

# Fitness for work provisions in coal mines

Gerard Tiernan - Manager, Health Surveillance Unit

Graeme Smith – Inspector of Mines

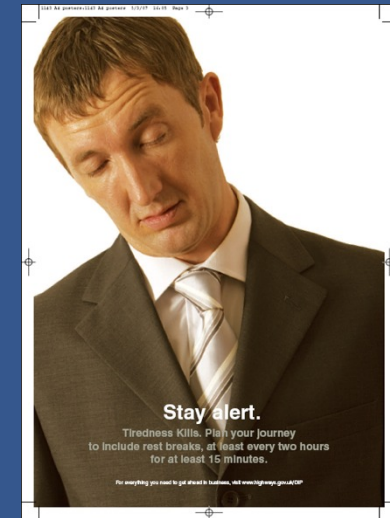
Safety & Health, Queensland Mines & Energy

# December 2008 Fitness for Work (FFW) provisions survey

- to determine compliance with the various elements of Sections 41 and 42
- to gain an appreciation of the systems that each mine has in place to adequately discharge their obligations with regard to ‘fitness for work’
- to determine how the current system and regulations can be improved

# Coal Mining Safety & Health Regulation 2001 S41 & S42

- SHMS must cover the risks associated with:
  - the excessive consumption of alcohol
  - personal fatigue
  - physical or psychological impairment
  - the improper use of drugs.



# Coal Mining Safety & Health Regulation 2001 S41 & S42

- SHMS must provide for:
  - education
  - employee assistance program
  - maximum hours and the number of rest breaks in a shift
  - Notification and recording of current use of medication
  - assessments for
    - voluntary self-testing;
    - random testing before starting, or during, work;
    - suspicion testing

# Mining & Quarrying Safety & Health Regulation 2001 S84 *Alcohol & Drugs*

- must not carry out operations at a mine or
- enter an operating part of a mine,
  - if under the influence of alcohol; or
  - is impaired by a drug.



# Mining & Quarrying Safety & Health Regulation 2001

- S89 Work hours and rest breaks
- A mine's safety and health management system must provide for controlling risk at the mine arising out of personal fatigue caused by excessive work hours or insufficient rest periods.



# Development of SHMS for Controlling Risk for the Improper Use of Drugs

SSE must consult in developing the fitness provisions

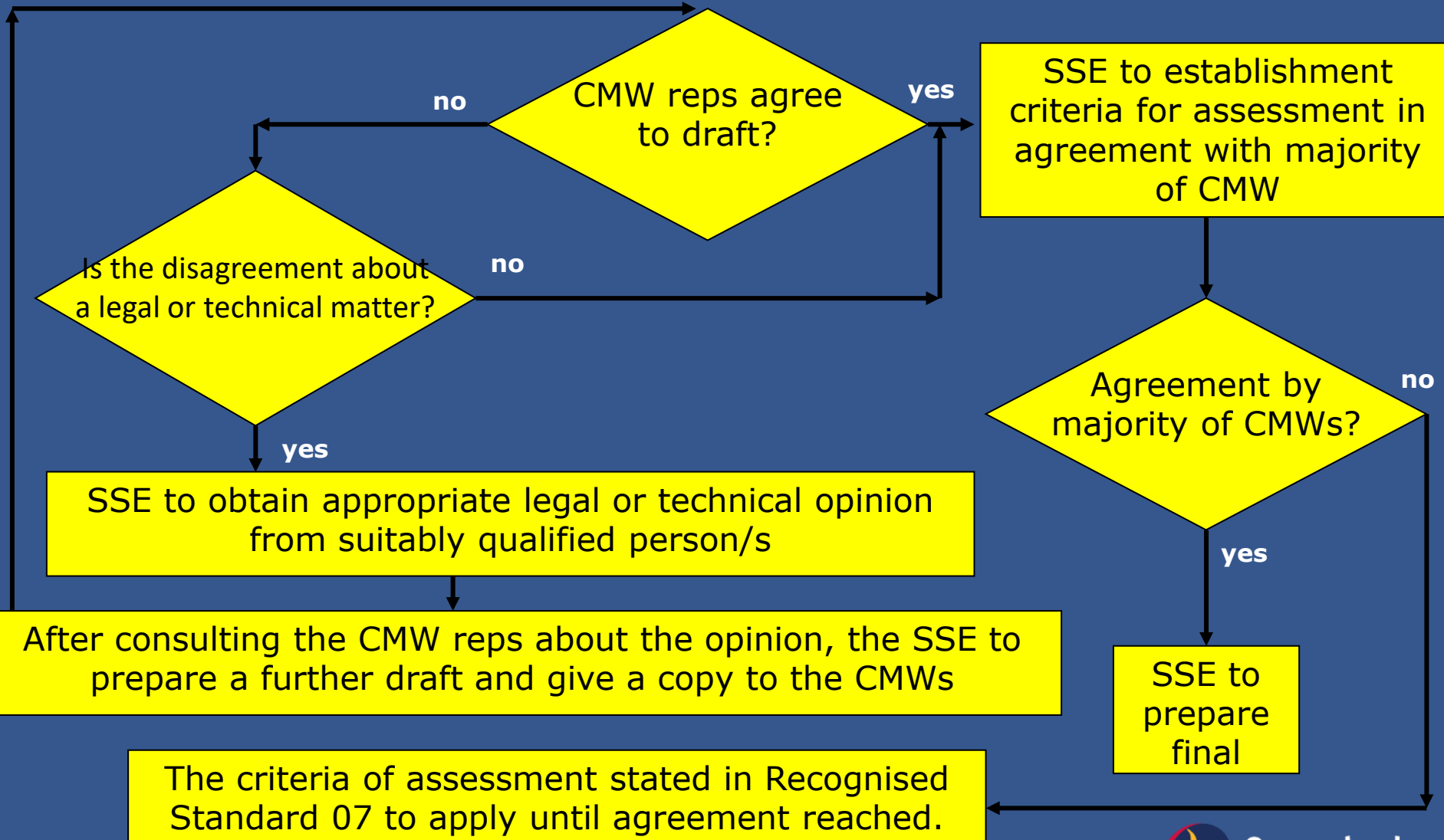
The SSE shall prepare a draft of site fitness provisions by:

- Utilising a recognised risk assessment process; and
- Having regard to the QME hazard database.

Draft given to CMW who were previously consulted.

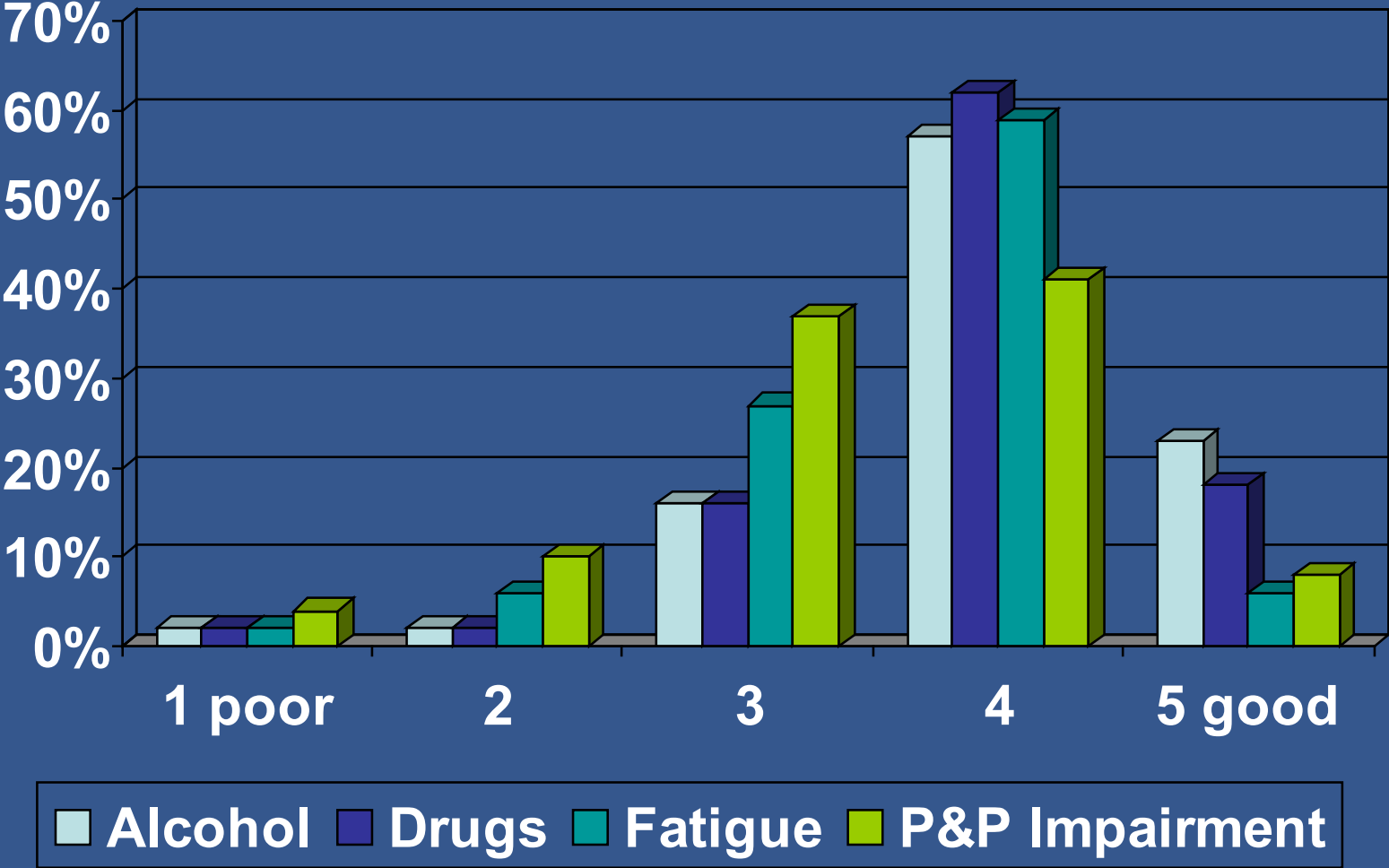
CMW reps agree to draft?

# Development of SHMS for Controlling Risk for the Improper Use of Drugs

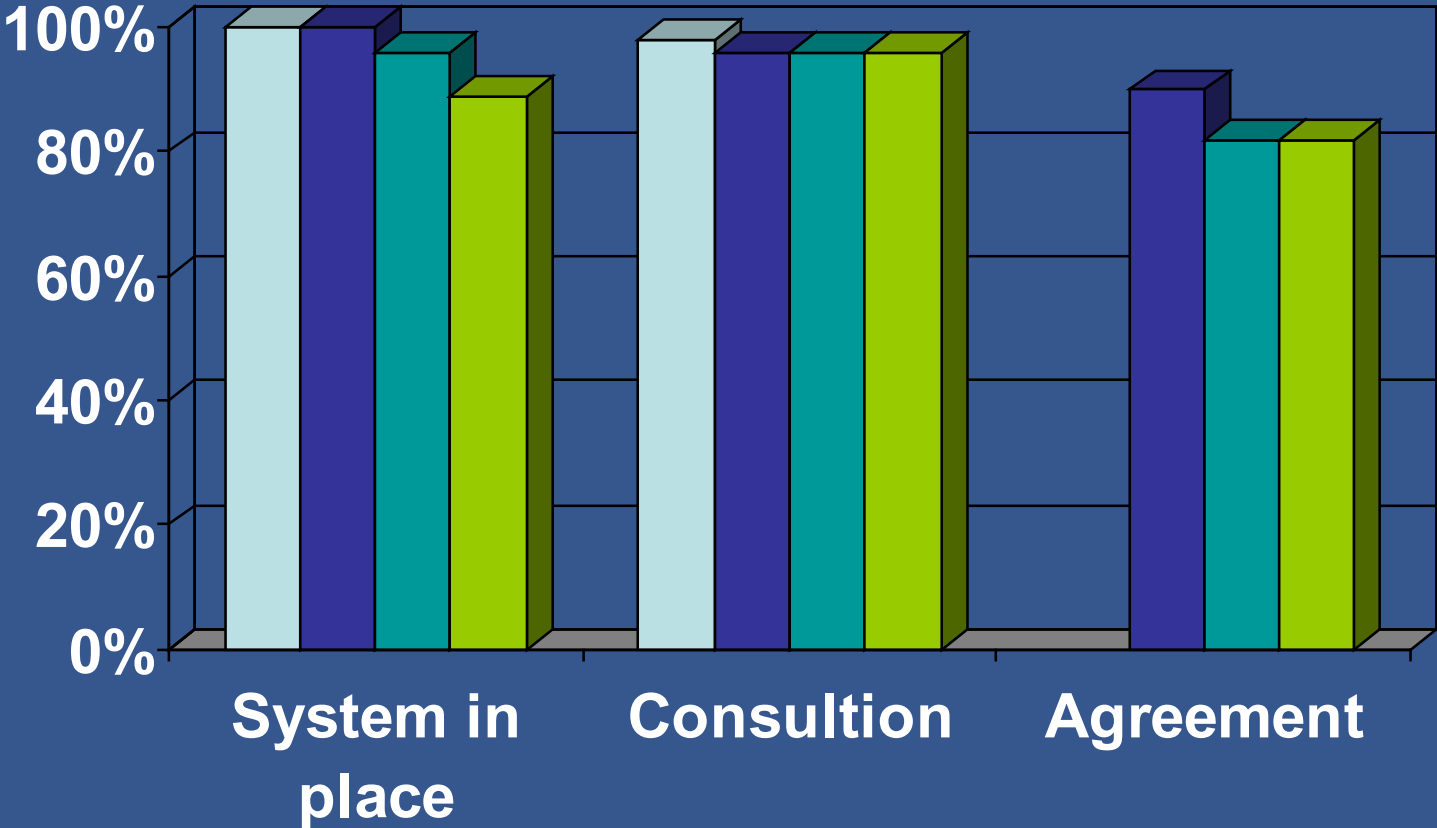




# Self assessment of the mine's FFW SHMS provisions



# Self assessment of the mine's FFW SHMS provisions



Alcohol Drugs Fatigue P&P Impairment

# Provisions of FFW programs

- education programs
- employee assistance programs
- training of supervisors
- contractor fitness for work systems

# Provisions of FFW programs - Fatigue

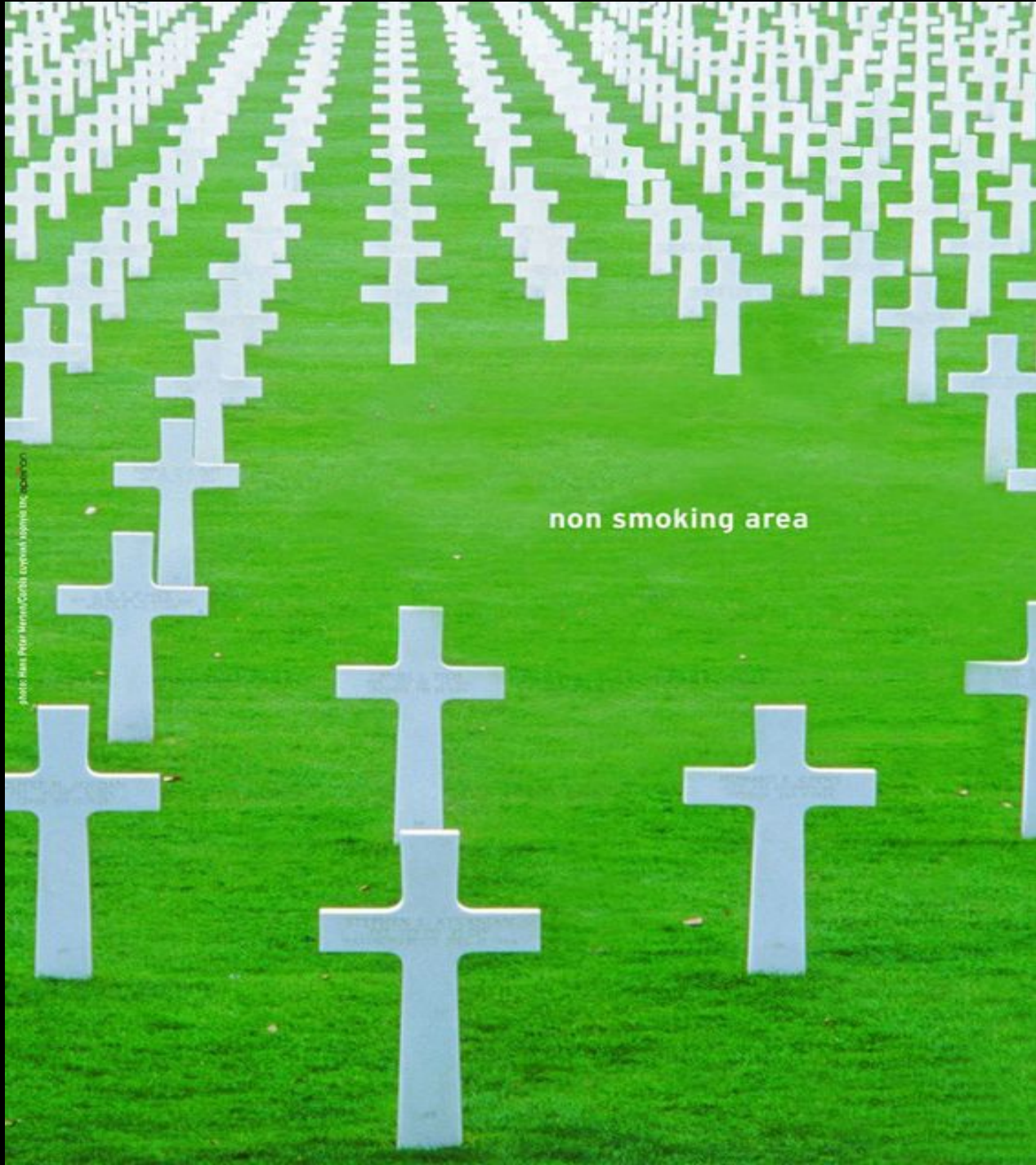
- Hours of work and shift arrangements
- Combating on-shift fatigue
- Long distance commuting
  - 64% have a rule/policy in place regarding long distance commuting prior to and post roster cycle
- 56% utilize
  - fatigue likelihood calculators; and/or
  - retina scanning technology; and/or
  - circadian rhythm research; and/or
  - sleep apnoea research
- 37% have a system of disclosure of second jobs



# Provisions of FFW programs - Physical & Psychological Impairment



- Most sites treat physical impairment and psychological impairment as separate issues
- Most have criteria in place for identifying and classifying an injury or illness and allocating normal or 'restricted' duties
  - This normally involves medical specialists and a risk assessment processes
- Some sites had difficulty defining fitness provisions for physical and psychological impairment



non smoking area

photo: Hans Peter Hermann/Corbis Sygma/Agence France Presse

# Provisions of FFW programs - Alcohol & Drugs

- Voluntary self-testing
- Random testing
- Testing under suspicion
- Indirect FFW screening
- Mandatory testing following an accident or incident

# Criteria for excessive consumption of alcohol

- 64% of mines – effectively zero
  - $< 0.01$  g/100ml
- 28% of mines - 0.02 g/100ml
- 8% of mines
  - Various BAC level limits ranging from 0.01 to 0.05g/100ml
- 0.05 limit
  - two mines - for work in non operational areas
  - one of these allowed mineworkers to return to work in operational areas when their BAC reduced to 'zero'





# Drug testing methodology as of Dec 2008

- Urine – 47 (85%)
- Oral fluid - 19 (35%)
- Both – 12 (22%)



- Many mines are now moving over to oral fluid testing

# Criteria for improper use of drugs

- All mines use the cut-off or target concentrations considered indicative of drug use denoted in the Australian Standards.



# 3 step counselling/disciplinary procedure



- Step 1 (1st positive result)
  - ensure that they are familiar with mine's FFW procedures
  - an entry on their record
  
- Step 2 (2nd positive result)
  - counselling by supervisor/manager
  - external counselling
  - commitment to mine's FFW requirements
  - possibility of increased frequency of tests
  - possible final warning
  - record on file



# 3 step counselling/ disciplinary procedure

- Step 3 (3rd positive result)
  - final written warning; or
  - show cause; or
  - mandatory termination



- instant termination in the case of wilful or serious misconduct, no matter at what step of the disciplinary procedure.



Australian XI, First Test, Brisbane  
Aust vs. West Indies  
1960.

# Positive result – 1/7/08 to 31/10/08

- Alcohol
  - 177 out of 51177 (0.35%)



- Drugs
  - 167 out of 19790 (0.84%)



# QME Recognised Standard 07

- *Criteria for the assessment of drugs in coal mines*



# QME Recognised Standard 07

- Urine test

- Before the worker first commences work at the mine. To confirm if a person is at a higher risk classification due to evidence of drug usage.



- Oral fluid - on-site initial test

- Random testing - *Pre-shift, post-shift and during shift*
- After an accident / incident at the mine
- On suspicion - *Where there is reasonable concern regarding an individual's fitness for duty.*
- Following a positive drug test result - *On return to work.*

# M&E Recognised Standard 07

- Oral fluid laboratory confirmation - AS4760 – 2006

- if the on-site initial test is positive and the result is disputed and/or a confirmation test is requested by the individual or is otherwise required.

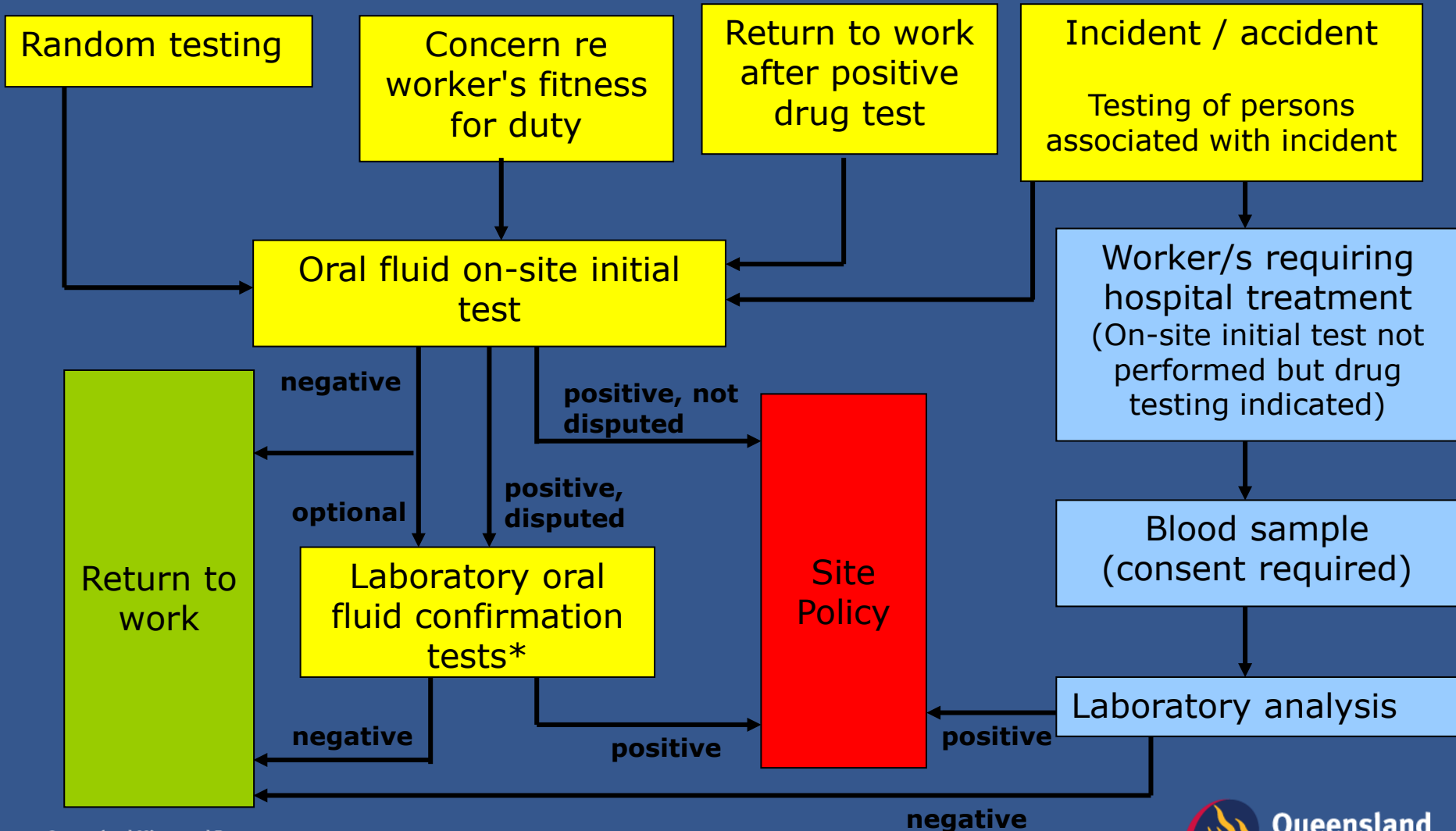


- Blood test

- Hospitalisation following an incident
- Unless a person has already been subjected to an oral fluid on-site initial test, or has provided a urine sample, prior to leaving the mine.



# M&E Recognised Standard 07



# Conclusions

- Survey generally reflects the status of the implementation of FFW provisions required under S41 and S42 of the Coal Mining Safety and Health Regulation 2001.
- Most mines have in place, at the least, basic safety and health management systems for the fitness for work provisions.
- In many cases adequate records of the consultation and agreement process in setting up the systems are not available.