# **Corporate Health Trends** 2014



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# **Corporate Health Trends 2014:**

10 Key Recommended Actions



# **About the Council**

The International Corporate Health Leadership Council (the Council) is a non-profit foundation whose objective is to drive standards and policies that result in reducing risk and improving delivery of healthcare to international business travelers, expatriates (and their families) and employees (in emerging markets) wherever they may live or work. Made up of the most senior leadership in corporate health – medical directors, corporate executives, thought leaders and researchers – the Council produces periodic reviews of the latest health trends relevant to global enterprises and provides key recommendations so that appropriate standards are benchmarked and best practices identified and shared with those who make or influence policy decisions concerning the protection and preservation of human capital.

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The members of the Council represent a cross-section of industries with a global footprint. Currently they include industry representatives of manufacturing, finance, technology, pharmaceutical, automotive and energy/mining/infrastructure industries employing over two million people worldwide. There is also representation from governmental and non-governmental organizations. The Council reviews relevant literature, networks with leading experts in global health and conducts independent research to define global corporate health recommendations. It is the intent of the Council that the findings and results documented here will assist corporate leaders in managing the risks of a global workforce, thus fulfilling their Duty of Care by protecting employees from foreseeable risks and threats. Further, the Council intends to continue to advocate for those health practitioners involved in international corporate health and occupational and environmental medicine. Finally, the Council ultimately plans to inform policymakers of the best science and practices in international corporate health and occupational and environmental medicine.



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International Corporate Health Leadership Council



This *Corporate Health Trends Report* assesses current literature and reviews corporate polling results to provide management recommendations to best protect an organization's mobile workforce. The Council surveyed global organizations, reviewed recent literature and canvassed leading experts to document the most relevant global corporate health trends for 2014. Below are six health trends and 10 key recommended actions which best protect your globally mobile workforce.

# 2014 Global Corporate Health Trends and Survey Findings

- 1. Business growth in emerging markets continues to expand.
- 2. Workforces in emerging markets are increasing in parallel.
- 3. Expectation for the provision of quality healthcare service is increasing globally.
- 4. As more enterprise operations penetrate emerging and remote locations, companies, in the spirit of their Duty of Care, have made healthcare for their workforce a priority.
- 5. An aging workforce has introduced an increasing sub-population having chronic noncommunicable diseases (e.g., cardiovascular disease, cancer, diabetes) which can negatively impact productivity, and reductions of in-country healthcare may result in these individuals having less than optimal control of their disorders.
- 6. The local workforce in these emerging nations have unique healthcare needs.

# **Corporate Health Trends 2014: 10 Key Recommended Actions**

The Council recommends 10 key actions, in order of priority, which form the foundation for supporting a globally mobile workforce.



#### CORPORATE HEALTH POLICIES MUST DRIVE THE AGENDA.

Policies are recommended to clearly define the global health agenda and ensure consistent health program delivery.



#### ACCESS TO CORPORATE MEDICAL RESOURCES ARE RECOMMENDED.

Corporate medical resources are critical for all organizations to support and manage their global health programs and provide expertise/counsel in cases of emergency.



#### BUSINESS SUSTAINABILITY REQUIRES HEALTH CRISIS MANAGEMENT PLANS AND THE RESOURCES TO RESPOND EFFECTIVELY.

A corporate health crisis management plan is recommended which must be maintained, tested and resourced globally.



#### UNDERSTAND AND MANAGE THE MEDICAL RISKS WHERE ORGANIZATIONAL OPERATIONS EXIST.

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A site medical risk assessment and local medical emergency response plans are recommended for high medical risk work locations and populations.



#### WHERE LOCAL HEALTHCARE GAPS EXIST,

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ORGANIZATIONS MAY NEED TO FILL THE VOID. On-site clinics and/or company-arranged medical services are recommended where local healthcare resources cannot or will not meet the organizational need.



#### 24/7/365 MEDICAL ASSISTANCE MUST BE AVAILABLE GLOBALLY WITH COMPANY INSIGHT AND DECISION MAKING CAPABILITIES. Medical assistance services from a health expert with local knowledge must be available in real-time and 24/7/365 for all travelers and assignees.



#### ..... ORIENT, TRAIN AND EQUIP PERSONNEL PRIOR TO DEPARTURE.

Pre-travel medical information should be provided for all international travelers and assignees (and dependents) as well as training and medical kits for those working in high-risk locations.

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#### PROACTIVELY ASSIST AT-RISK PERSONNEL.

Pre-assignment screening and medical accommodation is recommended for those at-risk personnel assigned to high medical risk locations.



#### UNDERSTAND THE LOCAL OCCUPATIONAL **HEALTH REQUIREMENTS & IDENTIFY** COMPANY-SPECIFIC AND INDUSTRY STANDARDS.

All companies must ensure compliance with all local occupational health regulations, and it is recommended that companies follow a corporate standard which often aligns with industry standards.



#### HEALTH IS A MAJOR PILLAR OF CORPORATE SOCIAL RESPONSIBILITY.

Health Impact Assessments help assure there is no negative business impact on community health and help identify and document positive health and safety impact opportunities.

### Purpose of the Corporate Health Trends 2014 Report: 10 Key Recommended Actions to Protect your Global Workforce

The purpose of this report is **three-fold**:

- 1. **Evaluate** and **document** the global health trends for the year and the real and potential impact of these trends on employee health;
- 2. **Provide expert guidance** to corporate management regarding the benchmark standards and best practices to mitigate the impact of those negative trends;
- 3. **Identify** and **recognize corporations** which demonstrate the best in international corporate health services to support their internationally mobile workforce.



# **Corporate Health Trends 2014**

Companies are doing business in more complex and challenging places. Global companies both large and small are crossing borders into new markets, and it is inevitable that their human capital (employees) will endure additional risks and require additional resources to meet their business objectives.

According to a McKinsey Global Institute report released in October, 2013, entitled "Urban World: The shifting global business landscape," the global business trend when comparing 2010 to 2025:

- Will double in companies having over \$1 billion (US dollars) in revenue;
- 45-percent of Fortune 500 companies will be based in emerging marketplaces (vs. 17% in 2010);
- Almost 40-percent of new large companies in the emerging world are likely to be in China;

Health Expenditures and GDP				
	Health expenditures per person	%	% of GDP on health	%
USA	\$8,608	100%	17.9%	100%
India	\$59	1%	3.9%	22%
China	\$278	3%	5.2%	29%
Brasil	\$1,121	13%	8.9%	50%

• Three times as many company headquarters will be in emerging regions as in 2010.

Source: World Health Organization on National Health Account Database 2008 - 2012

While emerging market countries build new hotels, restaurants and business centers to cater to this growth, healthcare infrastructure often lags far behind. As the US spends nearly \$9,000 per person on healthcare, India provides just \$59 (albeit increasing recently). In China, just over 5-percent of GDP goes towards healthcare - less than a third of that committed in the US.

Added to this deficit is the fact that the World Health Organization (WHO) projects that by the end of the decade, the largest increase in deaths from **noncommunicable diseases** (NCDs) like cancer, cardiovascular/respiratory disease and diabetes will occur in countries with developing or transitional economies, putting more stress on already challenged healthcare systems.

Nonetheless, many corporations see their future business success linked to their ability to grow their business in new markets in South East Asia, the BRIC countries (Brazil, Russia, India and China), and in particular, for the long term, Africa. To support this tremendous growth, multi-national "global" corporations are setting up new workplaces in locations remote from their typical established business infrastructure, and many of these sites lack even the most basic of medical services. These locations often have unique health hazards, including endemic diseases not present in most developed countries (i.e., dengue fever and malaria.)

In order to succeed and grow, companies need to address these new challenges. Failure to manage them can lead to significant human suffering, productivity loss, business disruption and the negative impact on corporate image and brand – all of which affect business sustainability. Global health continues to be a priority focus but now it is compounded by the globalization of the workforce and the rise in noncommunicable diseases. (Hunter and Reddy, 2013) The former is driven by economic stimuli while the latter by negative social behavioral changes and other determinants of health. Organizations seeking growth opportunities and lower costs of production have embraced globalization, resulting in an increasing number of employees now being required to work outside their countries of residence as either expatriates or frequent business travelers.

Employers have a moral as well as legal responsibility and obligation for the health, safety and security of their employees. To that end, employers are expected to take practical steps to safeguard their employees and, if applicable, their accompanying family members against any reasonably foreseeable dangers in the workplace and localities; i.e., Duty of Care (Claus, 2009). The scope of Duty of Care responsibilities can extend far beyond business travelers/expatriates to include contractors, subcontractors and more and more frequently, local national workers.

Not all risks can or will be anticipated, assessed properly, or planned for mitigation ahead of time. Natural and human-made disasters and even "Black Swan" events (impactful incidents that are highly improbable to happen) (Taleb, 2001) can and

do occur at the most inconvenient times. It is the responsibility of the employer to mitigate these "foreseeable" risks to its employees for the sake of its internal employee stakeholders, business continuity and reputational image (Claus and Giordano, 2013). Employee, business and societal expectations regarding Duty of Care are rising rapidly around the world.

The profile of business travelers and expatriates continues to change as does the increasing prevelance of noncommunicable diseases (NCDs). NCDs such as cancer, cardiovascular/respiratory disease and diabetes kill more people globally than



infectious diseases. These four diseases share the common risk factors of tobacco use, unhealthy diets, physical inactivity, and harmful use of alchohol, as well as high blood pressure and cholesterol. Equally as significant in this population is the rise in the diagnosis of mental health disorders likely exacerbated or even induced

by a stressful work environment. An extensive study (Tanielian, Haycox 2008) entitled "Invisible Wounds of War" describes post-traumatic stress disorder (PTSD) among contractor personnel in war zones, for example. Non-behavioral and behavioral health issues can respectively negatively impact productivity in the workplace.

New challenges often require unprecedented and creative solutions. This *Corporate Health Trends 2014: 10 Key Recommended Actions report* highlights the key challenges global corporations face in managing the health of their international travelers, expatriates and emerging market personnel. Each of these groups has specific and unique health issues to be addressed. Many leading corporations have developed unique programs to mitigate the risk to these employee groups, and they have been able to demonstrate significant financial return – a return on investment.

Influenza pandemic planning was one of the first corporate health planning initiatives that demonstrated the business critical need to address the impact of health crises on any organization. Today, other global health threats such as earthquakes/tsunamis and even nuclear disaster (i.e., Japan 2011-present), require appropriate planning and support. With more mobile personnel, tracking and supporting them, in the event of a crisis, becomes a greater challenge and increases the risk of corporate exposure.

Guidelines that demonstrate best practices in corporate global

health are very difficult to find in today's medical and human resources literature. While other global risks such as kidnapping or terrorist issues attract media attention and much corporate focus, in reality health threats are more common and cause more hardship (i.e. malaria, dengue fever) and are greater threats to an organization. New research has shown that excellence in management for a "culture of health" is associated with better results of stockholder value in terms of stock portfolio performance over time (Fabius et al., 2013).

This report assesses current literature and reviews corporate polling results to provide management recommendations to best protect an organization's mobile workforce. The Council surveyed 48 top Fortune 500 international companies representing more than 2.6 million workers (See Appendix A). The respondent companies ranged in size, so the results are representative of global businesses generally. The distribution of the number of employees for each responding firm is shown on page 10.





These same responding companies were also scored using three categories of performance (Purpose-60 points, People–76 points, Place–60 points) allowing the surveyors to distinguish top performers in the global health space (see chart below, where the highest possible score is 196 points--appendix B and C). Based on these scores, there is clearly room for improvement in corporate policy and practice for optimal health and wellness of global workforces.



The breakdown of responding companies were manufacturing (26%); chemical (20%); energy/mining/infrastructure (18%), healthcare/pharma (14%); aerospace/ defense (10%). Demographics of the responders revealed on average a domestic workforce of >31,000 and a non-domestic workforce of >21,000. The average age of a business traveler in this cohort was 44.3 years and expatriate 41.7 years. More than three quarters of the survey responders were medical professionals. The content of the survey was based on the multiple challenges facing global corporations today: workforce demographics, workforce destination risks and workforce regulations.

The Council identified 10 Key Recommended Actions presented in a framework of:











**Deople** addresses efforts to improve employee wellness and reduce medical risk in the context of the trends in the workforce demographics, and ultimately how to positively impact productivity.



Leveraging technology such as online training tools and automated emails can maximize the opportunity to effectively prepare personnel.

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#### **Recommended Actions:**

- Prepare employees and their dependents by informing them of predictable health risks and options for mitigation.
- First aid training and travel kits should be considered for all traveling employees, not just those going to remote locations or areas with limited medical care.

By effectively screening and medically accommodating personnel, adverse health outcomes can be reduced and business continuity maintained. This is particularly true for those on extended travel to high medical risk locations or performing hazardous work.

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#### **Recommended Action:**

• Medical evaluation prior to deployment should be encouraged.

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Corporate medical department resources offer medical expertise while understanding the business needs and employee health concerns. With this background, the best recommendations can be made in the interests of all.

#### **Recommended Action:**

• A corporate medical department resource should be available to offer guidance and assistance to both employees and management alike.

Even when personnel are oriented, equipped, trained and medically accommodated, health incidents will occur. In such cases, medical assistance services ensure care is provided in the most effective, culturally sensitive and timely manner - whether for a simple case (i.e. referral to a qualified provider) or a major medical emergency (i.e. aeromedical evacuation).

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#### **Recommended Action:**

• Personnel must have access to real-time, locally knowledgeable medical experts (i.e. physicians) who can offer guidance and direction. Equally important, companies must have insight into how their employees are being cared for in time of need to align with company ethos.



ORIENT, TRAIN AND EQUIP PRIOR TO DEPARTURE



PROACTIVELY ASSIST AT-RISK PERSONNEL



ENSURE ACCESS TO A CORPORATE MEDICAL RESOURCE



24/7/365 MEDICAL ASSISTANCE MUST BE AVAILABLE GLOBALLY WITH COMPANY INSIGHT AND DECISION MAKING CAPABILITIES

## **Research and Data Supporting The Key Recommended Actions**

# people...

#### Trends



THE PERCENT OF EXPATRIATES OVER **60 YEARS 0LD** HAS RISEN **30%** IN THE LAST 5 YEARS IN THE CONSTRUCTION AND ENGINEERING INDUSTRY ALONE.

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Protecting and enhancing human capital is business critical and this ideal is a priority in many corporate board rooms today. The general fitness and wellness of the workforce takes on increasing significance in less developed work environments. The World Health Organization (WHO) states that over 80-percent of the chronic health burden (noncommunicable diseases) globally comes from less developed countries. Additionally, most of the global burden of infectious diseases such as tuberculosis (TB) and malaria – come from these same locations. The WHO ranks 22 countries in the TB High "Burden" category - and these include the BRIC countries of Brazil, Russia, India and China and many common business destinations in Africa and the rest of Asia. Overall, the concern is for the existing and increasing burden of all aspects of noncommunicable diseases (NCDs) on employees and families; that NCDs are responsible for over 35 million annual deaths globally; that additionally, according to the United Nations Secretary General's Office, a 60-percent increase in NCDs will occur by 2030. Thus, the general health of today's workforce is indeed business critical, and enhancing its health can improve productivity and ultimately offer a major competitive advantage for tomorrow.

For expatriates, an aging workforce could be a significant and worrisome trend if not adequately addressed by individuals and organizations. The percent of expatriates over 60 years old has risen 30-percent in the last five years in the Construction and Engineering industry alone. An aging workforce has more physical limitations as well as more chronic health issues. Older personnel are less adaptable and resilient to new stressors such as climate extremes, high altitudes, sleep cycle disruptions and long work hours (Burkholder, 2010). On the other hand, more younger expatriate employees have conditions related to obesity, such as pre-diabetes, hypertension, depression, stress and injury-related impairments (Richards and Rundle, 2011). These younger employees are more likely to be hospitalized for accidents/injuries as well as engage in sexually risky behavior. These issues place additional challenges on corporations to best accommodate and support these personnel on their international assignments.

For travelers, while the same aging issues exist, they have additional stressors. Sleep cycle disruption, culture shock and lack of local knowledge of healthcare resources, can exacerbate a chronic medical condition, or can delay care turning a simple



problem into a critical health issue. Among the emotional stressors includes the fear of a greater work load upon return, personal and family concerns, dangerous ground transportation, jet lag and not getting rest upon return (Striker et al 1999). It is not advisable to assume that proper precautions will be taken by the employee. A survey of travelers to Asia for business or tourism shows that even though 65-percent of participants thought they were at risk for H1N1 Influenza during their trip to Asia, fewer than half (43%) sought pre-travel medical advice and the number one source of information came from the Internet. Among the groups more likely to receive a vaccination were those who were married. The age groups 18 to 49 were less likely than the age range of 50 to 64 and over to have received vaccines. Some of the reasons given were fear of becoming ill from the vaccine, not thinking it was needed, fear of needles and having a vaccination "a year ago and not needing another." Interestingly, cost or access to healthcare were not mentioned as barriers for getting the Influenza vaccine (Yanni, et al., 2010). Other surveys of international travelers reveal that the perception of Influenza may be serious or be significantly associated with protective behaviors suggesting that education and health promotion should

LACK OF ACCESS TO APPROPRIATE MEDICAL CARE FORCES COMPANIES TO ASSES ALTERNATIVES.

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be considered (Sharangpani et al., 2011). Such surveys indicate that education for employees using e-Learning options may be most helpful to prevent risk of contracting a preventable illness if education tackles knowledge, attitudes and beliefs of employees and dependents.

Both younger as well as older business travelers and expatriates are at risk for excessive alcohol intake, especially on dangerous missions (Dahlgreen et al., 2009). Surveys of such groups report that social situations often call for alcohol use or that alcohol may be a coping mechanism for emotional and physical stress related to travel (Burkholder, et. al., 2010; Rogers, 2000).

Finally, emerging market employees have their own unique health issues and concerns which are often culturally sensitive. Assessing the demographics of the local workforce is critical in identifying the common health concerns. For example, a largely young female workforce may require specific health services around pregnancy and infant care. Smoking, sexually transmitted diseases and common preventable diseases like measles and rubella may be common threats to the local workforce and need to be addressed. The majority of the global disease burden, however, has shifted to noncommunicable diseases. Cardiovascular disease is the leading cause of death with 80-percent of these deaths occurring in low and middle income countries where human and financial resources are most limited (Mitka, 2012). Large gaps exist between high income, middle income and low income countries in the three major behaviors for healthy lifestyles, the higher income countries have the highest prevalence of smoking cessation, regular physical activity and healthy diet particularly among people who previously experienced a heart attack or stroke (Teo, 2013).

Access to appropriate medical care for local nationals may be very limited, thus forcing an organization to address whether on-site medical services will better support the local workforce. Some ways to pre-assess mobile workers can involve a doctor's assessment but also self-administered surveys may be used to screen workers for fitness for international travel (Moshe, et al., 2007). The context of the landscape affects the health not only by type of illness and opportunistic infection but also the lifestyle and behaviors that transfer between populations.

Prior to the United Nations' Annual Meeting held in September 2011, major private sector partners came together to support a robust agenda in the fight against non-communicable diseases (NCDs). The private sector's commitment to this cause is vital. Reducing, preventing and treating noncommunicable diseases in all countries, but in particular in low- to middle-income countries, will rely to a significant extent on the private sector's actions.





**Polling Results** 

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Remote locations have trained first responders and first aid kits

- Business travelers are typically more educated on the risks associated with their travel more so than international assignees.
- 68-percent report providing a briefing to their business travelers on health risks and prevention prior to the start of their travel and nearly the same percentage offer their travelers a medical consultation.
- 48-percent provide their international assignees with an orientation program to educate them on local health resources and risks prior to deployment.
- More companies provide first aid travel kits than offer first aid training.



- 15-percent or less of the companies indicated that they offered first aid training for their international assignees or travelers.
- 26-percent offered training for employees in high-risk or medically underserved ocations.
- 80-percent of large companies (25,000 or more working outside the US.) offer medical kits to their international travelers.
- 34-percent of respondents use e-Learning to educate employees about health in remote locations.

#### **Council Commentary:**

The Council believes that there is significant opportunity for improvement as many companies still do not effectively orient and train their internationally mobile personnel, nor offer first aid training and travel kits. In high-risk environments, training and kits may make the difference between life and death and must be considered a standard.



PROACTIVELY **ASSIST AT-RISK** PFRSONNEL

#### **Polling Results**

- 42-percent of the companies surveyed have a formal medical assessment process that can be used by management to determine fitness for international assignments.
- 45-percent of companies have a pre-assignment assessment program.
- 62-percent consider the health risks of a location before sending an assignee or traveler abroad.

#### **Council Commentary:**

These results may reflect an industry bias, as many energy, mining and infrastructure companies have been performing such services for years, whereas other industries may have not yet identified the need. Screening at-risk international personnel show a 7:1 return on investment by identifying "critical" cases which, if not clinically mitigated, likely would have led to a failed assignment and/or medical evacuation, the costs of which in human and financial terms are great (see references).

In locations where medical services are inadequate, offering on-site medical services limits medical costs, improves productivity and increases staff retention rates.

The Council's recommendation is that pre-assignment medical assessments should be performed, at a minimum, for all personnel assigned to high-risk locations, and these assessments require review and approval from a corporate medical director.

#### **Polling Results**

- 78-percent of companies indicate they have a medical director or other similarly situated physician.
- 38-percent have clinical practice guidelines that were developed using an evidence-based medicine approach.

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#### **Council Commentary:**

A corporate medical resource is critical in assisting an organization preparing for and responding to global health incidents and ensuring the global wellness agenda is implemented and maintained. Analysis of the survey responses of companies in the top quartile compared to the lowest quartile of points by chi square testing indicates a statistically significant association of having a corporate medical director (or similarly placed expert) with having a higher score overall. While the position is important, appropriate health policies and guidelines to ensure effective program management are often lacking.

Even when personnel are oriented, equipped, trained and medically accommodated, health incidents will occur. In such cases, medical assistance services ensure care is provided in the most effective, culturally sensitive and timely manner - whether for a simple case (i.e., referral to a qualified provider) or a major medical emergency (i.e., aeromedical evacuation).

#### **Polling Results**

• 80-percent of the companies indicated that they use a third-party medical assistance provider to manage illness/injuries to their international travelers/assignees.

#### **Council Commentary:**

Global medical assistance services are the standard and mandatory for any organization with international travelers and expatriates. Without it, organizations are not meeting their minimum Duty of Care obligations, and are at significant liability risk. Moreover, poor company responses as perceived by those in emergency settings and requesting urgent help may negatively impact future acceptance by employees of overseas assignments.



MEDICAL RESOURCE



24/7/365 MEDICAL ASSISTANCE MUST BE AVAILABLE GLOBALLY WITH COMPANY INSIGHT AND DECISION MAKING CAPABILITIES



**place** identifies the relevance of workforce geographic location and the unique requirements needed to support the health of a globally mobile workforce.

Suskainabilika

Gap Analysis

Crisis Management

# Dace... Industry Standards

Resiliency

Opening a new operation or service site or expanding an existing one requires a clear understanding of the health risks inherent at that location and within the community. This is particularly true in emerging markets or remote site locations.

#### **Recommended Action:**

• All locations should receive an appropriate Site Health Risk Assessment.

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• All locations should develop a medical Emergency Response Plan.

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• Management should have a methodology to rate the relative health risk at their global locations.

By providing healthcare services, organizations can reduce employee health risk while improving productivity, which is in alignment with business objectives. These local healthcare resources can also form the foundation of a global wellness platform while ensuring workrelated medical cases are managed in the most effective manner. Finally, healthcare is a major sustainability issue, and partnering with local health services can achieve corporate social responsibility initiatives.

#### **Recommended Action:**

- Site health assessments should be considered to identify health issues which may put people, operation and even the community at unacceptable risk.
- Companies may need to augment existing medical services where significant healthcare gaps exist.



UNDERSTAND AND MANAGE THE MEDICAL RISKS WHERE COMPANIES OPERATE



WHERE LOCAL HEALTHCARE GAPS EXIST, ORGANIZATIONS MAY NEED TO FILL IT





UNDERSTAND THE LOCAL OCCUPATIONAL HEALTH REQUIREMENTS AND INDUSTRY STANDARDS



#### **Recommended Action:**

- All companies must ensure compliance with local occupational health regulations.
- It is recommended that companies align with industry standards.



BUSINESS SUSTAINABILITY REQUIRES HEALTH CRISIS MANAGEMENT PLANS AND THE RESOURCES TO RESPOND EFFECTIVELY • It is also important to establish connections with the in-country public health system for reporting of illness and disease that may be detected. Reporting these illnesses and diseases helps the World Health Organization track and report the numbers of such illnesses and diseases.

Workforce resiliency and readiness are key objectives as companies plan for the future. These dynamic plans require on-going maintenance and testing to ensure they remain relevant as new emerging health challenges arise.

#### **Recommended Action:**

• Companies need to develop and maintain plans that deal with health threats to their personnel and business continuity.



# **Research and Data Supporting The Key Recommended Actions**

# place...

#### Trends

While there is general consensus that traveling or working in "high-risk" locations (see Risk Map Appendix D) leads to more health incidents and emergencies-- is this really true, and if so, how serious is it?

One recent academic paper qualified/ quantified these risks (Druckman et al. 2012). The authors report that the risk of being hospitalized and then requiring medical evacuation out of that location vary between an expatriate and a traveler. Expatriates on average, live in higher medical risk countries (as determined by the Human Development Index (HDI) and the International SOS Country Medical Risk Ratings) than the destinations of the average travelers.



Travelers have a significantly higher risk of being hospitalized and evacuated in a developed, low medical risk country than expatriates. The authors hypothesize that the reason for this is that travelers do not know the local infrastructure as well as a local expatriate, but more importantly, travelers do not want to "recuperate" or be hospitalized for extended periods away from home, whereas expatriates in low medical risk countries are already "home" – living in that country. This reasoning is supported by research in influenza prevention behaviors among travelers and that even if travelers become sick with H1N1 they prefer to be in their "home" country and will choose not to delay travel (Sharanpangi et al., 2011).

We know from surveillance data that 28-percent of travelers hospitalized in a developed, low-risk country will require medical evacuation, where it is only 11-percent of a similar cohort of expatriates (Druckman et al unpublished data). Travelers are twice as likely to be hospitalized and seven times more likely to be medically evacuated than expatriates – in developed, low-risk countries. Research around the burden of 28% of Travelers Hospitalized in A developed, Low-RISK Country will Require Medical Evacuation ...



healthcare associated infection is highest in emerging marketplaces with the most common infections: urinary-tract, surgical-site and blood stream infections and hospital-acquired or ventilator-associated pneumonia (Allegranzi et al., 2011). As global operations extend into sub-Sahara Africa, an examination of risk factors shows that data on diet patterns and obesity indicate that there may be a rising level of diabetes, cardiovascular disease and certain cancers. Ironically, on a positive note, blood glucose and cholesterol levels in the same regions are still among the lowest in the world. It is noteworthy that these trends are averages across this region with high variation between rural and urban areas where risk factors tend to follow economic development (Plewes and Kinsella, 2012).

Also in the mix is the long-term impact of migration, as migrants have higher rates of noncommunicable disease and mortality compared to locals. These trends should be considered in patterns of communicable disease, surveillance of infectious illness and how economic changes can affect an area and its mortality rate (Plewes and Kinsella, 2012).

When travelers and expatriates live or travel to high-risk countries (see Appendix D), the risk becomes more predictable as previously outlined. One out of every 6,325 expatriates will be evacuated from a low-risk country, whereas one in 268 expatriates will be evacuated from a high-risk country – 23 times higher risk (Druckman et. al). For travelers in low-risk countries, one out of 905 travelers require medical evacuation, whereas one in 279 in high-risk countries – an increase in risk of only three-fold. (Druckman et. al – unpublished data).





In reports of disease surveillance data on travel the most common areas that travelers became ill was Asia (32.6%) and sub-Sahara Africa (26.7%). The most common travel-related illnesses are gastrointestinal (34%), febrile (23.3%) and dermatologic (19.5%) diseases but only 40.5-percent of all ill travelers had a pre-travel medical visit and ironically, those travelers who visited friends and relatives in their country of origin have a disproportionately high burden of serious febrile illness and very low rates of advice before travel (Leder, 2012). Life-threatening diseases, such as plasmodium falciparum malaria, melioidosis and African trypanosomiasis, were reported and some illnesses can be avoided by appropriate chemo-prophylaxis, and protective behaviors as vaccinations if travelers solicited a consultation beforehand (Leder et al., 2012).

For travelers, risk increases as travel destination risk increases, but the risk is more consistent with a particular focus on the high risk of incidents in developed countries.

For expatriates, risk increases most significantly in emerging marketplaces.

Thus, "place" is important, with increasing risk of hospitalization and the significant burden of medical evacuation in emerging marketplaces.

Also found in a company and NGO survey is the information that perception of risk versus actual risk often depends on the respondents' experience with perceived threats. The level of perceived threat depends on company size and industry. The cultural framework and resources may affect how respondents perceived threat of risk independent of the actual risk of events from happening. For example, small companies may fear remote locations or medical emergencies greater than larger corporations because larger companies have access to onsite clinics/resources. However, larger companies may have greater fear of terrorism since their brand is more recognizable and, therefore, targeted. The level of experience that respondents succumb to illness, natural disasters or how they perceive threats such as road conditions or compliance to law depends on the respondents' home country's cultural reference. Thus, level of risk and subsequent preparation are not made objectively on actual occurrences and real time data (Duty of Care and Travel Risk Management Global Benchmarking Study 2011 - Claus). "Understand and manage the medical risks where you operate"

THE MOST COMMON TRAVEL-RELATED ILLNESSES ARE GASTROINTESTINAL (34%), FEBRILE (23.3%) AND DERMATOLOGIC (19.5%) DISEASES...



The larger the workforce outside the US, the greater the extent that the company conducts risk assessments.

- When risk assessments are done, they are most often performed on an ad hoc basis, or at the time of an incident.
- 66-percent have operations in underserviced areas.
- 45-percent have a risk rating tool.
- 48-percent conduct health risk assessments in high-risk regions of the world.

- 62-percent consider the health risks of a location before sending an assignee or traveler abroad.
- 70-percent have site-specific medical response plans including medical evacuation if needed.
- 78-percent integrate some form of security risk assessment with the medical risk for international locations.

#### **Council Commentary:**

While the majority of companies describe having workplaces in underserviced locations, less than half perform some form of site health risk assessment. The majority of companies state they consider the health risks before sending personnel overseas but few have a standard risk rating tool. Medical response plans are common, and integration with security is a standard as well. The Council strongly recommends that all high-risk workplaces receive an appropriate site health/security risk assessment, a Medical Emergency Response Plan and the ability for management to rate the relative risk of their global locations.

#### **Polling Results**

- 38-percent have an on-site or near-site medical clinic near an emerging marketplace.
- 69-percent have clinics among companies with 25,000 or more working outside the US.
- China is the most frequently mentioned country where clinics are based.

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• 36-percent of the companies are getting more interest in establishing clinics of their own.

#### **Council Commentary:**

For those companies with high-risk locations where local medical services are deemed inadequate, corporations augment these services by partnering with outside providers to access quality care either on-site, close by or shared by other parties. Companies also may develop their own on-site clinics as recruitment and staff retention vehicles as well as resources to support their global health and wellness agendas. Clearly, the minority of companies has corporate clinics, but this is significant growth in this area as companies work to standardize employee healthcare service levels, drive wellness programs and best manage healthcare costs. Having company-operated clinics was statistically associated with being in the top quartile in the survey compared to the lowest quartile. This likely indicates the higher level of focused corporate attention to protecting the health of the remote workforce.



FILL THEM



UNDERSTAND THE LOCAL OCCUPATIONAL HEALTH REQUIREMENTS AND YOUR INDUSTRY STANDARDS

#### **Polling Results**

Sixty-percent report having a methodology to ensure that their business operations are in compliance with local occupational health requirements/regulations. This is especially true for companies with large workforces outside of the US.

- 77-percent of the return to work policies are established by country of origin.
- 76-percent indicated they have specific occupational care management guidelines to manage illness/injury in the workplace, with the vast majority using the US Occupational Safety and Health Administration (OSHA) recordables to track work-related injuries globally.

#### **Council Commentary:**

Requirements vary widely by industry, and organizations that implement global standards require expertise to ensure they meet both internal obligations and that of the local jurisdiction. Compliance with local occupational issues has grown in importance over the last five years, particularly in emerging markets such as the BRIC countries where requirements have been fluid and the business implications for non-compliance growing (plus, must maintain a corporate standard, which in many cases is OSHA-based).

It is also important to establish connections with the in country public health system for reporting of illness and disease that may be detected. Reporting these illnesses and diseases helps the World Health Organization track and report the numbers of such illnesses and diseases.



BUSINESS SUSTAINABILITY REQUIRES HEALTH CRISIS MANAGEMENT PLANS AND THE RESOURCES TO RESPOND EFFECTIVELY

#### **Polling Results**

- 78-percent have a pandemic plan.
- 54-percent have infectious disease plans.
- 70-percent have site-specific medical emergency response plans.
- 12-percent provide malaria training and/or track employees who have received malaria training.
- 34-percent have malaria compliance programs.



#### **Council Commentary:**

Influenza pandemic plans are now standard and corporations are expanding the scope of these plans to include other global health threats like common infectious diseases, radiation crises and other biological, chemical and natural disaster threats. Malaria remains a major threat to travelers and expatriates, and few companies are addressing the issue adequately. This is an area of great risk and exposure, as malaria is a preventable killer and one of the top ten causes of medical evacuation.

MALARIA REMAINS A MAJOR THREAT TO TRAVELERS AND EXPATRIATES...

Malaria remains one of the world's major infectious disease. The need to educate employees of these risks remains paramount in controlling this disease, as does managing the disease from an organizational standpoint.The significant movement of company operations to Africa where malaria is endemic means that this disease must be at the top of the agenda. Malaria is a preventable disease that kills an estimated 655,000 people with 216 million cases annually. Corporations should have malaria policies and processes to ensure employees receive the proper prophylactic medications, and even rapid testing and treatment kits if in very remote locations. Each year, 30,000 travelers contract the disease and death can occur even in places with excellent healthcare (press release). Furthermore, malaria cases can worsen in travelers who return to non-endemic home countries where it may not be recognized or managed appropriately. Fatalities occur when anti-malaria tablets are not taken, there is a misdiagnosis, delays in appropriate treatment and drug resistance (Kain et al., 1998).





**OURDOSE** focuses on how business leaders can best leverage corporate health in advancing their business agendas (i.e., private-public health partnerships and CSR, agendas).

purpose...

Corporate health policies are critical to defining the purpose and objectives of an organization's employee health strategy; ensuring the strategy is implemented, delivered and maintained.

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#### **Recommended Action:**

- Companies should maintain documented policies to ensure a healthy workforce.
- These policies must include sufficient resources to meet these objectives.
- A corporate health checklist (see Appendix F) can facilitate the evaluation of the company program.

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Particularly in new and emerging markets, health programs can improve productivity, build goodwill, and enhance business performance. These programs highlight the good work organizations are doing to support their CSR agenda as well as their Duty of Care obligations (taking care of their community from within).

#### **Recommended Action:**

• Organizations should identify and develop targeted health programs in partnership with their local community. Research and Data Supporting The Key Recommended Actions.





HEALTH IS A MAJOR PILLAR OF CORPORATE SUSTAINABILITY

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## **Research and Data Supporting The Key Recommended Actions**

# purpose...

#### Trends

While there is general consensus that traveling or working in "high-risk" locations (see Risk Map Appendix D) leads to more health incidents and emergencies—is this really true, and if so, how serious is it? While one may assume that a major objective of a corporation is the health of its people, this aim is not always communicated effectively or are actions appropriately visible to key stakeholders. While the academic literature is replete with research and data demonstrating the financial value of health programs in improving business productivity leading to higher profits and stock valuations, these messages do not always make it to the business decision makers and industry leaders. A clear example was highlighted in the poll which revealed that few companies considered the link of good health with improved productivity as a significant business success driver.

Prevention education, access to chemo-prophylaxis (i.e., drugs to reduce the risk of contracting malaria) and vaccinations, as well as medical consultations before, during and after travelers or expatriates return to their home locations may serve the company well. Such actions not only prevent sequelae of illness, avoid disability, save lives and facilitate long-term success of the assignment which extends the long-term vision of the company, but it is also the right thing to do, to protect the staff while giving them all of the tools for their success.

One of the clear differentiations in a corporate health plan is to demonstrate best practice activities as part of the corporate sustainability and the corporate social responsibility agenda. Innovative companies have developed private-public partnerships to not only improve the health of their workforce, but those of the entire community.

To discuss the rising tide of noncommunicable diseases (NCD's) globally, corporate medical directors and senior physicians who care for the health and wellness of employees and their families for ExxonMobil, Medtronic, IBM, Cisco Systems, 3M, Lockheed Martin, Air Products, Merck, General Mills and DuPont, gathered in Washington, DC on June 21, 2011. They expressed that global companies should attempt to have a positive impact in the communities in which they operate. With the workplace as a place where people spend a significant amount of time, it can serve as a platform for healthcare promotion and education. The private sector has

SINCE 2004, THE PROGRAM HAS PROVIDED OVER **5.5** BILLION LITERS OF CLEAN DRINKING WATER IN OVER **65** COUNTRIES, SAVING AN ESTIMATED **29,000** LIVES.



a relevant role to play in the prevention and management of NCDs due to its unique experience and expertise in areas such as developing innovation, technology, supply chain and logistics, and creating awareness through advertising and marketing. Further, the private sector benefits directly from the health and well-being in global markets and can contribute in meaningful ways to the fight against NCDs.

For example, Procter & Gamble's (P&G) not-for-profit Children's Safe Drinking Water Program (CSDW) seeks to "reduce child diarrhea deaths due to unclean water through raising awareness and providing P&G water purification packets. The packets contain a powdered mixture that quickly removes pathogenic micro-organisms, making water safe to drink. Since 2004, the program has provided over 5.5 billion liters of clean drinking water in over 65 countries, saving an estimated 29,000 lives." (http://www.csdw.org/csdw/index.shtml)

Cisco's "Jordan Healthcare Initiative is extending the reach of medical providers, increasing patient access to quality healthcare, and improving communication and follow-up care." (http://csr.cisco.com/pages/healthcare-impact-jordan)



Johnson and Johnson (J&J) runs numerous programs in the developing world providing global access to medicines focusing on HIV/AIDS and tuberculosis (TB), as well as donating medicines to disaster relief programs such as AmeriCares and MAP. In addition, J&J has a unique collaboration between the Global Alliance for TB Drug Development (TB Alliance), a not-for-profit, product development partnership that responds to the urgent need to accelerate the discovery and development of new drugs to fight tuberculosis.



#### POLICIES MUST DRIVE THE HEALTH AGENDA

#### **Council Commentary**

Corporate health policies must be clearly documented so that a consistent global health strategy can be delivered. While most companies state they have documented policies, our experience is that many lack specificity and enforcement with C-suite accountability and appropriate resources.



HEALTH IS A MAJOR PILLAR OF CORPORATE SUSTAINABILITY

#### Polling Results

• 24-percent perform a Health Impact Assessment on the possible health effects projects may have on the local community.

#### **Council Commentary**

While only a quarter of companies perform formal Health Impact Assessments today, it is strongly recommended that they assess their footprints within communities and ensure, at a minimum, their organization is not having a deleterious effect. Such negative impacts may be initially difficult to see. Over-burdening the local healthcare system with imported personnel and spreading communicable diseases within the community are common problems. Many of the positive impact opportunities are listed above in the actual efforts of best in class organizations. Such positive efforts are obvious "good news" stories which are important messages to be delivered under the Corporate Social Responsibility (CSR) agenda.
# Conclusion

Companies are taking positive steps to address the new and evolving challenges of supporting the health and well-being of mobile employees and accompanying dependents. While this report highlighted many cases where the majority of organizations are providing appropriate systems and services, clearly not all are doing so.

In some areas – assessing site medical risks and health impact, malaria and preparation – the gap is much greater and significant risk is seen. This is particularly worrisome as the Council expects many more organizations to join the rush to new markets without possibly knowing the risks, implications and best practice standards.

The Council hopes that by identifying these 10 key recommended actions, senior management of all international firms can better assess their gaps and ensure they meet their corporate health obligations. Unfortunately, many of the Council members have seen over the years the very serious impact poor preparation, planning and response can have on an organization. How an organization responds to employee health is business critical, and the objective of this report is to help ensure organizations do not fail when challenged.

While these recommendations reduce risk and hardship, they also add value by improving productivity, enhancing employee wellbeing, limiting costs and improving staff retention and recruitment.

Corporate health can be an essential business differentiator. People are the greatest asset, and the Council believes these key recommended actions will help organizations showcase their ethos while fulfilling their Duty of Care obligations.



# **APPENDIX**

### A. The survey results:

 Workforce Demographics - The survey revealed that the size of the workforce does not appear to influence how corporations handle medical risk assessment. Nearly two-thirds (64%) of corporations surveyed have operations in remote and/or medically underserved areas. The vast majority (84%) indicated that it is important that they maintain these operations with 70-percent existing in the BRIC countries.



Nearly six out of 10 (58%) companies use either governmental or non-governmental data sources to support their medical risk assessment of international workplace locations. However, less than one-half (46%) of all companies report having a documented process or a risk rating tool to evaluate the medical risk of an international assignment location. Nearly two-thirds (62%) of the companies indicated that they consider the health risks of a location before sending an assignee or traveler abroad. Nearly eight in 10 (78%) also integrate some form of security risk assessment with the medical risk for international locations.

Contrary to the literature, the survey indicated the workforce composition was relatively static (i.e., no change in size and age). Similarly, contrary to literature, employee health issues do not appear to be impacting business productivity.



- 2. Duty of Care Duty of Care obligations do not appear to be impacting the health programs of international assignees/business travelers. In general, most companies do not consider Duty of Care obligations for their contractors/ suppliers. However, companies with <10,000 employees in the US are slightly more inclined to do so, suggesting the importance of outside support to their operations.</p>
- 3. Regulation Compliance Guidelines are usually established to measure compliance with regulatory requirements. Most companies (60%) report having a methodology to ensure that their business operations are in compliance with local occupational health requirements/regulations. This is especially true for companies with large workforces outside of the US. Compliance with local occupational issues has grown in importance over the last five years, particularly for companies with a smaller workforce. This may be attributable to larger companies already having an existing program in place. Companies maintain documented polices on health and welfare guidelines. The vast majority of companies have documented policies related to provision of healthcare services, return to work guidelines and corporate standards related to the health and welfare of international travelers/assignees. Seventy-seven percent of the return to work policies are established by country of origin. Similarly, 76-percent indicated they have specific occupational care management guidelines to manage illness/injury in the workplace, with the vast majority using the US OSHA recordables to track work-related injuries globally. Nearly all of the companies indicated that they use a third party medical assistance provider to manage illness/injuries to their international travelers/assignees.



4. Crisis Management - Most companies report having existing plans in place in case of a medical emergency, or a pandemic influenza outbreak. The majority of companies also have a fully deployed and tested crisis management/business continuity plan which includes health-related incidents. It is noteworthy that companies with larger size workforces are most likely to have such plans in place. Most companies also have a plan to manage infectious diseases in all work locations, and maintain a process to track and communicate with travelers who may be affected.



5. Pre-Deployment Counseling/Services - Business travelers are typically educated on the risks associated with their travel more than international assignees. Almost two-thirds of companies (68%) report providing a briefing to their business travelers on health risks and prevention prior to the start of their travel. Nearly the same percentage offer their travelers a medical consultation. On the other hand, slightly less than half of the companies (48%) provide their international assignees with an orientation program to educate them on local health resources and risks prior to deployment.



Health Impact Assessments (HIA) are not a frequent occurrence. Less than one quarter surveyed perform a HIA on the possible health effects that worksite projects may have on the local community. Less than half (48%) conduct health risk assessments in high-risk regions of the world. Again, the larger the workforce outside the US increases the extent that the company conducts risk assessments. However, when risk assessments are done, they are most often performed on an ad hoc basis or at the time of an incident. More companies provide first aid travel kits than offer first aid training. Less than 15-percent of the companies indicated that they offered first aid training for their international assignees or travelers, while 26-percent indicated they offered training for employees in high risk or remote locations. First aid kits are deployed by less than half the companies. However, 80-percent of the companies with 25,000 or more working outside the US offer kits to their international travelers.



e-Learning programs are not widely used. Less than half of the companies surveyed indicated that they use e-Learning or other similar type programs to educate their international assignees or travelers with only a third (34%) saying they have something similar to educate employees in remote locations. e-Learning programs appear to be more widely used in companies that have over 50,000 employees in the US.



- 6. Malaria Prevention Companies do not test or track employees who have been trained in preventing malaria. Nearly nine out of 10 (88%) companies said they don't test or track employees. Companies with less than 1,000 employees are more likely to test or track when it is performed. Only a third (34%) of the companies have a compliance program to measure if employees are following company recommended procedures or ensuring that prophylactics are being taken. Companies with less than 1,000 employees are more likely to test or track when it is performed.
- 7. Behavioral Health Services Most companies do not have a procedure for identifying employees at high risk for stress or mental illness. However, nearly three out of four (72%) provide employees with behavioral health issues support services and counseling. Even though early assessment is not available in most companies (only 32% report having this to any extent) they appear to be supportive of employees in need of mental health services. This is particularly true in companies with over 25,000 employees both inside and outside the US.

Less than half (42%) of the companies surveyed have a formal medical assessment process that can be used by management to determine fitness for international assignments.

- 8. On-site Medical Clinics Companies with over 25,000 employees outside the U.S. are much more likely to have on-site or near-site medical clinics in emerging or less developed locations. Slightly more than a third (38%) of all companies have an on-site or near-site medical clinic near an emerging or less developed location. This percentage increases to 69-percent among companies with 25,000 or more working outside the US. Not surprisingly, the average number of clinics varies based upon the size of the workforce and ranges from 1 to 75. China is the most frequently mentioned country where the clinics are based. A number of companies indicated that they have clinics in various locations globally. A third (36%) of the companies mentioned that they are getting more interest in establishing on-site or near-site locations.
- **9. Medical Directors -** Most companies have a Corporate Medical Director, especially for the top quartile of survey respondents. Although 78-percent of companies indicate they have a Medical Director or other similarly situated physician, only 38-percent say that they have clinical practice guidelines that were developed using an evidence-based medical approach.
- **10. Wellness Programs -** Most companies maintain an annual influenza vaccination program globally. Less than half (46%) of the companies indicate that they have an existing Global Wellness Program. This increases to 69-percent among companies that have 25,000 or more working outside of the US. Only a third of the companies report that their CEO was frequently or regularly involved in the decision making process for the Global Wellness Program.

# B. Corporate Health Champions:

Respondents to the survey of 48 top Fortune 500 international companies were ranked according to their answers to the questions (See Appendix A). The objective of the survey was to quantify and qualify three relevant benchmarks: 1) the medical risk to the employee crossing borders; 2) the evolution of employee demographics and their subsequent needs; and 3) the consequences of changing local health requirements and obligations. The questions were placed into categories of People, Place and Purpose (see next page).

Based on the methodology below, the top 10-percent of respondents were determined.

One ranked exceptionally high in People, whereas another highest for Place, and a third was highest for Purpose. Based on the survey results, these three companies represent current benchmark organizations for protecting health of their mobile, global workforce. However, no one company ranked high in all three categories indicating respondent companies still have work to do to become multidimensional champions.

Methodology to rank the respondents: Survey questions were grouped to the criteria applicable to each category (see below). One or several questions were tagged to each survey question. Each criterion within a category (i.e., People, Place or Purpose) was given a score of zero (not doing anything in this area) to four (activity or focus to a great extent), whereas "yes" answer was given 4 points and "no" answer yielded zero points. An example is, "Do you have a formal corporate wellness program?" The highest score is 4 while having no program (or do not know) means zero points. In this way a total score is tallied, which is compared to other respondents' scores in an overall ranking. The total points among the survey respondents was 196 and the median score was 100. The top ranked companies listed above had at least 135 points.





# C. Scorecard Rubric:



# INTERPRETATION OF TOTAL POINT SCORE

- If 60 points or greater, then top 25-percent ranking of respondents.
- If 50-60 points, then second 25-percent ranking of respondents.
- If 40-50 points, then third 25-percent ranking of respondents.
- If less than 40 points, then lowest 25-percent.

not at all	= 0	great = 4
little	= 1	don't know $= 0$
some	= 2	yes = 4
moderate	= 3	no = 0

The scorecards on the following pages are simplified versions of those discussed earlier in this report.

people Points		
Do you know the demographic distribution of your international travelers and assignees?	not at all little some	moderate great don't know
Do you have a formal Corporate Wellness Program?	not at all little some	moderate great don't know
Do you have a Global Influenza Vaccination Program?	not at all little some	great don't know
Do you have an international employee assistance program for psychological support?	not at all little some	moderate great don't know
Do you provide travel or remote site personal first aid kits?	not at all	☐ moderate ☐ great ☐ don't know
Do you provide first aid training?	not at all little some	moderate great don't know
Do you provide pre-travel health information?	not at all little some	moderate great don't know
Do you track your international travelers?	not at all little some	moderate great don't know
Do you have a documented return-to-work program?	not at all little some	great don't know
	Do you know the demographic distribution of your international travelers and assignees? Do you have a formal Corporate Wellness Program? Do you have a Global Influenza Vaccination Program? Do you have an international employee assistance program for psychological support? Do you provide travel or remote site personal first aid kits? Do you provide first aid training? Do you provide pre-travel health information? Do you track your international travelers? Do you have a documented	Do you know the demographic distribution of your international travelers and assignees?       not at all little some         Do you have a formal Corporate Wellness Program?       not at all little some         Do you have a Global Influenza Vaccination Program?       not at all little some         Do you have an international employee assistance program for psychological support?       not at all little some         Do you provide travel or remote some       not at all little some         Do you provide travel or remote first aid kits?       not at all little some         Do you provide pre-travel health information?       not at all little some         Do you track your international travelers?       not at all little some         Do you provide pre-travel health information?       not at all little some         Do you track your international travelers?       not at all little some



place (32 POINTS)		purpose	s
Do you have a methodology to medically risk rate workplace locations?	not at all moderate     little great     some don't know	<ul><li>Is health productivity</li><li>given significant weight in business strategy?</li></ul>	yes no
<b>2</b> Do you have medical expert review of rating?	not at all moderate     little great     some don't know	2 Is Duty of Care a core business objective?	yes no
<b>3</b> Do you perform standard health impact assessments?	not at all moderate little great some don't know	<ul><li>Is health part of your</li><li>sustainability and business social responsibility agenda?</li></ul>	yes no
<b>4</b> Do you have a documented Health Incident Plan?	not at all moderate     little great     some don't know	<ul><li>Is health incident risk</li><li>4. mitigation savings part of your financial analysis?</li></ul>	yes no
5 Do you have a documented Influenza Pandemic Plan?	not at all moderate     little great     some don't know		
Do you have a documented site-specific Medical Emergency Response Plan?	not at all moderate     little great     some don't know		
If travel or work in malaria endemic areas, do you have malaria policies and plans?	not at all moderate little great some don't know		
<ul> <li>Do you medically screen</li> <li>(with corporate medical review) employees for high-risk international assignments?</li> </ul>	not at all moderate little great some don't know		



# D. Traveler and Expatriate Research:

- 1. Several members of the Council collaborated with public health experts to quantify risks of medical "misadventures" when employees of international companies cross borders (Druckman, et. al 2012). Their initial study, which focused entirely on international assignees (expatriates), had three fundamental purposes:
  - To quantify the magnitude of hospitalization and aeromedical evacuation risk;
  - To quantify the relevance of geographic location as a risk factor for hospitalizations and aeromedical evacuations;
  - To quantify the efficacy of two potential country medical risk rating tools.

The authors defined international assignees as those individuals (and dependents) who worked and lived outside their home country for at least 12 months. Their study was based on two populations: an at-risk population of almost 100,000 including their dependents in one calendar year based in 181 countries and a second population of actual hospitalizations and medical evacuations recorded over two calendar years. All raw data were retrieved from International SOS database. Two different country medical risk rating tools were used: the international Human Development Index (HDI) and the provider (International SOS) Country Medical Risk rating tool (CMR). With the latter tool countries were rated on a scale from low to extreme based on eight criteria reflecting the country's medical and security infrastructure.

Regardless of the tool used the results clearly demonstrated that the characteristics of the country in which an employee is assigned represents a major determinant of the likelihood of hospitalization and, to an even greater degree, aeromedical evacuation.

The authors acknowledged certain shortcomings to their published results. Specifically industry and occupational exposure, age, sex and underlying occult clinical conditions all may influence the country medical risk. These aforementioned factors may be differentially distributed among countries.

**2.** These same authors are now focusing their research entirely on the business traveler to compare and contrast their findings with the international assignee populations.

The preliminary (unpublished) data indicate that health risks are significantly greater for the traveler than the international assignee. This is likely a direct consequence of familiarity with the environment by the international assignee.

These results are complimentary to a recent multicenter report (GeoSentinel records) in the Annals of Internal Medicine (Leder et al.,2013). Here the authors reviewed the demographics of travelers seen at GeoSentinel sites (53 tropical medicine clinics around the globe inclusive of Latin America, Southern Africa and the Middle East). There were >40,000 travelers who presented to the clinics for either pretravel advice or post travel symptoms over a five year

period ending in December 2011. The largest proportion of travelers acquired their illness in Asia, followed by sub-Sahara Africa and Latin America. Just over 40-percent of the ill returned travelers acknowledged a visit with a health professional for advice prior to travel. Gastrointestinal infections were the most common illnesses reported (34% of travelers). Febrile illnesses were reported in over 23-percent of travelers. Malaria, diagnosed in 29-percent of those with fever, and disproportionately in travelers returning from Africa and 15-percent of the febrile group were diagnosed with Dengue fever (particularly in those returning with fever from Latin American/Southeast Asia).

The relative frequency of many diseases varied with both travel destination and reason for travel, with travelers visiting friends and relatives in their country of origin having both a disproportionately high burden of serious febrile illness and very low rates of advice prior to travel (18%).

The disproportionate burden of serious febrile illness, such as malaria and gastrointestinal fever, among travelers who visited friends/relatives juxtaposed with the low rates of advice before travel in this population represents a health disparity, highlighting the requirement for more effective delivery of preventive advice to this high-risk group. With the increase in multinational workforces these same risks would apply to today's business traveler or international assignee. It is noteworthy that among ill travelers who were reported by GeoSentinel sites, the number of business travelers who died was significant.

- **3.** Collectively the Council has reviewed the relevant literature as it applies to corporations with global footprints. They have focused their efforts on the following topical themes:
  - The value and role of health management systems in the workplace (inclusive of compliance with pre-screening programs);
  - Innovations (inclusive of technologies);
  - The significance of the demographically changing workforce and its impact on productivity (inclusive of the increasing exposure for the ever expanding local workforce).

As previously addressed, today all corporations, have an obligation, and should have a commitment, to protect and promote the health of those employees affected by injury/illness, directly or indirectly, while at the workplace. This is their Duty of Care. An effective and robust health management system can serve as a vehicle to deliver this commitment. The workforce may consist of a combination of local, national and international employees. Management is advised therefore to be sensitive to the diversity and requirements of its workforce and their dependents.

The system should serve to demonstrate the company's ethos, infrastructure practices, procedures, resources and responsibilities for implementing health management including the ability to identify root causes of poor performance, prevent recurrence of such negative performance and drive continuous improvements.





# E. HealthMap 2014

#### MEDICAL RISK RATINGS

Hawaii (U.S.)

eutian Islands (U.S.

International SOS assigns medical ratings to countries' by assessing a range of factors including the standard of local medical and dental care available, access to prescription drugs, the presence of serious infectious diseases and cultural, language or administrative barriers. The medical risk within a country can vary widely. For example, major cities may have lower risk whereas remote or rural areas may have higher risk. The staff in our 27 International SOS assistance centers, 46 clinics as well as 600 medical remote sites, have an initmate knowledge of the standard of medical care in their regions, including that offered by individual medical facilities. This consolidated knowledge is used by our physicians when advising on medical actionce and unsents. on medical assistance requirements.

CANADA

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#### LOW RISK

International standard of care throughout. All tertiary-level, specialist and sub-specialist care widely available. High-quality emergency and dental services and a wide range of quality prescription drugs available. Low risk of infectious disease Medical assistance; Medical referral. Assistance with language and cultural differences. Payment. Evacuation

rarely required.

#### MEDIUM RISK

High or international standard of care available from selected providers; other providers offer a lower standard of nigh of hiermitouran standard of de antibatel horn seecieta jurkida 5 one plovidars due a token sa dara or care. Adequate emergiony services and dential care usually available some risk of food water-borne deseases. Diseases such as malaria and dengue fever may be present. Madicial assistances, Selection of quality providers. Case monitoring. Severe iliness/njury may require evacuation.

#### MEDIUM & HIGH RISK

Large emerging countries where the standard of medical care is generally limited. Significantly better care is available in some major cities from selected providers. Outside these cities, medical care, emergency services and dental care may be basic. Access to quality prescription drugs may be limited and, in some cases, counterfeiling and/or impropre storage of drugs is an issue. Servicus linesses such as dengue, malaria, lyphoid, Contenting and in major entropy acting of a stage of the stage of the

#### HIGH RISK

Developing countries with very limited medical capabilities. Emergency services and dental care may be basic Derociping occurso window not innear model optication. En englishy control end outside of margo bases Access to quality prescription drugs may be limited and in some cases, counterfeiting and/or improper storage of drugs are an issue. Serious inflectious diseases such as tybhoid, cholera, dengue fever and malaria may pose a timeat. Medical assistances: Selection of best care available. Case monitoring. Moderate and severe illness/injury may require international evacuation.

#### EXTREME RISK

Countries where healthcare is almost non-existent or severely overtaxed. There may be no emergency or Countries where reading statution for existin to resterior vietatos. There is a high risk of the statution for existin to resterior vietatos. There is a high risk of food or water-borne infections. Serious infectious diseases such as dengue, malaria, typhoid, and cholera are common. Medical assistance: Selection of best care available. Case monitoring. Moderate and severe cases may require international evacuation.



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Response Center ternational SOS has established six response neters to support the offshore oil and gas industry. hey provide expertise in workplace injury, illness ase management and advice on a patient's fitness stay at work or return to work in line with industry gulations and/or HSE standards.



Clinic Our 36 International SOS clinics practice the Our se international sUSS clinics practice the highest strandards of healthcare, operating in areas where gaps in quality of care are evident and/or where there may be cultural or language barriers. Additionally, ten of our other clinics operate in hostile environments and/or in environments that require industry – specific occupational health standards.



Medical Services Center To support our clients' medical needs in remote locations, we deliver medical staffing, consulting, training, supplies, operations, quility improvements and occupational health through more than 600 remote medical services sites across 70 countries, seamlessly coordinated by 36 medical services centers.



International SOS Air Ambulance International SOS dedicated fleet of ten air ambulances functions as intensive care units in the sky and are monitored by our own regional light dasks. They are equipped with state-of-the-art medical equipment and statled by aero-medical specialists. International SOS has access to additional planes available 24/7.



centers.

# F. Corporate Health Check List (Self Assessment):

4 = YES0 = NO

## TO EVALUATE THE CORPORATE HEALTH PROGRAM OF YOUR COMPANY\*

For each question, (People, Place, Purpose), indicate a score from 0 to 4 in a Likert scale.

### 0 = "don't do any" or "no" 4 = "do it all" or "yes" 1,2,3 = extent if not 0 or 4

- Status of the corporate health program greater than 60 points = likely adequately prepared by being in the top percent of respondents, but reviews are recommended for opportunities for improvement.
- 40 to 60 points = improvement reviews are recommended, which should be accomplished when feasible.
- Less than 40 points = urgent attention is needed since there may be major gap(s) compared to standards.
- \* Standardized Likert Scale

The scorecards on the following pages are simplified versions of those discussed earlier in this report.

# people

	1	distribution of your international travelers and assignees?	
ŋ.	2	Do you have a formal Corporate Wellness Program?	
<b>.</b>	3	Do you have a Global Influenza Vaccination Program?	
<b>.</b>	4	Do you have an International Employee Assistance program for psychological support?	
	5	Do you provide travel or remote site personal first aid kits?	
<b>.</b>	6	Do you provide first aid training?	
	7	Do you provide pre-travel health information?	
	8	Do you track your international travelers?	
5.	8 9		



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