Dynamic risk assessment is often seen as only applying to very particular circumstances such as the emergency services. However, the principles it teaches can surely inform all aspects of health and safety awareness. Alan Field explains why.

Risk assessment is seen as a core process in health and safety. In general terms, what is sometimes described as systematic risk assessment assumes that we observe, analyse and understand risks that might cause harm to individuals, then we remove or mitigate risk to provide a safe environment and a safe system of work. This will involve training and consultation with staff and contractors and, in some scenarios, will include customers and other stakeholders, too.

Dynamic risk assessment is something that is continuous and done on the job. The controls may change depending on the evaluation of changing or emerging circumstances. Both the ongoing evaluation of risk and the continuous evaluation of the required controls demand a high level of staff training, with a level of competence regarding the generic risk assessments already in place. These are the foundations that enable an individual to reach fast-changing judgments. To be absolutely clear, “dynamic” certainly doesn’t mean a “free for all” with no risk assessment process at all.

MORE DYNAMISM?

The principles behind dynamic risk assessment can inform awareness and training for any activity where there may be changing activities or circumstances. This could include activities as diverse as working in a retail environment or production line maintenance.

Dynamic risk assessment explicitly considers the question of risk being proportionate to benefit. This is necessary with the emergency services, because individuals may be risking their personal safety to rescue other individuals. Perhaps this is sometimes forgotten with other work activities. The usual view that is put forward by many organisations is that they would never put their staff at any risk — and “zero accident” or “zero harm” campaigns are sometimes a reflection of such policies.

Of course, such views do not reflect the whole reality. For example, if in the pursuit of economic activity individuals need to drive, work alone or handle 21 chemicals, there is always an element of risk. It is disingenuous to say otherwise. We may, of course, minimise and control these risks very effectively so that even near misses only arise occasionally — in other words, there is a proportionate response. However, making sure that individuals are aware of dynamic techniques can be positively helpful to support existing protocols and controls.

There is one other aspect to this approach to consider. Dynamic techniques can apply to lower-level risks that present themselves in high risk scenarios; the author remembers visiting a chemical processing plant where no risk assessment had been done for office and catering activities on site. While these were lower risk compared to that of the plant, they should not have been ignored. Why expose individuals (and shareholders) to unnecessary risks when they could have been so easily managed? This is one example where dynamic techniques could have led to staff questioning risks not being covered by existing systematic techniques. The speed or unpredictability of change does not necessarily need to be present for dynamic principles to be influential in the risk management process.
DYNAMIC STAGES

For a particular task or activity, systematic risk assessment should always be followed. Unplanned events are less likely to arise when people act in a planned way, i.e. if a safe system of work requires a guard to be put in operation on a machine, then this must be done consistently for safety. While accepting this as a given, there are many jobs where it is not possible to find just a single routine to follow but, typically, a number of options may present themselves.

Dynamic risk assessment, in an emergency services application, might be defined in three stages. The initial phase is where the officer in charge, upon arrival at an incident, will make a diagnosis based on gathered information and evaluation of the situation. His or her initial decisions — based on generic risk assessment principles and professional judgment — will be crucial. Any errors at this stage can have significant effect on safe outcomes.

Reactive maintenance activities provide a good example whereby the diagnosis, resolution and the specific working environment can be anticipated but may present a number of optional circumstances and outcomes. In other words, the individual is making a dynamic decision from the moment they are called to a job, say, within a factory. Their training needs to be adequate to make sure the process of risk assessment, imposing controls and finding the resources needed will be anticipated. The risk assessment and safe systems of work need to be fully understood but dynamic principles can be applied as well.

The development phase of a dynamic risk assessment means as the process life cycle or incident develops, then additional factors may arise that either require the original risk control approach to be changed or, at least, modified. Events can influence decisions and these changes tend to become reactive.

For example, when lone workers enter a domestic customer’s premises, they may have made a proactive assessment of risk considering the location they are visiting and customer history. Perhaps as the visit progresses, unplanned factors may present themselves — examples might include a gas leak or the presence of a large, unfriendly dog.

Of course, some would argue that these events can all be anticipated and appropriate risk mitigation or controls communicated to staff. However, dynamic principles can provide a level of confidence in analysing unplanned events and deciding on the best proactive approach to deploy.

Finally, there is a closing stage. This may literally be when the risk has diminished to such a stage that controls can be relaxed; however, the closing stage of an incident or life cycle needs careful management to ensure no new emerging risks arise during this final phase. Or it might refer to the post-incident review where lessons learnt are considered. One example might include transportation of a large piece of machinery where, once safely offloaded, it could mean — based on a safe system of work — that controls can be relaxed. However, unexpected issues such injuries from contact with unstable packaging material could still arise. The second example can apply to almost any type of incident or project completion. Dynamic principles can help the analysis of what happened at the various stages, or phases, of the event(s).
It is also worth remembering that concepts such as “safe place” and “safe person” strategies have their roots in dynamic risk assessment. “Safe place” being the working environments, achieved through design, technology and controls, and “safe person” being the right person for the job, someone who is effectively trained, supervised and working in the “right” safety culture. In short, the optimum set of resources should be available for dynamic decision making and implementation. It is also what all good health and safety is about.

CONCLUSION

Dynamic risk assessments will never replace systematic risk assessment, coupled with employee consultation and a safe, compliant and efficient system of work. However, dynamic principles can provide a number of insightful pointers that can inform all elements of risk assessments, from planning to creating greater staff awareness, of what to do in most scenarios. Dynamic principles can, for some, make health and safety seem more relevant than simply following written procedures.