Moderate = 4)
- Control = 3

# Measures

- Health risk of employees -- overweight/obesity, diet/nutrition, exercise/physical activity, and other behavioral risk factors -- collected through individual HRAs and biometric screenings
- Health care utilization and costs
  - collected via health plan insurance claims and enrollment data
- Participation in risk reduction programs offered by Dow
  - collected routinely at the sites
- Absence from work
  - collected for hourly employees using personnel files
- Functional health
  - collected via the SF-12 Health Survey
- Presenteeism at work
  - collected using the Work Limitations Questionnaire (WLQ)
- Organizational Climate (Leading by Example)
- Environmental Assessment Tool (EAT)

# Moderate and Intense Sites - Required Interventions

## ***Access to Healthy Food Choices***

Cafeterias, Vending, Catering (Dow Meetings, Overtime meals)

- Education
- Labeling
- Promotional/Comparative Pricing
- Communications/Prompts/Messaging

## **Access to Physical Activity**

- Weight Management Tracking Program – “Why Weight”
- Walking Paths/Routes
- Communications/Prompts/Messaging

## **Moderate and Intense Sites - Required Interventions (con't)**

### **Work Group Healthy Culture Focal Points**

- Communication/Education
- Intervention Promotion and Implementation
- Interventions Advocate
- Employee Recognition Identification

### **Employee Recognition**

- Personal Lifestyle Change
- Inspiration/Positive Influence on Others
- Advocates of Change

# Intense Sites - Required Interventions

## Site Health Goals and Workgroup Alignment to Goals

- Participation
  - *Health Screenings*
  - *Weight Management Tracking Program*
  - *Leadership Learning and Training*
- Implementation of All Interventions Defined for the Site

## Site Leadership Goal Reporting to Senior Corporate Leadership

- Leadership Learning and Training
  - Health is a Priority and Benefit to Dow
  - Leadership Behaviors and Building a Culture of Health
  - Health Related Policies, Services, Programs and Resources Education

## **Intense Sites - Required Interventions (con't)**

### **Work Group Healthy Culture Focal Points (in addition to moderate site roles)**

- Work group goals and plans/tracking aligned to Site goals
- Reporting on work group goals to align and support Site Leadership Reporting Intervention
- Weight Management Program - Progress Tracking and Reporting
- Promotion and encouragement for work group employees to order from healthy choice meeting menu

### **Rewards & Recognition**

- Site Leadership
- Cross Discipline Teams
- Healthy Culture Focal Points and Work Groups

\* Moderate and high intensity interventions supplement existing Dow programs primarily aimed at individual employees.

# Optional Site Interventions

- Enhancements to On-site Fitness Centers
- Employee Reimbursement/Subsidy to Community Fitness Facilities
- Healthy Food Cupboards/Snacks in Workgroup Areas
- Scales in Workgroup Areas

# Examining Culture Aspects of Success

## Organizational Health Culture: Leaders

While visible commitment from senior management is not as strong a driver of an individual's participation in prevention, **senior management does have a significant role to play in forging a corporate culture in which employees believe that the organization cares about their health and well-being.**

# Organizational Culture Descriptions

- The integrated pattern of human behavior that includes thought, speech, action and artifacts....
- The prevailing behavior patterns... and reflects what is acceptable or not acceptable, what is important or not important.
- “How things get done around here”

Source: Joel Levey, PhD, Michelle Levey, MA, IHPM, 2001

Leadership  
Supported –  
Employee  
Driven

Alignment to  
Current Processes

**Dow Health Strategy Prevention  
Element  
LightenUP Study Implementation**

Senior Corporate Leaders

Site Leaders

Site Cross Discipline Teams

DHS Steering Team

Site Leadership Teams

DHS Implementation Team

Health Services

Work Group Teams

Corporate Communications

Site Communications

↓  
Healthy Culture  
Focal Points

Health Services Mgt. Team

Vendors

Facility Management

# **Building a Healthy Culture**

## ***Dow Implementation Critical Success Factors***

- Alignment to Dow's Health Strategy
- Alignment to Existing Dow Strategies and Processes
- Leadership Supported/Engagement – Employee Driven
- Site Partnerships/Teams and Engagement
- Open and Integrated Communications
- Accessible and Integrated Best Practice Programs, Services and Resources
- Rewards and Recognition

# First Year Formative Research Key Findings

- Good participation in Health Reviews
  - Health Screening = 35%
  - Health Questionnaire = 50%
- Overweight and obesity rates for employees at the study sites are consistent or greater than the US population (national average = 65%)
- There is strong support by Dow leaders for health promotion efforts
- Critical success factors for getting employees involved and maintaining their participation in health improvement programs include:
  - Leadership support and involvement
  - Implementing measurement strategies and interventions in alignment with the organizational culture and processes
  - Easy access to programs and services
  - Promoting participation and engaging champions at “**all**” levels at the sites
  - Rewards and recognition



**GOOD**



**HEALTH**

For The Whole Self