

# THE RISK FACTOR IN SAFETY

**RISK COMES FROM NOT KNOWING  
WHAT YOU'RE DOING.**

**Risk is a key word in your business. It can both be harnessed and optimized as an opportunity, or unchecked and free, it can destroy your bottom line and the lives of people. It is closely linked with growth, because without 'pushing boundaries', you cannot renew, change and innovate.**

**RISKmap offers new thinking about risk, advanced risk tools and techniques to do just that.**

RISKmap interventions are focused on the risk culture, risk behavior and risk optimization. It is focused on RISK in the business. Our interventions have been developed by psychologists, safety professionals, industry experts and academia –combining the real world and advanced thinking from research. We offer an impeccable track record in our field.

Our clients include BHPBilliton, Anglo American, De Beers, Kinross, Southern Company, Boeing and many more.

**We take you towards the key factors in risk: Competence Cognition and Control.**

riskSYSTEM

riskDELTA

safeSENTRY

riskSIXEYE

Rapid Risk Reduction (R<sup>3</sup>)

X-RAY

riskMANAGER

riskMETRICS

# riskSYSTEM

## RISK MANAGEMENT SYSTEM

A RISK MANAGEMENT FRAMEWORK, BASED ON OSHAS 18000 AND ISO 31000 - DESIGNED TO BE A FLEXIBLE YET COMPREHENSIVE RISK MANAGEMENT SYSTEM.

### Key Focus Areas:

Serious Injury, Fatal and Catastrophic risks  
Critical Risk Control  
Change management  
Incident Analysis  
Support Programs

### Program Outline:

- ▶ The program is deployed through a series of phases and steps, comprising:
  - Step 1: Company overview
  - Step 2: Gap analysis
  - Step 3: System targeting
  - Step 4: System development
  - Step 5: Standards development
  - Step 6: Deployment



# riskDELTA

DEEP eLIMINATION OF LATENT tRIGGERS OF aCCIDENTS

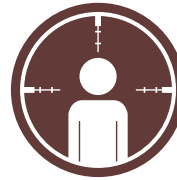
DESIGNED TO TEST AND VALIDATE THE INTEGRITY FATAL RISK CONTROL.

### Key Focus Areas:

Advanced risk control system  
Dynamic control of randomness  
Rapid risk reduction techniques  
Delegated roles for controls

### Competencies of champions:

- ▶ Advanced capabilities in risk controls
- ▶ Focus on SIFC risks
- ▶ Establish core teams to address dynamic risks
- ▶ Key roles in mitigation of risks
- ▶ Transparency on risks
- ▶ Random control of risks



# Rapid Risk Reduction (R<sup>3</sup>)

## MITIGATING RISK AT THE SHOP FLOOR

RISK MANAGEMENT SYSTEMS THAT QUICKLY, RANDOMLY AND CONTINUOUSLY CAPTURE AND EVALUATE RISK WHERE IT HAPPENS: THE SHOP FLOOR - AND ENABLE RAPID RISK REDUCTIONS.

### Key Focus Areas:

Routine risks  
Serious Injury risks  
Continuous risk reviews  
Random risk controls  
Team risk skills

### Program Outline:

- ▶ Design, deploy pilot processes
- ▶ Train risk observers
- ▶ Design routine risk system
- ▶ Design serious injury risk system
- ▶ Deploy SIXeye risk reviews
- ▶ Deploy risk sentry systems
- ▶ Train riskSWAT teams



# X-RAY

## CRITICAL RISK AND INCIDENT ANALYSIS

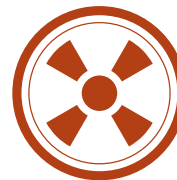
THE ANALYSIS OF SERIOUS INCIDENTS IN THE WORKPLACE THROUGH TECHNIQUES OF MULTIPLE CAUSE ANALYSIS.

### Key Focus Areas:

Information collation  
Key factor identification  
Critical contributory factor analysis  
"Cross X" Value analysis  
"Z-Grid" profiling  
Mitigation strategies

### Content:

- Course material covers the following;
- ▶ Concerns/current deficiencies
  - ▶ Multiple cause analysis defined
  - ▶ Gathering/organizing information
  - ▶ Identify and analyze the hazards
  - ▶ Identify and analyze the barriers
  - ▶ Identify and analyze the factors
  - ▶ Corrective and preventive measures
  - ▶ Report writing





# safeSENTRY

SAFETY LEADERSHIP AT THE FRONT-LINE

IDENTIFYING DYNAMIC FATAL RISKS AND CREATING LEADERS IN THE FRONT-LINE.

**Culture Types Profile:**

- Fatal risks
- Critical controls
- Risk skills development
- Risk mitigation

**Survey Process:**

- ▶ Identifying fatal risks
- ▶ Analyzing catastrophic potential
- ▶ Verifying critical control effectiveness
- ▶ Effective leadership in the teams
- ▶ Active participation in safety
- ▶ Risk communication and transparency
- ▶ Predictive safety metrics



# riskSIXEYE

ANALYSIS OF CRITICAL RISKS

TO INSTALL AND MAINTAIN A CHANGE PROCESS FOR SITES/DIVISIONS TO IDENTIFY CRITICAL RISKS (WITH SERIOUS INJURY, FATAL & CATASTROPHIC POTENTIAL).

**Key Focus Areas:**

- Critical risks
- Leadership
- Balance
- Competence
- Analytics
- Systems
- Processes

**Program Outline:**

- ▶ Site/department conducts self analysis (SWOT)
- ▶ Review site safety materials
- ▶ Deploy review program over 3 days
- ▶ Present a Review Report to the site management team
- ▶ Present an action Plan by the local site management, to the senior executive of that organization
- ▶ A safety system optimization process conducted by an external facilitator
- ▶ Follow-up analytics



# riskMANAGER

MANAGING AND MITIGATING RISK

TRAINING IN RISK MANAGEMENT SKILLS, FOR MANAGERS AND SUPERVISORS, ENABLING A PROACTIVE FOCUS ON RISK IN THE BUSINESS.

**Key Focus Areas:**

- Serious, Fatal and Catastrophic risks
- Risk recognition
- Risk dynamics
- Risk analysis (Bowtie)
- Risk critical controls
- Risk competency
- Rapid risk reduction

**Skills and Competencies:**

- ▶ Risk recognition skills
- ▶ Risk analysis skills
- ▶ Dynamic risk evaluation techniques
- ▶ Rapid risk reduction
- ▶ Human factors in risk management
- ▶ Risk behavior management
- ▶ Risk attitudes and perceptions
- ▶ Innovation skills



# riskMETRICS

MEASURE SAFETY PERFORMANCE AND ASSESS PROGRESS

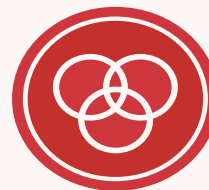
MEASURE SAFETY PERFORMANCE 'BEYOND' ZERO.

**Key Focus Areas:**

- Analysis of latent risks
- Measuring 'chronic unease'
- Upstream indicators
- Link with culture assessments

**Premise and approach:**

- ▶ Measuring safety as the 'readiness to respond to risk'
- ▶ On-line pulse survey that measures risk trends
- ▶ Identify gaps in safety focus
- ▶ Maintain control over dynamic risk exposures





**CORRIE  
PITZER**  
CEO SAFEMAP  
INTERNATIONAL

# OUR TEAM



**EWAN  
ALEXANDER**  
COO RISKMAP  
INTERNATIONAL



**KIMM  
BARKER**  
COO SAFEMAP  
INTERNATIONAL



**DR. ROSEMARY  
MURRAY**  
SVP SAFEMAP  
RESEACH/  
DEVELOPMENT



**ALEX  
STEINHAUS**  
SVP SAFEMAP  
LATINOMERICA



**ERIC  
RATSHIKHOPHA**  
SVP SAFEMAP  
AFRICA



**BRETT  
READ**  
VP SAFEMAP  
AUSTRALASIA



**KARL  
ZANDER**  
VP SAFEMAP  
AFRICA



**CLAUDIA  
MARIN**  
SENIOR  
CONSULTANT



**ROSE  
BAKRI**  
SAFEMAP PARTNER  
EUROPE/MIDDLE EAST



**JAN  
PEETERS**  
SAFEMAP PARTNER  
EUROPE



**DR. MICHEL  
POLITY**  
VP SAFEMAP  
BRAZIL



**STEVE  
WOODWARD**  
SENIOR  
CONSULTANT



**MARK  
PERGREM**  
SENIOR  
CONSULTANT



**DR ROB  
ROBSON**  
ASSOCIATE  
CONSULTANT



**JASON  
CALDERON**  
CONSULTANT



**DAVE  
APELT**  
CHIEF TECHNOLOGY  
OFFICER



**ROGER  
BELAIR**  
ASSOCIATE  
CONSULTANT



**PETE  
CUTBUSH**  
ASSOCIATE  
CONSULTANT



**MICKI  
MACLEAN**  
CLIENT RELATIONS  
MANAGER



**EMILIANO  
PALOMAR**  
CONSULTANT



**MIKE  
PIROT**  
REGIONAL  
CONSULTANT



**MIKE  
BYRNE**  
ASSOCIATE  
CONSULTANT



**ROGER  
LARAMEE**  
ASSOCIATE  
CONSULTANT



**HEMANT  
KHADSE**  
ASSOCIATE  
CONSULTANT



**STEVE  
AMOR**  
ASSOCIATE  
CONSULTANT



**ANTHONY  
BEASLEY**  
ASSOCIATE  
CONSULTANT



**ANTHONY  
AARONS**  
ASSOCIATE  
CONSULTANT



**KEITH  
BELL**  
ASSOCIATE  
CONSULTANT



**PETER  
SUSCA**  
ASSOCIATE  
CONSULTANT



**PUVAN  
BALASUBRAMANIAM**  
ASSOCIATE  
CONSULTANT



**MURRAY  
RITCHIE**  
ASSOCIATE  
CONSULTANT



**TYLER  
BAKER**  
ASSOCIATE  
CONSULTANT



**DR. TOM  
COHENNO**  
ASSOCIATE  
CONSULTANT



**DR. SIMON  
ROBERTS**  
ASSOCIATE  
CONSULTANT



**MARK  
ADAMS**  
ASSOCIATE  
CONSULTANT



**BEN  
COOPERMAN**  
ASSOCIATE  
CONSULTANT



**DOUGLAS  
BEUGER**  
ASSOCIATE  
CONSULTANT



**DEB  
HALDANE**  
ASSOCIATE  
CONSULTANT



**BARDO  
TAIPE CALIENES**  
ASSOCIATE  
CONSULTANT



**TOM  
PATERSON**  
ASSOCIATE  
CONSULTANT

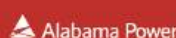


**ISRAEL  
MONKUTLWATSI**  
ASSOCIATE  
CONSULTANT



**ÁNGELA  
SALAS**  
ASSOCIATE  
CONSULTANT

## COMPANIES WE HAVE HELPED



RISKMAP INTERNATIONAL CANADA // USA // AUSTRALIA // SOUTH AFRICA // CHILE // EUROPE // BRAZIL // INDIA

RISKMAP INTERNATIONAL

+1 604 642 6110 safemap@safemap.com safemap.com



**SAFETY  
IS NOT OUR BUSINESS,  
IT IS OUR PASSION**