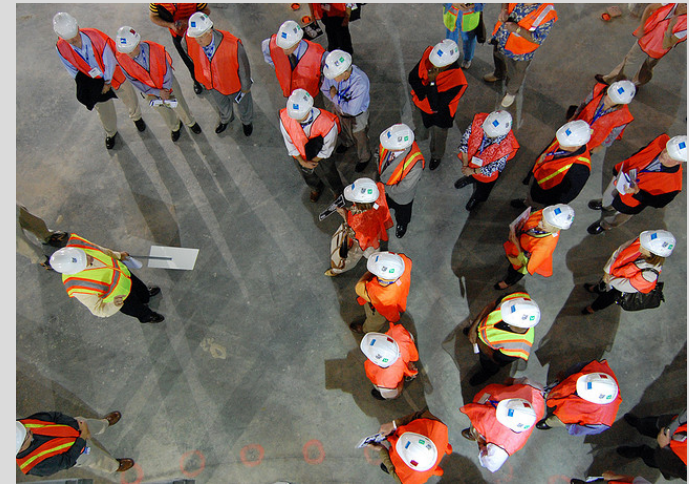


# SYSTEMATIC REVIEW OF QUALITATIVE LITERATURE ON THE PLANNING AND IMPLEMENTATION OF OCCUPATIONAL HEALTH AND SAFETY LEGISLATION AND REGULATORY ENFORCEMENT

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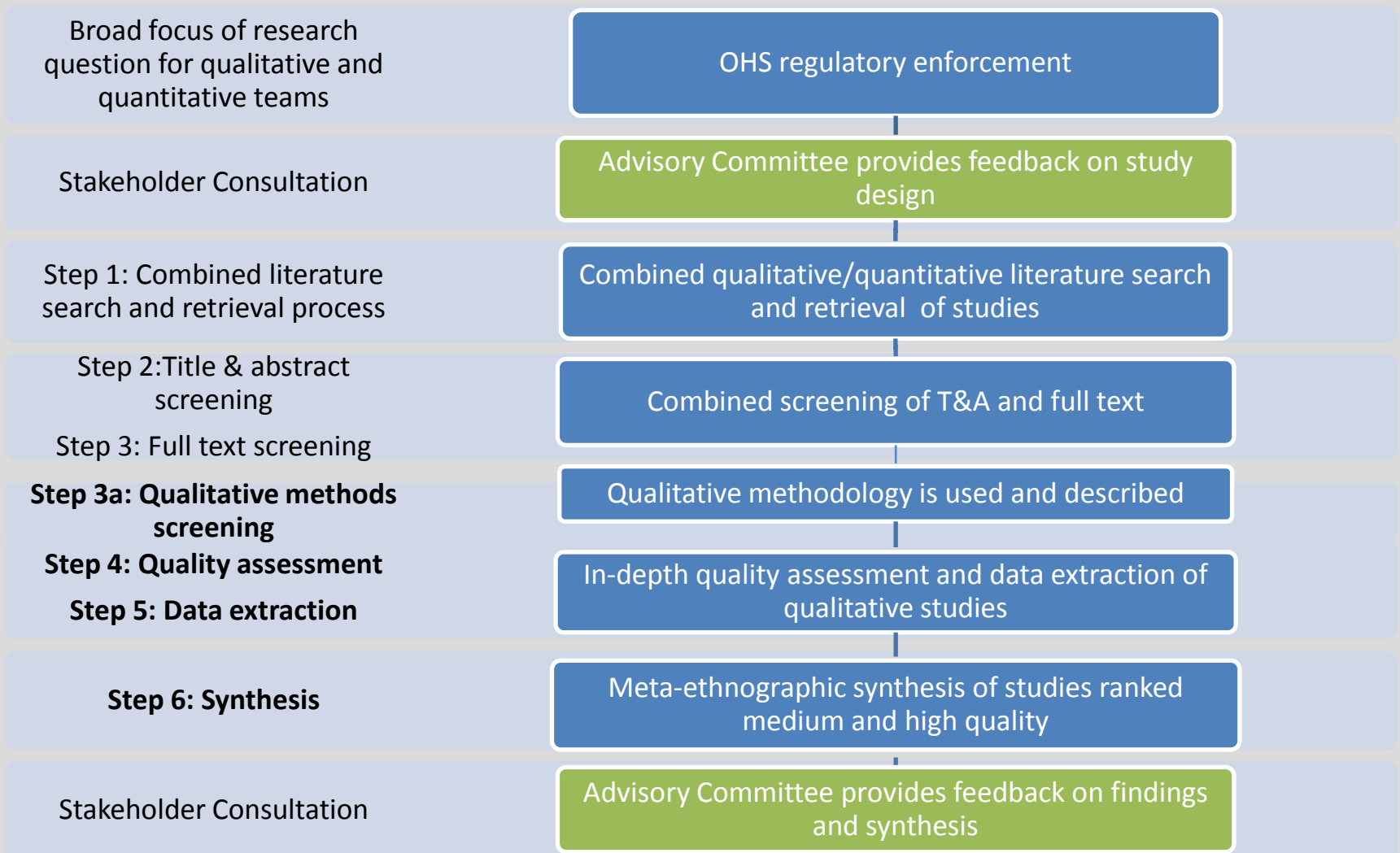


# RESEARCH QUESTION

- **How is OHS legislation and regulatory enforcement planned and implemented?**
  - ✓ Focused analytically on directives made by a government authority
  - ✓ Published 1990 or later
  - ✓ Peer reviewed journals
- Interested in implications for non-standard workplaces and employment conditions
- Considered legal, social, and economic contexts of OHS regulation



# DESIGN OF SYSTEMATIC REVIEW



# THE DATABASE SEARCH: QUALITATIVE & QUANTITATIVE

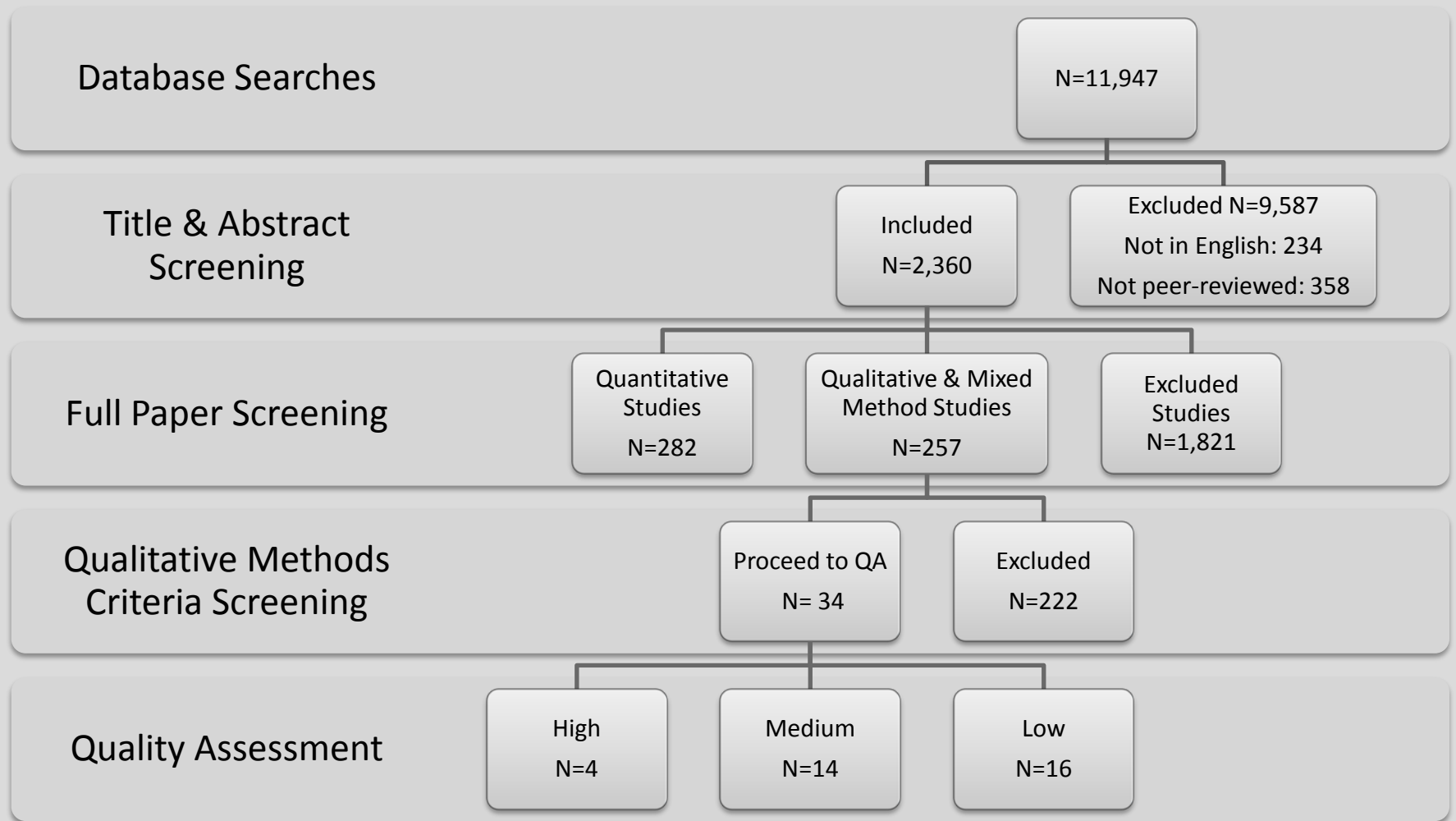
1.	Medline	4190
2.	PsycINFO	733
3.	ABI Inform	4000
4.	Health & Safety Sci Abstracts	1181
5.	ASSIA	85
6.	EconLit	279
7.	Sociological Abstracts	195
8.	Wilson Social Science Abstracts	184
9.	Index to Legal Periodicals	149
10.	Hand-search: PPHS	19
11.	Content Expert library PDFs	8
12.	SafeWork Australia/RegNet Sources	35
13.	Content experts	11
	Total	<hr/> 14, 159

REMOVE DUPLICATES = 2580

Total yield n=11947



# FLOWCHART OF STUDIES



# QUALITY ASSESSMENT



<b>Low (16)</b>	Unconvincing, weak sampling strategies or inadequate analysis.
<b>Medium (14)</b>	Rich description, identification of new variables or concepts, thereby broadening understanding of phenomena.
<b>High (4)</b>	Explanatory detail about issues such as the relationships between events and their context, underlying mechanisms explored.

Varied pairs of reviewers.

Derived from Spencer, L., et al. (2003). Quality in qualitative evaluation: a framework for assessing research evidence, National Centre for Social Research (17 questions)



# DATA EXTRACTION

<b>OHS REGULATORY CHARACTERISTICS</b>	<ul style="list-style-type: none"><li>• Location of study</li><li>• Relevant OHS legislation for this article</li><li>• OHS regulatory enforcement issue</li></ul>
<b>METHOD</b>	<ul style="list-style-type: none"><li>• Main study design</li><li>• Sample</li><li>• Theoretical perspective</li><li>• Analytic process</li></ul>
<b>NUGGETS (For LOW rated)</b>	<ul style="list-style-type: none"><li>• Useful descriptive information</li></ul>
<b>FINDINGS</b>	<ul style="list-style-type: none"><li>• What is the purpose of the study?</li><li>• What are the key findings of the study?</li><li>• Provide detail about what this study means for this systematic review: what does it tell us about how OHS regulatory levers are understood, planned, implemented and carried out?</li><li>• If relevant to this study, describe findings implications for non-standard workplaces and employment conditions (such as temporary work agencies, supply chains).</li><li>• Provide any other observation about this study. For instance, how findings compare or contrast with other papers you have reviewed for the systematic review.</li><li>• Issues that shape our interpretation of the study findings.</li></ul>





# 4 STUDIES RATED HIGH

	Author & year	Focus	Method	Jurisdiction	Sector	Reg issue	Rating
1.	Harris, Olsen & Walker (2012)	Role typology for health and safety representatives	QL	New Zealand	Metal manufacturing	New OHS law on worker participation	H
2	McCallum, Schofield & Reeve (2012)	Role of judiciary in OHS prosecutions	QL	Australia	any	Legal judgement	H
3	Sørensen, Hasle & Navrbjerg (2009)	Local workplace OPHS agreements	QL	Denmark	any	New OHS law on worker participation	H
4	Walters (1991)	Ontario labour relations board rulings on work refusals		Ontario	any	Right to refuse unsafe work OHSA	H



# 14 STUDIES RATED MEDIUM

	Author & year	Focus	Method	Jurisdiction	Sector	Reg issue	Rating
5	Bluff, Johnstone, McNamara & Quinlan (2012)	OHS Responsibilities of upstream duty holders	QL	Australia	any	Inspections and general duty regulations	M
6	Dacanay & Walters (2011)	Philippine workers in international maritime shipping	QL	Philippines	Marine shipping	Laws and regulations (lack of)	M
7	Egilman, Mailloux, Valentin (2007)	Popcorn worker lung and under-regulation	QL	USA	Food industry	OHS regulation (lack of)	M
8	Genn (1993)	Business responses to the regulation of health and safety in England	QL	UK	any	Inspections, audits	M
9	Gräbe (1991)	Comparison of OHS policy making and implementation in UK and Germany	QL	UK and Germany	any	Policy committees, inspections	M
10	Gunningham (2012)	Regulatory competence and Australia's mines inspectorate	QL	Australia	Mining	Inspections, laws	M
11	Hart (2002)	Worker involvement OHS	QL	Norway	Offshore oil rigs	Workplace inspections	M

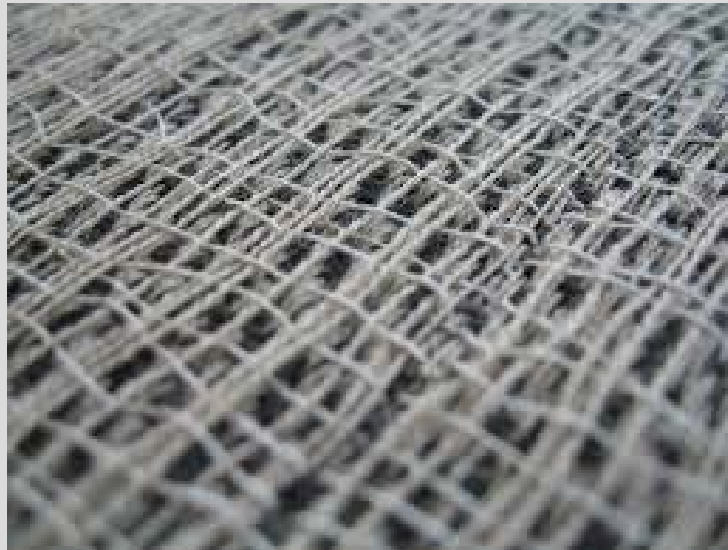


	Author & year	Focus	Method	Jurisdiction	Sector	Reg issue	Rating
12	Jeppesen & Boggild (1998)	Health and safety worker-management cooperation committees	MM	Denmark	Healthcare	EU Directive on working time	M
13	Johnstone, Quinlan & McNamara (2011)	Psychological risk at work	QL	Australia	any	General duty laws, guidelines, inspections	M
14	Lippel, MacEachen, Saunders, Werhun, Kosny, Mansfield, Carrasco & Pugliese (2011a)	Risks for temporary agency workers	QL	Ontario and Quebec	Temporary employment services	laws (OHSA)	M
15	Lippel, Vézina & Cox (2011b)	Protection of worker mental health	QL	Quebec	any	Laws, inspections	M
16	Quinlan (2007)	Mental health and organisational downsizing	QL	Australia	any	Laws, inspections	M
17	Quinlan (2009)	Precarious work arrangements an OHS	QL	Australia	any	Laws, inspections	M
18	Vierendeels, Reniers & Ale (2011)	Modeling the major accident prevention legislation change process within Europe	QL	European Union	any	laws	M



# EVIDENCE SYNTHESIS

- General principals of the meta-ethnography (Noblit & Hare 1988, Pope et al. 2007).
- No a priori groupings. Entire body of data examined for recurring themes & patterns.
- Process of constant comparison, negative case analysis



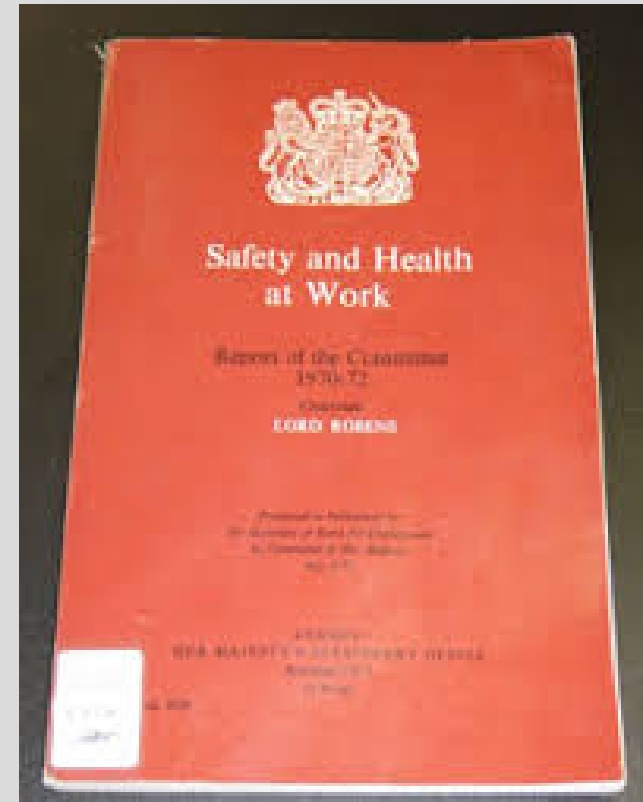
# FOUR FINDINGS THEMES

	Bluff et al. 2012	Dacanay & Walters 2011	Egilman et al. 2007	Genn 1993	Grabe 1991	Gunningham 2012	Harris et al. 2012	Hart 2002	Jeppesen & Boggild 1998	Johnstone et al. 2000	Lippel et al. 2011a	Lippel et al. 2011b	McCallum et al. 2000	Quinlan 2007	Quinlan et al. 2009	Sorensen et al. 2000	Vierendeels et al. 2011	Walters 1991
<b>I. OHS regulation formation</b>																		
Robens approach			X	X	X	X		X					X	X		X		
Politics of regulation formation	X	X	X		X												X	X
<b>II. Regulation challenges</b>																		
Psychosocial & mental health										X		X		X				
Organisational restructuring								X						X		X		
Complex contracts	X	X									X				X			
<b>III. Inspector organisation</b>																		
Interpretive leeway					X	X								X				
Inspectorate staffing	X	X				X				X								
Inspector training						X				X		X		X				
<b>IV. Worker representation</b>																		
Worker consultation					X	X					X							
Nature of involvement							X	X	X							X		



# I. OHS REGULATION FORMATION

- **Influence of Robens approach**
- **Politics of OHS regulation formation**



# Influence Of Robens Approach

Robens Report (1972, UK) influenced OHS policy internationally; criticized prescriptive approach of law.

Proposed OHS law based on assumptions:

- Workplace self-regulation
  - » Inspectors give advice, save rigorous enforcement and legal sanctions for worst offenders
- Shared 'identity of interest' between employers and workers
- 'Deterrence': Employer prosecutions create avoidance behaviour among all employers



## Identity of interest

- ***Identity of interest cannot be assumed***

Found only in catastrophic health and public relations cases (UK). Employer OHS actions generally focused on economic return on investment and workers generally concerned with avoidance of harm to workers (UK, Germany, Norway).

Genn 1993,  
Grabe  
1991, Hart  
2002

## Deterrence

- ***General deterrence thwarted by imperfect procedures***


In practice, long delays disassociate crime from the punishment, reduces impact on avoidance behaviour (Australia).

McCallum  
2012,  
Quinlan  
2007,  
Egilman et  
al. 2007

General deterrence requires community awareness of sanctions and their severity---but lack of proactive processes (Australia, USA) to inform public.







## Self-regulation

- ***Conditions for organisational self-monitoring not always present***

Fundamental prerequisite is employer awareness of obligations, consciousness of dangers, knowledge about means of improving standards, and a clear definition of OHS responsibilities within companies. These varied widely in businesses (e.g. Australian mining), and cannot be assumed (Denmark, Australia, UK).

## Inspector advice-giving role

- ***Not all employers seek advice and inspectors who advise encounter complex negotiation situation***

Small firms, those with no obvious risk often reactive; lack safety personnel (UK).

Difficult for inspectors to move between advice and enforcement—becomes a subject of negotiation with employer, requiring significant inspector self-confidence and negotiation skills (Australia).

Sorensen  
et al. 2009,  
Egilman et  
al. 2007,  
Gunningham  
2012,  
Glenn 1993

Genn 1993,  
Gunningham  
2012



# Politics of OHS Regulation Formation

## Publicity

- **Laws can be prompted/shaped by more than evidence**

Shock effect induced procedure following major accidents (EU).

## Uneven influence

- **Uneven influence of employers/labour can influence regulations**

Despite 'balanced' consultation processes, employers have disproportionate input due to greater access to expertise and resources (UK, USA, Germany, Canada).

Conditions of high unemployment weaken trade union position, enhance employers' arguments about cost, and can be linked to erosion of OHS law (Philippines, UK, Germany).

## Coordination of regulation

- **Poor coordination between regulatory bodies, leaving OHS areas uncovered**  
(Australia, UK, Germany, USA)

Vierendeels et al. 2011

Grabe 1991; Egilman et al. 2007; Walters 1991, Dacanay & Walters 2011

Grabe 1991, Egilman et al. 2007, Bluff et al. 2012



# II. REGULATION CHALLENGES

- **Psycho-social and mental health**
- **Organisational restructuring**
- **Complex contracts**



# Psycho-Social & Mental Health

## Psychosocial and mental health

- **Psychological harm cases can be complex and difficult to clearly link to OHS**

Inspectors avoided because difficult to collect evidence—workers fearful to speak up, employers claiming industrial relations framing of issue (Australia, Canada).

Context of general duty law, and inspectors and administrative tribunals don't always see mental health as within their scope (Canada).

Johnstone et al.,  
Lippel et al. 2011b,  
Quinlan 2007



# Organisational Restructuring

## Downsizing and organisational restructuring

- **Not adequately recognised as determinant of OHS conditions**

Detrimental OHS effects of downsizing recognized by regulators, inspectors (Australia) and labour unions (Norway, Denmark) but not considered in prosecutions (Australia) because too difficult to establish a clear connection between downsizing and a deterioration of OHS.

Quinlan  
2007, Hart  
2002,  
Sorensen et  
al. 2009



# Complex Contracts

## Temporary employment and subcontracting

- **Employer accountability challenges and risk shifting**

Three-way employment relationships and challenge of: who is the true employer (Canada, Philippines).

Deliberate risk-shifting, confusion amongst duty-holders with subcontracting and temporary work (Australia).

## Upstream duty holders

- **Upstream duty holders not being held responsible for OHS failures**

Although multiple parties (equipment designers, manufacturers, suppliers, etc.) can contribute to OHS risks and have a 'duty to others', they are rarely pursued for OHS accidents (Australia).

Inspectors tend to focus on non-compliance in the particular accident context.

Lippel et al. 2011a, Quinlan 2009, Dacanay & Walters 2011

Bluff et al. 2012



# III. INSPECTOR ORGANISATION

- Interpretive leeway
- Inspectorate staffing
- Inspector training



# Inspector Leeway/Staffing

## Interpretive leeway

- **General duty laws allow varied inspector interpretations**

Specific OHS laws can become quickly outdated. Non-specific (general duty) regulations, e.g. standards, risk management plans, allow flexibility. But they can be difficult to apply—room for interpretation (Australia, UK, Germany)).

Inspectors more comfortable enforcing specific regulations, and discretion can create enforcement inconsistency (Australia).

## Inspectorate resourcing

- **Under-staffing prompts focus on simple quick issues**

Challenge of enforcing OHS laws when inspectorate is under-staffed and resourced (Australia, Philippines).

In complex situations time spent on investigations not justified by outcome achieved (Australia).

Grabe 1991,  
Gunningham  
2012

Decaney &  
Walters  
2011,  
Gunningham  
2012,  
Quinlan  
2007,  
Johnstone et  
al. 2011,  
Bluff et al.  
2012,  
Johnstone et  
al. 2011





# Inspector Training

## Inspectorate training

- **Enhanced inspector qualifications and training needed for complex and interpreted OHS environment**

Inspectors traditionally drawn from trades backgrounds (Australia).

Inspectors lack training in how to gather scientifically robust evidence—dampening effect on employer prosecutions (Australia, Quebec).

Now hiring from wider backgrounds (e.g. women, university educated) to enhance inspector ability to deal with complex hazards, investigations, management systems (Australia).

Gunningham 2012, Lippel et al. 2011a, Johnstone et al. 2011, Quinlan 2007



# IV. WORKER REPRESENTATION

- **Worker consultation**
- **Nature of involvement**



# Worker Consultation/Involvement

## Inspector consultation with workers

- **Limited contact creates OHS knowledge gaps**

Lack of systematic consultation with workers and trade unions linked to under-informed inspectorate assessments (UK, Australia).

Temporary workers not always included on worker committees (Canada).

## Worker involvement

- **How should worker representation be enacted?**

Technical experts not necessarily better OHS reps (New Zealand).

Senior versus on-site workers (Norway, Denmark).

Grabe 1991,  
Gunningham  
2012, Lippel  
et al. 2011 a

Harris et al.  
2012,  
Sorensen et  
al. 2009,  
Hart 2002,  
Jeppesen  
and Boggild  
1998

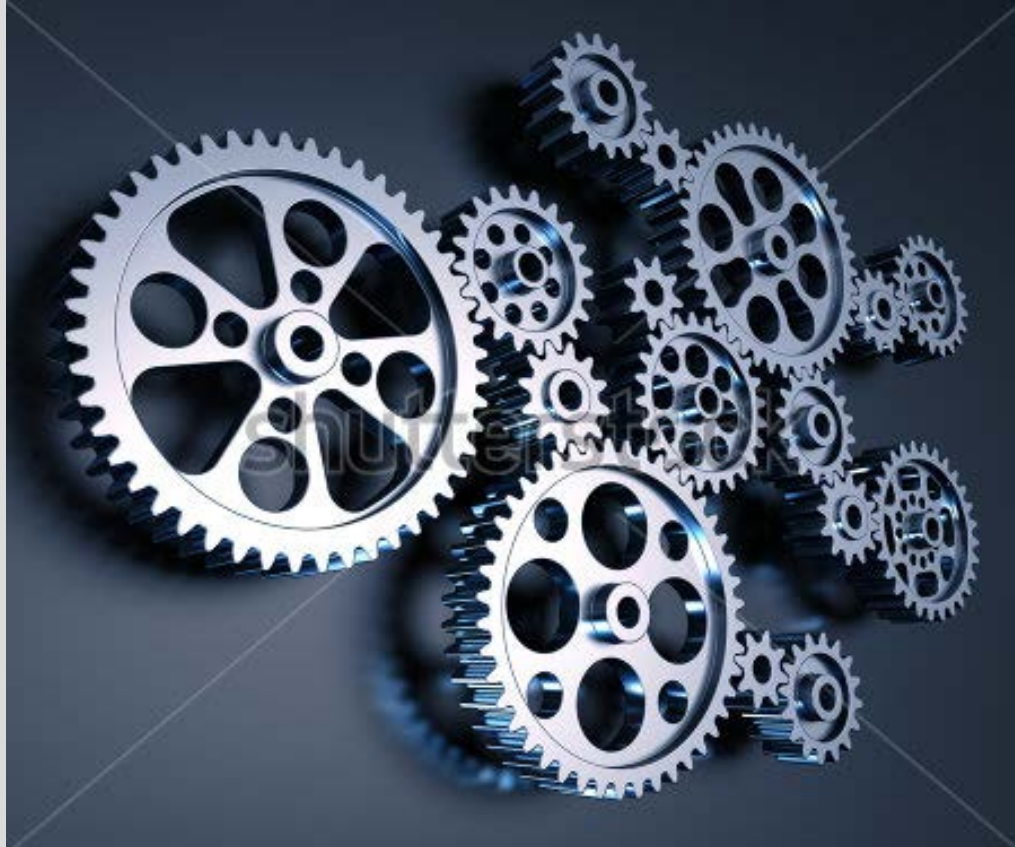


# TWO OVERALL SYNTHESIS FINDINGS

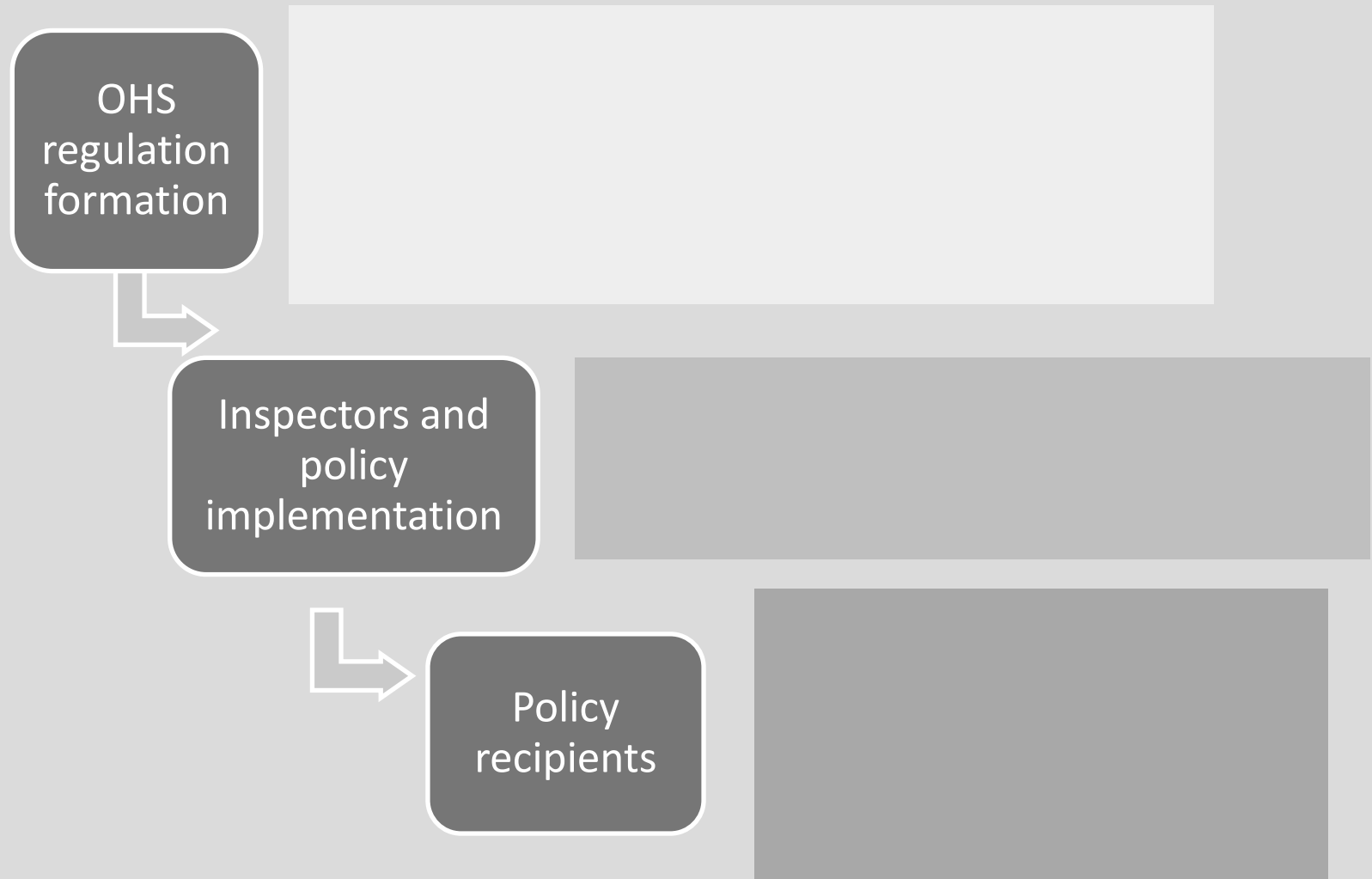
- ❑ Illuminates the ‘underbelly’ of *OHS legislation formation*, including how OHS legislation can be based on normative presumptions (Robens) about worker and employer behaviour and shaped by differential economic and political resources of parties.
- ❑ Identifies how *OHS legislation implementation* is shaped by a range of conditions including non-specific, ‘general duty’ approaches to legislation, adequacy of coordination of authorities, resourcing of inspectorates, and ability of workers to participate in the system.



# DISCUSSION



# DISCUSSION: FINDINGS & GAPS



# DISCUSSION: FINDINGS & GAPS

OHS  
regulation  
formation

- Post-Robens world
- Laws and approaches for changing technology, workplaces, global trade conditions, new OHS issues
- **GAPS: Small businesses, precarious employment, how to balance worker and employer input, specific areas for employer-worker cooperation**

Inspectors and  
policy  
implementation

Policy  
recipients



# DISCUSSION: FINDINGS & GAPS

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Inspectors and  
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- General duty or specific law?
- Challenges of under-resourced inspectorates, unclear OHS territory, fearful workers
- Changing face of inspectors
- **GAPS: Strategies for OHS enforcement in 'grey zones'**

Policy  
recipients





# DISCUSSION: FINDINGS & GAPS

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- **GAPS: Strategies for OHS enforcement in 'grey zones'**

Policy  
recipients

- The "how's" of worker representation
- **GAPS: Employers as policy recipients, move beyond 'cost focused' label. How can employers better participate in OHS?**



# STRENGTHS AND LIMITATIONS

✓ First systematic review of qualitative literature addressing political, economic and social processes that shape OHS regulation

✓ Experienced and international team

- Only English language articles
- No included articles from Asia, Africa, S. America



# NEXT STEPS AND CONCLUSION

- Next: analyse data on implications for non-standard workplaces and employment conditions
- Conclusion
  - Highlights underlying planning and implementation conditions that set the stage for OHS practice
  - For policy makers: Can consider the Ontario situation in relation to international practices
  - For researchers: identifies research gaps & practice issues



# THANK YOU





» This is an optional area for you to put a message or caption for your photo. Delete it if you don't need to use it.



# QUALITATIVE SCREENING QUESTIONS

## Title & Abstract Screening

- Is the paper in English?
- Does the study described in this article consider directives related to OHS legislation and/or regulation made by a government authority?
- Does the study examine or evaluate OHS legislation and/or regulations made by a government authority using one of the following methodologies:
  - *Qualitative*
  - *Quantitative*
  - *Mixed methods*
  - *Review article*
  - *Unclear*

## Full Article Screening

- Does the study described in this article consider directives related to OHS legislation and/or regulation made by a government authority?
- Does the study examine or evaluate OHS legislation and/or regulations made by a government authority using one of the following methodologies:
  - *Qualitative*
  - *Quantitative*
  - *Mixed methods*
  - *Review article*

## Qualitative Methods Screening

- Does the study described in this article consider directives related to OHS legislation and/or regulation made by a government authority?
- Clear description of methodology including data source and analytic approach
- Describe sampling and empirical data (exclude legal briefs, historical analyses)





# STUDIES BY REGULATORY LEVER

OHS regulatory lever			
	Total*	Included	Excluded
Inspections	11	9	2
Investigations	1	1	
Audits	2	2	
Consultations	2	2	
Guidelines	5	3	2
Warnings /orders	2	2	
Fines	1		1
Prosecutions	3	3	
Firm closure	0	0	
Law /legislation	19	13	6
Other (self-regulation, employee participation, committees, appeals, workplace assessments, codes, certification, seminars)	10	7	3
*total may be greater than total number of studies because some articles cover multiple OHS regulatory levers			



# RANKING AND DATA EXTRACTION

<b>Low</b>	<p>Study provides weak descriptive detail and analysis, e.g.:</p> <ul style="list-style-type: none"><li>• Poor/inadequate sampling strategy, and/or data are under-analysed and/or conclusions drawn do not match sample or analysis.</li><li>• Cannot illuminate research questions or support conclusions drawn.</li><li>• Study may provide some descriptive insight to a situation.</li></ul>
<b>Medium</b>	<p>Study provides good descriptive detail and analysis, e.g.:</p> <ul style="list-style-type: none"><li>• Study captures key features of a phenomenon.</li><li>• “Rich” description of phenomena are provided, but not necessarily contextually situated.</li><li>• Can identify variables not previously identified for attention. Can identify/propose new dimensions of events and relationships.</li><li>• Study provides concepts. Substantive theory broadens current understandings of similar phenomena.</li></ul>
<b>High</b>	<p>Study provides explanatory detail and analysis, e.g.:</p> <ul style="list-style-type: none"><li>• Study explains the nature of relationships between events or understandings and their immediate and broader social, legal, economic and other contexts. Assumptions and theoretical perspectives that shaped the form and output of the study are explained.</li><li>• Can speak to patterns and relationships, and general implications for policy/practice. Can identify underlying mechanisms for behavior and events, and provides “thick” description of context.</li><li>• Study provides explanatory theory and/or theoretical framework about events that can apply to settings with similar properties.</li></ul>





# QUALITY APPRAISAL PROCESS

- Each article evaluated independently by varied pairs of reviewers. Reviewers met to review quality ratings and resolve differences.
- Derived from Spencer, L., et al. (2003). Quality in qualitative evaluation: a framework for assessing research evidence, National Centre for Social Research. 17 questions:

Design and objectives	<ul style="list-style-type: none"> <li>• How defensible is the research design?</li> <li>• How well defended is the sample design/target selection of cases/documents?</li> <li>• Sample composition/case inclusion - how well is the eventual coverage described?</li> <li>• How well was the data collection carried out?</li> </ul>
Analysis	<ul style="list-style-type: none"> <li>• How well has the approach to and formulation of the analysis been conveyed?</li> <li>• Contexts of data sources - how well are they retained and portrayed?</li> <li>• How well has diversity of perspective and content been explored in analysis?</li> <li>• How well has detail, depth and complexity (i.e. richness) of the data been conveyed?</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>• How clear are the links between data, interpretation and conclusions - i.e. how well can the routes to any conclusions be seen?</li> <li>• How clear and coherent is the reporting?</li> </ul>
Other quality indicators	<ul style="list-style-type: none"> <li>• Reflexivity &amp; Neutrality— How clear are the assumptions/ theoretical perspectives/values that shaped the form and output of the study?</li> <li>• Ethics—What evidence is there of attention to ethical issues?</li> <li>• Auditability—How adequately has the research process been documented?</li> </ul>
Findings	<ul style="list-style-type: none"> <li>• How credible are the findings?</li> <li>• How has knowledge/understanding of OHS regulatory levers been extended by the research?</li> <li>• How well does the study address its original aims and purpose?</li> <li>• Scope for drawing wider inference about OHS regulatory levers- how well is this explained?</li> </ul>



# STUDIES MEETING CRITERIA

Meeting relevance criteria	34
Qualitative proceeding to QA	17
Mixed methods proceeding to QA	1
High	4
Medium	14
Low	16



# STUDIES BY JURISDICTION

\* (ONE STUDY COVERED 2 JURISDICTIONS)

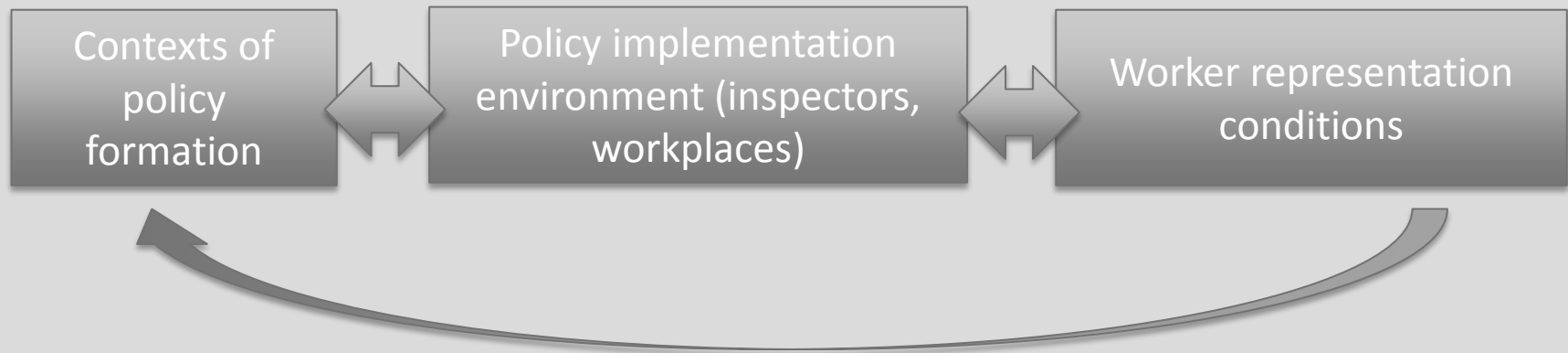
Jurisdiction	Included	Excluded	Total
Australia	6	3	9
Canada	3	1	4
UK	2	2	4
Denmark	2	2	4
New Zealand	1	1	2
Philippines	1	0	1
USA	1	6	7
Germany	1	0	0
Norway	1	0	1
European Union	1	0	0
Netherlands	0	1	1
Finland	0	1	1
Sweden	0	1	1
International	0	1	1
<b>TOTAL</b>	<b>19*</b>	<b>19</b>	<b>36</b>



# DISCUSSION: QUALITATIVE METHODS

“Useful for discerning complex chains of interactions, explaining the nature of relationships between events, interpreting events in relation to their social, legal, economic and other contexts”

## How different parts of OHS systems relate to each other



Across different industries, regulatory regimes, we identify shared, broader contextual features that these variations speak to, including widespread political and economic trends that have occurred over the last 20 years.

