2003 Corporate Health Achievement Award

Brian J. Linder, MD, MPH
Corporate Medical Director

Matthew Hughes, MD, MPH
Associate Medical Director

Marathon Oil Company

MARATHON ASHLAND Petroleum LLC
Marathon Oil Company

- Top-five US oil company
- Fortune 52
- Established in 1887
- Headquartered in Houston, Texas
- 3,000 employees worldwide
- Net production of 412,000 BOE per day
Marathon Ashland Petroleum LLC

- 1998 Joint Venture of MOC (62%) and Ashland Inc. (32%) refining, marketing, and transportation operations
- $8 billion in assets
- Operations in 21 states
- 25,000 employees including retail marketing (Speedway SuperAmerica LLC)
Marathon Ashland Petroleum Operations

Refinery
Terminal
Pipeline
Coastal Water Terminal
Inland Water Terminal
Health Services Mission

To provide support and guidance in protecting, maintaining and promoting the health of employees and their families worldwide.
I. Healthy People –

Absence Management Program

- Escalating costs in sick leave, LTD, WC costs
- Obstacles impeded return to work for occupational and non-occupational conditions
- Poorly written job descriptions
- Poor communication between healthcare providers, benefits coordinators, supervisors, HR
- Benefits plans used as “dumping ground” for difficult employees with mild/vague medical reasons
I. Healthy People –

**Absence Management Program**

- 1997 absence management team created
- Comprised of MDs, RN case managers, benefits managers, claims analysts, attorneys, and Third Party Administrator
- Integrate WC, sick leave, LTD claims information
- Provide positive influence on employee health
- Improve financial outcomes of benefit plans
- Monthly meetings
I. Healthy People –

**Absence Management Program**

- Advanced formal job analysis identified quantifiable physical demands on top 73 jobs
- Established uniform information packets
- Established internal reporting hotline known as MAPLINE
- Early intervention through Corporate COHN professionals who liaise between employee, field, HR, and health care provider
I. Healthy People – Absence Management Program

Occupational Disability-Related Days/Employee

- Days Away from Work
- Restricted Duty Days

Year | Days Away | Restricted Duty
--- | --- | ---
1999 | 0.05 | 0.30
2000 | 0.15 | 0.20
2001 | 0.10 | 0.25
2002 | 0.05 | 0.20
I. Healthy People – Absence Management Program

**OSHA Recordable Rate**

- MAP
- MOC
- MOC/MAP combined

**OSHA Lost-Time Rate**

- API Average
## I. Healthy People – Absence Management Program

### Benefit Plan Cost/Employee

<table>
<thead>
<tr>
<th>Year</th>
<th>Workers Comp.</th>
<th>Company LTD Costs</th>
<th>Total LTD Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>$400.00</td>
<td>$100.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>1999</td>
<td>$300.00</td>
<td>$50.00</td>
<td>$350.00</td>
</tr>
<tr>
<td>2000</td>
<td>$200.00</td>
<td>$20.00</td>
<td>$220.00</td>
</tr>
<tr>
<td>2001</td>
<td>$100.00</td>
<td>$10.00</td>
<td>$110.00</td>
</tr>
</tbody>
</table>

### Graph

The graph shows the benefit plan cost per employee for four categories: Workers Comp., Company LTD Costs, and Total LTD Costs. The years 1998, 1999, 2000, and 2001 are represented by different colors: red, yellow, green, and blue, respectively.
I. Healthy People – Absence Management Program

Short Term Disability Days/100 Employees

- 1999
- 2000
- 2001
- 2002
- Bank One

Burton, W., et al, JOEM 42;10:1006-1012.
People: Our most valuable asset

Significant health risks in underdeveloped nations

Risks can be significantly reduced/prevented

Medical evacuations are disruptive and costly

Medical conditions can escalate abroad, resulting in increased morbidity and mortality

Endemic public health conditions present opportunities for sustainable development and maintain a “license to operate”
I. Healthy People –

**International Medicine**

*Risk Mitigation*

- Perform site risk assessments
- Establish health risk guidelines and policies
- Provide necessary medical preparation
- Provide travel medicine kits
- Vendor automated information systems
- Enforce travel policy
I. Healthy People –
International Medicine
Sustainable Development

- $2 Billion project in Equatorial Guinea
- Malaria is Bioko Island’s most significant health risk
- Employee programs extended to community
- Why not try to eradicate it?
- Comprehensive study completed by Marathon in 2002
Comprehensive Malaria Survey
- Infant Mortality 92/1000
- 1/3 due to malaria
- 22% of Anopheles carrying *p. falciparum*
- Entomological Inoculation Rate: 8
- Case management deplorable
- No malaria control programs
I. Healthy People –

**International Medicine**

**Sustainable Development**

---

**Goal – Eliminate malaria from Bioko Island in 5 years**

- Transmission reduction
- Improving case management
- Develop surveillance system and outcomes measures
- $4.4 Million over 5-year period
II. Healthy Environment –

Workplace and Community Exposure Risk Mitigation

- Upstream and Downstream activities have inherent hazards
- Health & Safety agent-specific IH programs eliminated or reduced exposure risks
- Next step: become more proactive and promote new comprehensive approaches
- Rebranding effort “Occupational and Environmental Hygiene”
II. Healthy Environment –
Workplace Exposure Risk Mitigation

- Correlation of exposure to disease
- Exposure drives surveillance
- API tracking system
- Engineer-out risks
- Ergonomics program
- Program efficacy
## II. Healthy Environment – Occupational & Environmental Hygiene

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of medical removals from chemical or physical hazards</td>
<td>0</td>
</tr>
<tr>
<td>Percent of audiograms meeting OSHA recordability criteria (n=5943)</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Percent of benzene exposure measurements that exceeded the OSHA airborne PEL (n=1843)</td>
<td>2%</td>
</tr>
<tr>
<td>Percent of urinary phenol determinations that exceeded OSHA criteria (75mg/l) from emergency situations</td>
<td>2%</td>
</tr>
<tr>
<td>Follow-up blood actions required from emergency situations</td>
<td>0</td>
</tr>
</tbody>
</table>
II. Healthy Environment –

**Community Protection**

- Toxicology and Product Safety Research
- Community Right-to-Know
- Designated Environmental Incidents (DEI)
- Disaster Preparedness
II. Healthy Environment – Community Protection

3-year DEI Performance

- Number of Incidents
- Yellow: MAP, Red: Marathon

Environmental Expenditures

- Dollars in millions
- Green: Remediation, Yellow: Operating & Maintenance, Red: Capital
II. Healthy Environment –

**Community Protection**

- Critical business function
- MOC/MAP cooperate in disaster drills
- Our Incident Command Structure recognized as **“Best-in-Class”**
- HF Acid refinery exposure drills
III. Healthy Company –

Well ALL Ways

Challenges

- Wellness program implemented in 1990
- Minimal program change in 10 years
- Low participation rates
  - 25% for examinations
  - 14% for reimbursement programs
- No way to determine effectiveness in improving health
III. Healthy Company –

Well ALL Ways

A New Program Initiative for a new Millennium

- Program redesign in 2001 linked to health and productivity
- Championed by senior management
- Focus on participation
- Incorporate incentives
- Stratify risk in population and apply risk-based interventions
- Evaluate program
III. Healthy Company –

Well ALL Ways

Program Elements

- Health Risk Assessment (HRA) as program cornerstone
- Wellness spending account
- Biometrics onsite screening program
- Preventive services enhancements
- Outcomes measures and research
- Awards
- Colonoscopy program
III. Healthy Company –

**Well ALL Ways**

*2002 Colonoscopy Results*

- 623 procedures completed through Feb. 2003
- Average age: 53 for both males and females
- 298 total polyps found
- 46% were adenomatous or adenocarcinoma
- 51% of adenomatous polyps would have been missed via flexible sigmoidoscopy

- 2 adenocarcinomas
  - 52 yo wf with adeno CA (Dukes B1)
  - 49 yo wm with adeno CA (Dukes A)

- 2 Tubulovillous Adenomas
III. Healthy Company –

Well ALL Ways

HRA Participation Rates

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employees</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spouses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Employees** participation rates are high, exceeding 90%.
- **Spouses** participation rates are lower, around 70%.
- **Total** participation rates show a consistent increase from 2001 to 2002, indicating a positive trend in health awareness among employees and their families.
Health Environment and Safety Guiding Principles

- Commitment
- Building Trust
- Accident Prevention
- Reduction of Emissions/Releases
- Emergency Preparedness
- Legislative/Regulatory Process
- Compliance
- Training/Education
- Measurement of Performance
- Continuous Improvement
- Communication
- Product Stewardship
Management and Leadership

- Demonstrate 12 principles
- Adopt HES management systems
  - Sustainable Global Performance
  - Responsible Care®
- President’s Award for Excellence
Awards

- Responsible Care® Exemplary Recognition 2001, 2002
- OSHA VPP status of Garyville, LA & Robinson, IL, refineries
- OSHA VPP status of Yates West Texas production field
- William H. Benkert Award for Marine Transportation
- Garyville refinery -EPA Performance Track
- Multiple WHC Certified Wildlife Habitat locations
- Numerous NPRA Gold Awards for safety at refineries
- API #1 safety performance in Liquid Pipeline Industry (2001)
Improving on Success

- Build integrated databases for internal/external health data
- Complete research agenda of wellness program
- Develop key metrics and special studies
- Communicate findings
- Use findings to drive program improvements
- Develop and implement integrated Health and Safety Information Management System
ACOEM Corporate Health Achievement Award 2003