

Summary

Police Arms in Perspective

On the Use and Effectiveness of Batons and Pepper Spray

The weaponry of the police is changing over time. The latest adaptation to the standard equipment of the Dutch police officer dates from ten years ago with the introduction of pepper spray. The present study focuses on two overall questions: How and to what effect are batons and pepper spray deployed by Dutch police officers; and what are the experiences with extendable baton and conducted energy devices (tasers)? These overall questions are answered in connection with the following seven research questions:

- a) How can the volume and trends in the use of pepper spray and batons by the Dutch police be characterized in the period 2002-2010 as compared to their use of firearms and other physical force?
- b) Under what circumstances and with what effect are pepper spray and batons used by the Dutch police?
- c) What is the profile of citizens against whom the police use these weapons, and to what extent do citizens complain or file charges as a result of police use of force?
- d) To what extent do police officers feel that pepper spray and batons have added to their ability to carry out their work safely and effectively?
- e) To what extent do police officers feel themselves sufficiently skilled and well-trained in the use of force – especially as it applies to pepper spray and batons, and how do they experience the use of force vis-à-vis internal regulations and penal law restrictions?
- f) What is the documented effect of the introduction of extendable batons as part of standard police equipment in foreign countries as compared to experiences with pepper spray and ordinary batons?
- g) What is the documented effect of the introduction of the Taser as part of standard police equipment in foreign countries as compared to experiences with pepper spray and batons?

The research described is based on prior literature, existing registries (use of force registration forms, citizen complaints and internal investigations) and information gathered directly from police officers (open interviews, focus group sessions and written questionnaires). We have also discussed the results with representatives of the police unions. This summary presents the research results on the basis of responses to the seven research questions.

Size and development of batons and pepper spray use

Pepper spray was the most utilized weapon in 2010. It is, however, necessary to distinguish between the threat and actual use of weapons. In actual use, pepper spray is applied almost 3.5 times more often than the short baton. If use of long batons is included in the figures, then pepper spray is used ap-

proximately 2.5 times more often than the baton. Pepper spray is used approximately 12 times more frequently than firearms (including warning shots).

The information available concerning threats with weapons is of varying validity. Threats with batons are not recorded. Threats with pepper spray are recorded, but not at all systematically. The true extent of these threats is therefore unknown. Threats with firearms (drawn and/or pointed at subjects), on the other hand, are more carefully registered. Thus, while the ratio of threats to use can be measured quite accurately for firearms this is not true for baton and pepper spray use.

While the absolute frequency of pepper spray use was stable during the period 2002-2010, its relative use declined. This was due to an increase in the use of batons and firearms. Police officers seem to feel an increased need to use force. While pepper spray was initially popular among officers when first approved for police use, it is now considered just one in a variety of available weapons. The same period saw a re-evaluation of the effectiveness of firearms. By the end of the period 2002-2010, there had been an increase in the speed with which police brandish firearms in police-citizen confrontations. A faster use of firearms is also a part of official police training. Nonetheless, many police officers are (very) reluctant to use their firearms, not least because of the negative psychological consequences of having to actually shoot someone.

Effectiveness of baton and pepper spray use

The second research theme concerns the types of situations in which pepper spray and batons are used by Dutch police, and their measured effectiveness. The research indicates that batons are primarily used to maintain public order. The use of batons is especially prominent in nightlife situations. The analyses show that batons are generally used in the same types of situations in which physical force is used. Pepper spray is used more frequently in arrest situations. There is a certain degree of overlap between the situations in which pepper spray and firearms are used.

Batons

Police have standard short batons. Yet most police report that they find the short baton poorly suited for the types of situations in which it is most used, i.e., maintaining public order. They feel that the short baton is too short to keep people at a distance, that it lacks authority, and that it often makes little impression on those upon whom it is used. The long baton is perceived as far more effective, but is only available to a select group of regular police officers (e.g., during nightlife patrol in certain cities/regions). The short baton is rarely used in arrest situations since it requires skills that many police officers do not possess. There is also some scepticism among police officers as to how effective a baton really is for subduing combatant civilians. The short baton has a reputation of 'limited utility' – an image that works partly as a self-fulfilling prophecy.

Pepper spray

Police regulations do not allow the use of pepper spray for maintenance of public order. The rules are clear on this point and in that sense pepper spray is not an alternative to the (short) baton in these situations. Although pepper spray is normally used to hold suspects, there are a variety of other circumstances in which it can be used. The physical reactions of suspects who are (effectively) pepper sprayed consist of tearing, swelling eyes, burning skin, laboured breathing and impaired motor skills. It is a nasty experience, but generally has no lasting effects.

Pepper spray is not effective in about a quarter of the cases in which it is applied, i.e., suspects are still able to defend themselves or to attack. On the other hand, when pepper spray does work, arrestees are

more or less disabled and can be easily handcuffed. Threatening with pepper spray is sometimes sufficient: citizens who know its potential effect from prior personal experience or hearsay often surrender without resistance. It is unclear just how often the mere threat of pepper spray is sufficient to achieve compliance, but we do know that a quarter of all registered uses of pepper spray consist of only threats.

The fact that some persons are less sensitive to pepper spray than others means that it is not always equally effective on all persons. The effectiveness of pepper spray is further hampered by the risk of self-infliction. There is always a risk of police officers accidentally contaminating themselves or their colleagues. The use of pepper spray is therefore riskier to officers in small rooms and in situations where there is already an on-going physical altercation. In practice, however, pepper spray is used regularly in precisely these situations and self-contamination occurs quite often.

Weather conditions constitute a third limitation to the use of pepper spray. If it is windy or raining, the probability that the spray will actually hit the face of a suspect is considerably reduced.

According to regulation, pepper spray is the designated weapon for arresting a suspect with a knife or other non-firearm weapon. Police officers use firearms only in cases where there is good reason to believe that the suspect might be armed. Police officers do not always rely solely upon pepper spray when dealing with a suspect who is threatening them with a knife. This is because officers fear that if the pepper spray fails to work adequately, it may be too late for them to use their firearms.

Chance of injury

Use of the (short) baton generally results in injuries to citizens despite the widespread belief among officers that the short baton has little capability. The risk of injury by physical violence is about one-quarter: one out of four reported uses of physical force results in (light) injury to the citizen involved. Use of a baton increases this risk of injury to about 40%. The repeated or prolonged beating of a civilian with a baton can appear very aggressive to the untrained eye. This is especially true when it is filmed and uploaded to the internet (YouTube). Such instances can have a negative impact on the image of the police and may risk diminishing their authority among the public.

The risk of injury to police officers in situations where they use the baton is very low. If physical force is used the injury risk is higher (around 12%). Nonetheless, our data suggest that the risk of injury to police officers using force has declined during the past five to ten years. In fact, our numbers suggest that the risk of injury is now half what it was before. The explanation for this is hard to determine, but one possibility could be that increased (political) attention to officer safety has begun to bear fruit.

The risk of injury to citizens in police-citizen encounters has actually been reduced by the introduction of pepper spray to the police arsenal. According to our records, approximately 10% of citizens are injured in connection with physical violence pursuant to an arrest. The finding that the risk of injury declines with the introduction of pepper spray is supported by the (inter)national literature. The risk of injury to police officers who use pepper spray pursuant to an arrest is also around 10%.

Citizens involved

The profile of citizens against whom the baton is used differs in some aspects from the profile of those against whom pepper spray is used. In both cases the citizens involved are almost exclusively male with an average age of thirty years. Baton use is often related to public order issues in nightlife areas and from that fact is not surprising that many citizens against whom the baton is used are under the influence of alcohol and/or drugs. Nor is it surprising that the baton is regularly used against groups,

as opposed to individual citizens. In 90% of cases only one citizen is actually hit with pepper spray. These individuals are less likely to be under the influence of alcohol and/or drugs. Generally, only one out of three people actually sprayed are under the influence of alcohol and/or drugs. This is a decrease in comparison with the initial period (2002-2004) of the police use of pepper spray in the Netherlands. This decrease may be partly due to the fact that the police have noticed that pepper spray is less effective when used against persons under the influence.

Regulations specify that pepper spray may not be used against certain categories of persons (youngsters, elderly people, pregnant women and people with health problems). These regulations are generally followed. We encountered only a single example, in a complaint, in which a pregnant woman was pepper sprayed. In the literature we read of a few more exceptions, such as an elderly man who was exposed to pepper spray. It is also predictable that the avoidance of these groups is not difficult in police practice since members of these groups are generally not involved in situations where police consider the use of force necessary.

Citizens file relatively few complaints concerning the use of force by police. In 2010, there were complaints in about 4% of baton use cases. Among pepper spray cases, the percentage involving complaints was even lower (1%). The percentage of cases resulting in complaints declined for both baton and pepper spray cases in 2010 as compared to 2005. The reason for this is unclear. The percentage of cases resulting in complaints is lower for pepper spray cases than baton cases in all years. This is probably due to the lower rate of citizen injury associated with pepper spray- as compared to baton-use incidents. Interestingly, the research suggests that the use of pepper spray generated more complaints when it was first introduced for police use than it did in subsequent years. This probably arises from a combination of two factors: That citizens have become more aware of the futility of resisting police use of pepper spray and that police have become more professional in its use.

Safe police work

When it comes to the use of force by police, officers can be roughly divided into three types: ‘tacklers’, ‘short fuses’ and ‘no force users’. The extent to which police officers are adequately equipped to feel safe and act professionally is not only a matter of the right weaponry, but also seems to depend on the physical and psychological condition of the officer in question. In fact, confidence is often based less on arms than self-perception. As previously mentioned, however, the addition of pepper spray to the standard equipment of the police has actually increased use of force by the police. This trend has been observed not only in the Netherlands but in other countries as well. This is explained by officers’ increased self-confidence in their ability to end physical conflicts successfully – which means that they are more likely to deploy physical force to begin with. This finding demonstrates that weapons impact officer sense of security.

Many police officers appreciate the difference between lethal (firearms) and non-lethal (batons and pepper spray) weapons, and are deeply reluctant to actually shoot anyone. Given this, research on the effectiveness of Tasers is particularly relevant. The reluctance to use firearms does not, however, play a key role in daily policing, since firearm use is far more the exception than the rule. In the infrequent cases where firearms are used, it is usually within standard procedures such as apprehending and arresting an armed and dangerous suspect. Firearms are rarely drawn by police for purposes of self-defence.

Preconditions for the use of force: Training and assessment

Police officers tend to feel that the training they receive in the use of weapons and physical techniques is insufficient. The current training scheme – which amounts to only four days per year – is deemed far from sufficient in the opinion of teachers and policemen. The emphasis given to self-defence and physical arrest techniques is considered particularly inadequate. This lack of training is recognized by the Minister and efforts for improvement are underway.

Assessments of the justifiability of police force are made, by definition, after the use of force incident has occurred. Colleagues and supervisors generally look with mild eyes upon these incidents. Sometimes too mild: Some police officers wish that the police culture was more self-reflective and self-critical. It is extremely rare for supervisors using the official reporting form to judge their colleagues' use of force as excessive. In the rare cases where formal criticism is lodged, it is generally in connection with the use of pepper spray as opposed to batons. This is probably because of regulations restricting the use of pepper spray among specific groups of citizens and in specific situations.

Police officers are less satisfied when it comes to judgments of use of force situations by internal investigators and complaint bodies. Officers sometimes feel that these assessments favour the citizen over the police officer. It is, however, only a small percentage of use of force cases that are subject to internal investigation or complaint. And it is only a modest proportion that results in disciplinary action or criminal prosecution. Successful complaints are especially rare in cases involving pepper spray and baton use. Complaints are also often not supported by a complaints committee. The National ombudsman is more critical on this point and sometimes qualifies the use of pepper spray as unnecessary force.

Extendable batons

Little literature is available on the extendable baton, and studies documenting its effectiveness are entirely lacking. It is, however, clear that police officers consider the extendable baton as more effective than the short, non-extendable version. The effect of the extendable baton in terms of injury rates is unknown. A blow with the extendable baton is more severe than a comparable blow with a short baton. But whether it causes more injuries in practice does not seem to be documented as of yet.

Tasers

There have been far more studies of the effectiveness of Taser than of extendable batons. This is probably because the Taser is a new type of weapon, while the extendable baton is a variation on a long-existing police weapon. The Taser has two modes of use: It can either be used at a distance by firing dart-like electrodes at the target (probe mode) or at short range by holding the Taser directly against the target (stun mode). Both modes of use utilize a high voltage, low ampere electrical current. The difference between the two modes is that the probe mode interrupts the ability of the brain to control the muscles in the body (resulting in immediate and unavoidable incapacitation) while the stun mode causes pain without necessarily incapacitating the target. Several organizations are concerned with the potential for police abuse of Tasers used in stun mode. This is because stun mode can be used to inflict pain without leaving physical traces – a potential that may tempt police to mete out instant justice on the spot.

The Taser is the most frequently used weapon in Australia and the United States. Its use far exceeds that of batons or pepper spray. We were unable to conclude from the studies reviewed whether the total number of police use of force incidents were increased by the introduction of the Taser – and if so, to what extent. Studies do reveal, however, that the introduction of the Taser had different effects

on the use of firearms in these countries. Firearm use in Australia increased after introduction of the Taser while it decreased in the United States. It is not clear why firearm use increased in Australia and whether this increase was causally connected to the introduction of the Taser. We cannot think of a plausible explanation for this finding as it would seem more logical that the introduction of the Taser would decrease police use of firearms as opposed to increasing it.

The Taser is deployed in many situations. In Australia, 40% of Taser incidents involve breaking suspects' physical resistance, while 10% occur in response to threats or use of weapons by civilians. Tasers are also widely used in Canada. Here only 5% of all Taser use incidents occur in response to threats or use of weapons by civilians.

Not much is known about the effectiveness of the Taser in stun mode. The probe mode of the Taser is effective if the darts hit target. Research among Canadian police suggests that the probe mode has not been effective approximately one out of five times the darts are fired, i.e., one or both darts have either missed or failed to stick in the target. When firing the darts, there is a danger of hitting sensitive body parts.

Data from the U.K. show that simply drawing the Taser often is sufficient to achieve civilian compliance. Tasers are only actually used one out of every three times they are drawn. Canadian research has also examined the deterrent effect of the Taser, but has been unable to document it definitively.

Experiences with the Taser generally indicate a lower risk of injury for civilians involved. The Taser may, however, have fatal consequences in certain circumstances. Some studies show no change in police officers' risk of injury, while others suggest a decrease.