

Deciding which diseases should be covered by Industrial Injuries Disablement Benefit (IIDB): Some frequently asked questions

Employed earners (employees) can claim IIDB if they suffer one of a list of 'prescribed' diseases. There is no benefit entitlement for the self-employed.

This frequently asked questions (FAQ) document has been prepared as a guide about why some diseases are 'prescribed' and others are not.

Which diseases are covered by IIDB?

The 'prescribed' diseases are those listed in Schedule 1 of the Social Security (Industrial Injuries) (Prescribed Diseases) Regulations 1985. Diseases are added to the list from time to time, but only rarely removed, in the light of developing knowledge. A list of the currently prescribed diseases can be found at

www.gov.uk/government/publications/industrial-injuries-disablement-benefits-technical-guidance/industrial-injuries-disablement-benefits-technical-guidance#appendix-1-list-of-diseases-covered-by-industrial-injuries-disablement-benefit.

What else is relevant to an IIDB claim for one of these diseases?

The type of work activity or job recognised for a given disease. To receive IIDB a claimant must be both medically diagnosed with a prescribed disease and have worked in the qualifying work for that disease (also listed in the Schedule).

For more information on claiming IIDB from the Department for Work and Pensions, visit www.gov.uk/industrial-injuries-disablement-benefit.

What is the legal framework for prescribing a disease?

The Social Security Contributions & Benefits Act 1992 allows ministers to prescribe a disease if they are satisfied that it can be caused by work and that such a link can be made with "reasonable certainty" in the individual claimant's circumstances. In this context "reasonable certainty" means "more likely than not" that the disease is due to a person's work.

The government is guided in this by scientific advice from the Industrial Injuries Advisory Council (IIAC).

What is the Industrial Injuries Advisory Council (IIAC)?

IIAC is an independent body, set up by Act of parliament (originally in 1948) to advise on which diseases should be recognised and in what types of job (i.e. what is put in Schedule 1 of the 1985 Regulations). The Council usually has 17 members, including its chair.

Most of IIAC's members are medical and scientific experts knowledgeable in how and why diseases occur in the general public and in workers with particular jobs or exposed to particular hazards. The Council also includes members representing employees (often trade union officials) and employers (often occupational health and safety professionals);

by law these groups must be equal in number. IIAC members are not politicians or civil servants. An observer from the Health and Safety Executive (HSE) and one from the Ministry of Defence (MoD) also attend meetings and IIAC is supported by a Secretariat, including a scientific adviser, provided by the DWP.

The Council's role is to advise and make recommendations on prescription, but the Secretary of State for Work and Pensions takes the final decision about whether to accept and implement a recommendation.

How does IIAC decide about those diseases which it recommends for prescription and those which it does not?

For certain diseases, IIAC's decision is straightforward. Some diseases only occur due to particular work (e.g. pneumoconiosis in coal miners); or are almost always associated with work (e.g. mesothelioma in the UK); or have specific medical tests that prove their link with work (e.g. occupational asthma or dermatitis); or have a rapid link to exposure or other clinical features that make it easy to confirm the work connection (e.g. certain infections and chemical poisonings). In situations like these, IIAC would recommend prescription of the disease.

For many other diseases, the decision is less clear-cut. Problems arise over diseases that can also occur in the wider public, and not just because of a particular type of work. For example, lung cancer can be caused by asbestos, but is also caused by smoking, and can occasionally occur without an apparent cause. What makes things particularly difficult is that, for these diseases, *there is no reliable way in an individual case to tell whether disease has been caused by work or not*. All that can be said is that the disease may be *more probable* in a worker with a specific work history than an individual without that same history.

The question in law for these less clear-cut diseases is: 'Is it *reasonably certain* that work caused the person's disease?' Corresponding to this, IIAC looks for evidence that the disease is likely to be due to work *on the balance of probabilities* (or put another way '*more likely than not*'). This is the standard of proof that is normally needed in civil courts of law and social security tribunals.

What kind of evidence does IIAC need for these less clear-cut situations?

In a typical inquiry, IIAC will look for as much research data as possible on a particular disease and its possible links to particular jobs and hazards.

It focuses mainly on high quality published evidence in scientific reports (so-called "peer-reviewed" evidence, which has been independently checked by experts before publication). It also considers the reports of expert bodies, such as the International Agency for Research on Cancer (IARC); and may invite experts to contribute written or oral evidence; put out open calls for evidence on its website and through its employer and union links; or request further analysis of existing data by outside parties.

IIAC has no budget to conduct research of its own. However, it is supported by a scientific adviser provided by DWP; and can bid for funds to commission external literature reviews or data analyses on topics of concern.

Anyone can raise a topic of concern and submit evidence to IIAC. Commonly, doctors, researchers, MPs, individuals, trades unions and victim support groups write in. Every case is considered on its merits and some may prompt a detailed review. In the end, though, good quality scientific evidence is needed before prescription can be recommended.

Before making a decision about prescription IIAC considers:

- the *quantity* of data, particularly the number of research studies, pointing to a particular conclusion;
- its *consistency*;
- its *quality* (and what the *best* reports show);
- the findings in workers with the heaviest exposures;
- the biological plausibility of reported findings; and
- whether the findings can be applied to groups of workers in the UK.

Possible *biases* in the research studies are also considered, as well as *how to define the qualifying exposure(s)* in a practical way that would allow the benefit to be delivered.

For the less clear-cut situations, IIAC normally seeks evidence that the “relative risk” (“RR”) in a particular job is more than 2, as explained below.

What does “a relative risk of more than 2” mean?

It means that people who work in a particular type of job or who are exposed to a particular hazard at work are more than twice as likely to develop a particular disease as members of the general public who do not work in that type of job and are not exposed to that hazard but are in other ways the same. To put it another way, the risk of the disease is doubled for those working in that type of job or exposed to that hazard at work. This is the minimum standard for prescribing a disease.

A RR of 3 means that those exposed to the hazard are three times more likely to develop the disease than others, i.e. the risk of disease is trebled; if the RR were 4 the risk would be quadrupled, and so on.

A RR of 1 means that those exposed to the hazard are no more likely to develop the disease than those **not** exposed to the hazard and consequently there is no increase in risk.

Why is the threshold for prescription set at a relative risk of more than 2?

Say a particular disease develops in 10 people in every 1,000 generally, but for people in a particular type of job it is 20 in every 1,000; in other words, a RR of 2 (RR=2). Of those 20 cases, 10 would have developed the disease anyway, and only 10 developed it because of their work. For any one of the 20, there is no way of knowing whether they developed the disease due to their work or would have developed it anyway. But if the RR=2, among those who have a particular work exposure and who develop the disease there is a 50:50 chance that it occurred because of their work. If the RR is *above* 2, then it is *more likely than not* that their work caused their disease; therefore, the legal condition for prescription can be met.

What not use a relative risk that is greater than 1 but lower than 2? Why not RR=1.2 or RR=1.5?

Say a particular disease develops in 10 people in every 1,000 generally, but for people in a particular type of job it is 15 in every 1,000; a RR=1.5 in other words. Of those 15, on average 10 (two-thirds of them) would have developed the disease anyway, and 5 developed it because of their work.

Following the same logic, when an exposure carries a RR=1.2 of causing a disease, among people with the disease who have that exposure, only 1 in every 6 would have it because of work, while 5 in every 6 would have had it anyway. The point is that we cannot tell which is the 1 case with an occupational cause and the 5 which do not have an occupational cause.

In these situations, work is no longer *more likely than not* to be the culprit, i.e. it is no longer “*reasonably certain*” that the person’s disease was due to their work, and consequently the legal standard in the benefits legislation is not met.

I have seen some diseases listed as occupational by HSE but which are not prescribed by IIDB. Why not?

Lists for prevention of diseases can differ from those for compensation. Suppose that shift-working increased the risks of heart disease by 20% (as has been reported in some, but not all, research). Because shift working and heart disease are common in the general population, many cases of possibly avoidable disease could arise. Important questions would be asked about prevention. However, because, as explained above, most cases among shift workers (5 in every 6) would not be occupationally caused and because, among affected shift workers, the occupationally-caused 1 case in every 6 could not reliably be distinguished from the other 5 in every 6 that would arise whatever the job, the legal requirement of “reasonable certainty” in individual claimants of IIDB would not be met.

A research study shows a relative risk of above 2. Will the disease be prescribed?

Not necessarily. IIAC assesses the quality of research. Also, it is not usually enough for just one research study to show a relative risk of over 2, several studies must do so, to show a consistency of pattern. Furthermore, the reliability of research data varies. It can be less in some studies because they are too small or because of flaws in the way the groups are chosen; how they are compared and analysed; or biased in the information being collected.

A further problem, sometimes, is that, while a study reports a relative risk which is high enough to be considered for prescription of a disease, the way that the exposure is defined is too complex or too subjective to transfer from the research setting to the benefits (i.e. IIDB) setting. Frustratingly, in some topic areas, research studies have all used *different* exposure definitions, with no two alike, making it difficult or impossible to decide how the occupational part (i.e. the definition of the work activity or type of employment) of the IIDB legal schedule should be written.

Can you illustrate these relative risk numbers to help me visualise them?

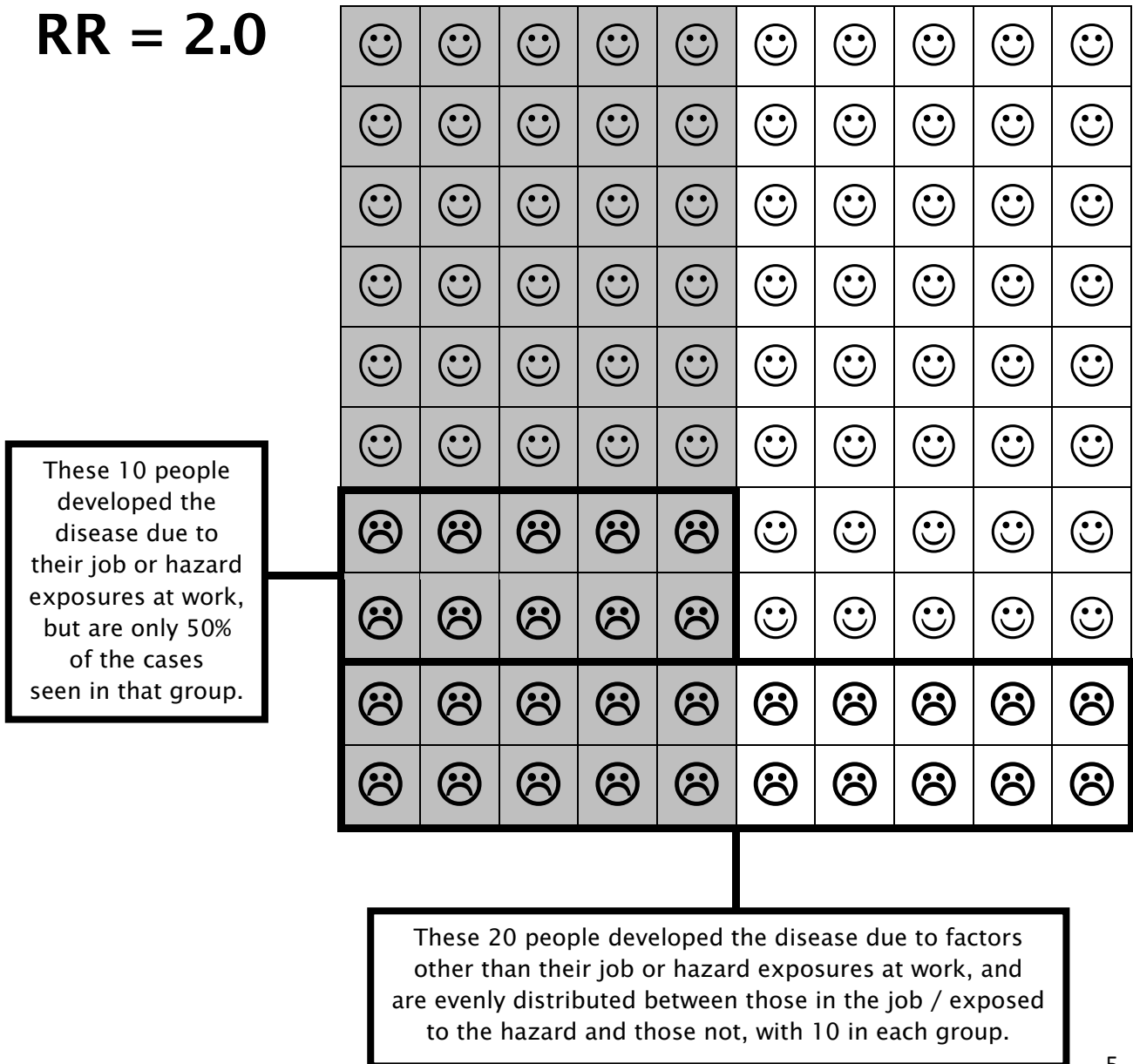
Below (Figure 1) 100 people are represented, 50 working in a particular job or exposed to a particular hazard at work (shaded), and 50 others who are not, but are otherwise the same and form the 'control' group for comparison (unshaded). (In practice, 'exposed' can mean exposed above a certain level that is capable of causing disease.)

Some people develop the disease we are interested in (shown thus: ☹) and some do not (shown thus: ☺). 10 people (out of 50) in the control group develop the disease, but 20 people (out of 50) in the job/exposed group develop the disease. This is a relative risk of 2.0 (20/50 divided by 10/50 therefore RR=2).

Of those 20 exposed cases, half of them (10) would have developed the disease anyway, as in the control group, and half (10) developed the disease because of their job/hazardous exposure at work, i.e. the likelihood that the disease *is* due to the job/hazardous exposure is the same as the likelihood that it *is not* due to the job/hazardous exposure. This example is *at* the threshold for prescription.

Figure 1

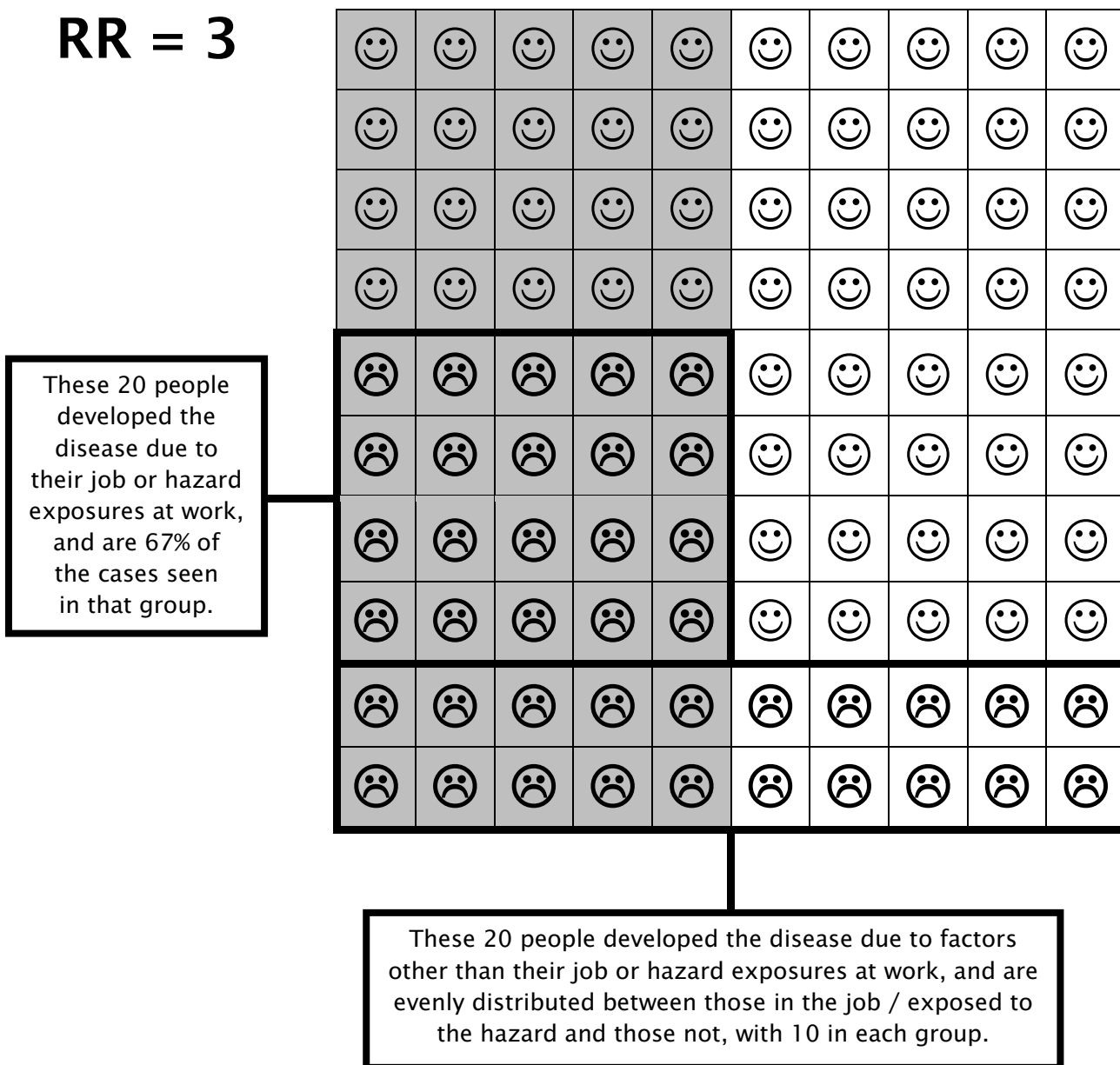
RR = 2.0



In the next example (Figure 2 below), 10 people (out of 50) in the control group develop the disease, but 30 people (out of 50) in the job/exposed group develop the disease. This is a $RR=3$. Of those 30, just one-third (10) would have developed the disease anyway, as in the control group, and two-thirds (20) developed the disease because of their job/hazardous exposure at work, i.e. it is more likely than it is not that the disease is due to the job/exposure. This is above the threshold for prescription.

Figure 2

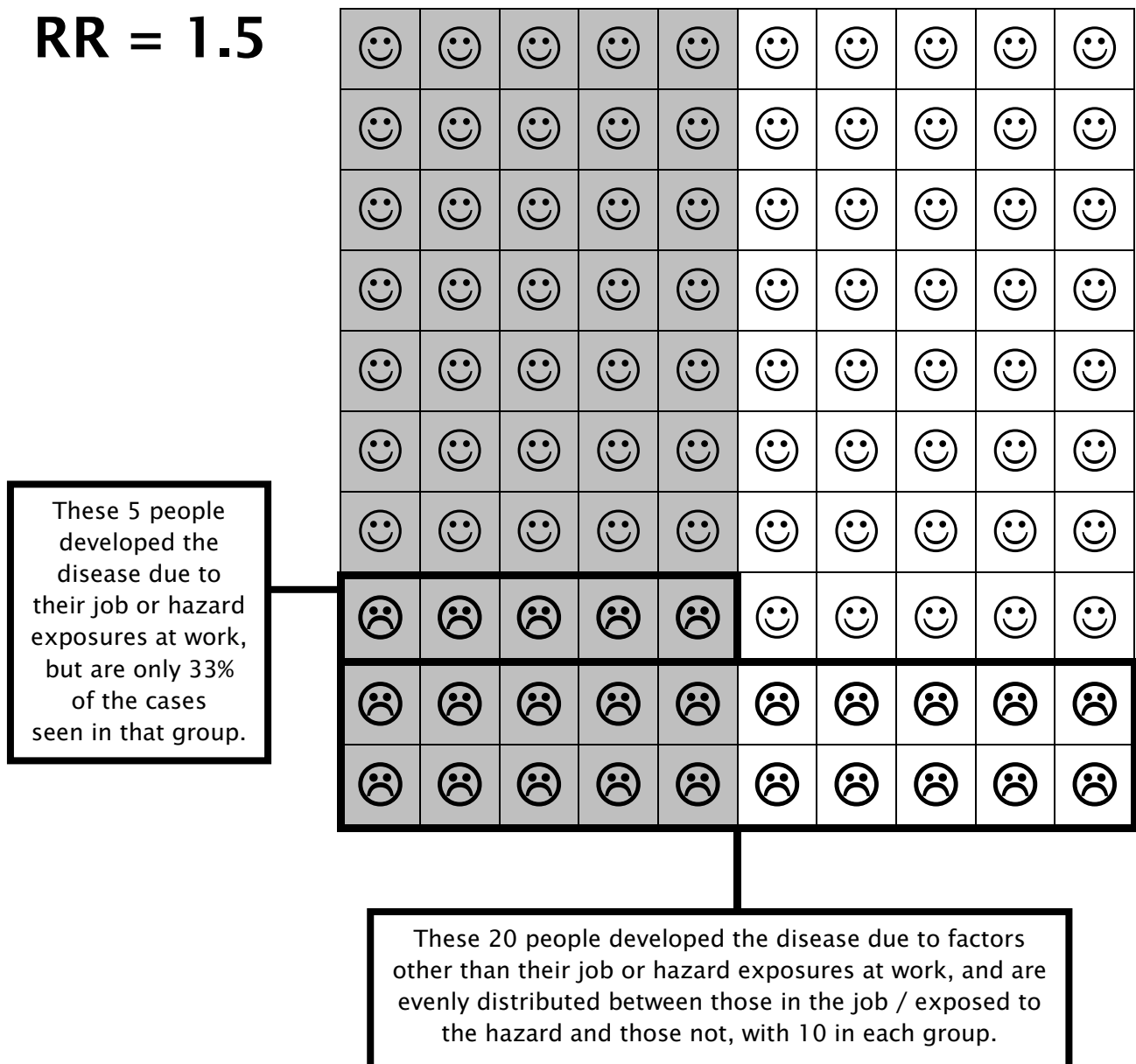
$RR = 3$



In the third example (Figure 3 below), 10 people (out of 50) in the control group develop the disease, but 15 people (out of 50) in the job/exposed group develop the disease. This is a RR=1.5. Of those 15, two-thirds (10) would have developed the disease anyway, as in the control group, and just one-third (5) developed the disease because of their job/exposure at work, i.e., it is less likely that the disease is due to the job/exposure than otherwise. This is *below* the threshold for prescription. Whilst there *is* indeed an increased risk due to the job/hazard, *fewer than half* of those who develop the disease and are in the job/exposed to the hazard do so because of their job or exposure.

Figure 3

RR = 1.5



If you would like to know more about the IAC and its work, please visit the dedicated website at www.gov.uk/iac.