



DUTCH
SAFETY BOARD

Summary

Environmental safety of cannabis grow rooms

Research into the physical safety risks to nearby residents
of commercial cannabis grow rooms.



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The Hague, March 2018

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The Dutch Safety Board

When accidents or disasters happen, the Dutch Safety Board investigates how it was possible for them to occur, with the aim of learning lessons for the future and, ultimately, improving safety in the Netherlands. The Safety Board is independent and is free to decide which incidents to investigate. In particular, it focuses on situations in which people's personal safety is dependent on third parties, such as the government or companies. In certain cases the Board is under an obligation to carry out an investigation. Its investigations do not address issues of blame or liability.

Dutch Safety Board
Chairman: T.H.J. Joustra
E.R. Muller
M.B.A. van Asselt

Associate member
of the Board: B.J.A.M. Welten

Secretary Director: C.A.J.F. Verheij

Visiting address: Lange Voorhout 9 Postal address: PO Box 95404
2514 EA The Hague 2509 CK The Hague
The Netherlands The Netherlands

Telephone: +31 (0)70 333 7000

Website: safetyboard.nl
E-mail: info@safetyboard.nl

N.B. The full report is published in the Dutch language. If there is a difference in interpretation between the Dutch report and English summary, the Dutch text will prevail.

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CONSIDERATION

Every week, police in the Netherlands discover and dismantle more than 100 illegal cannabis grow rooms. It is precisely because it happens so often that it has lost its value as a news item. After all, weed is available from every cannabis café and has to be produced somewhere. However, the dry police statistics mask a serious safety problem.

The cultivation of cannabis is prohibited in the Netherlands. Nonetheless, the scale of production in the country is extensive, with the number of grow rooms estimated at between 10,000 and 30,000. This is not about citizens who have a few plants for their own use, but rather about cultivation for financial gain, involving the use of a lot of equipment that is normally used for regular horticulture. At least 4,500 of the nearly 6,000 grow rooms that are dismantled every year can be described as dangerous, because of a combination of the high levels of power that are used, the illegal tapping of electricity, and the fact that the equipment is installed and used inexpertly. This can lead to fire, the building collapsing and harm to health. The Board regards this as worrying, because a large proportion of the cultivation of cannabis takes place in homes. Cannabis growers are therefore not only endangering themselves, but also innocent neighbours and other local residents. The risks are not merely theoretical - there is an average of one to two house fires every week as a result of the growing of cannabis; the annual number is at least 65.

The increased detection of cannabis grow rooms, which appeared in the 1990s in response to the greater levels of cannabis production in the Netherlands, has not solved the safety problem. In order to spread their risks, growers have moved some of their nurseries from large commercial premises in outlying locations to homes, and have reduced the number of plants in each nursery. According to the available figures, the scale of cannabis cultivation in the Netherlands has not decreased, but actually appears to be distributed over a larger number of nurseries, which are found in many residential districts.

It is obvious that the large-scale cultivation of cannabis in homes is hugely undesirable. As well as the specific safety risks of growing cannabis, homes are not generally designed or equipped for commercial horticulture, nor are they intended for that purpose. In the case of 'normal' businesses, the government is able to regulate where they are located through spatial planning and licensing laws. This does not apply to cannabis grow rooms because they are illegal and therefore lie beyond the direct control of the government. From that point of view, it would appear obvious that criminal law should prevail here and that the police and the Public Prosecution Service should take the lead in combating cannabis nurseries. However, this approach does not solve the physical safety problems of cannabis cultivation in residential districts.

The Board is of the opinion that citizens should be better protected in their immediate living environment against the dangers of the illegal cultivation of cannabis. This requires a change from a too one-sided approach based on criminal law, which results in public and private bodies expecting the police and the Public Prosecution Service to solve the problems associated with cannabis cultivation. The Board believes that many more organizations have a social responsibility in improving safety in relation to illegal cannabis grow rooms in homes, including distribution network operators, energy suppliers, local authority watchdogs, environmental services, the fire service, housing corporations, private landlords, insurance companies, mortgage lenders, cannabis café owners, and nearby residents.

The Board expects each of these parties to acknowledge their responsibility and to take clear action in order to reduce the number of unsafe situations. The research shows how they can do this. Because environmental safety is, in the first instance, a local issue, the Board very much envisages a leading role for the mayor. Given his central role at local level, he is in a position to bring all the relevant parties together and to encourage them to contribute.

It is high time, in the view of the Board, to move away from the one-sided reflex of detection and prosecution and to bring an end to the uncontrolled environmental risks of cannabis cultivation. This calls for a different way of thinking, in which it is not the illegal nature of cultivation that is key, but the unsafe situations that that cultivation causes for local residents.

RECOMMENDATIONS

The Board underlines the view that citizens should be better protected in their immediate living environment against the dangers of the illegal cultivation of cannabis, regardless of the current or future legal framework governing the production of cannabis. This research shows that a large number of public and private parties have a social responsibility in this area.

The Board expects these parties to take account of the physical safety risks of the illegal cultivation of cannabis, that they recognize their responsibility in reducing these risks, and that they take clear action to that end in close collaboration with their public and private partners. The report shows that, with the help of existing initiatives, this is possible in practice.

The Board envisages a more structured solution to the physical unsafety of the residents who live near cannabis grow rooms in the strengthening of the integrated approach by public and private parties, under the direction of the local authority. The report provides five means by which collaboration in this network can be strengthened: a common goal, firm leadership, reliable partners, transparent exchange of information, and systematic evaluation and improvement.

Because of the unique position of Netbeheer Nederland in exposing, in the short term, the unsafety caused by the illegal manipulation of the power network and cannabis-related patterns of electricity consumption; the responsibility of the Minister of Economic Affairs and the Environment for a safe and reliable energy network; the key position of the mayor at local level; the responsibility of the Minister of the Interior and Kingdom Relations for safe housing, for local authorities and inter-organizational relations; and the special role of the Minister for Medical Care and Sport as the coordinating minister in the cannabis portfolio the Board is making the following recommendations to them:

To Netbeheer Nederland:

1. Ensure the continued development in the short term of an automated measuring system on the distribution network that makes it possible to measure unsafety at home level caused by the illegal manipulation of the electricity network, excessive consumption of electricity, and cannabis-related patterns of consumption.
2. Detect unsafe connections on the electricity network and act against residents who cause cannabis-related dangers in the electricity network.

To the Minister of Economic Affairs and the Environment:

Ensure that distribution network operators and energy companies clearly prioritize the active combating and proactive detecting of cannabis-related dangers in the electricity network.

To the mayors of every local authority:

Bring relevant public and private bodies together and ensure that they, under the leadership of the local authority, take measures to improve the environmental safety of citizens in their residential surroundings and to take preventive action in detecting and eliminating cannabis-related dangers.

To the Minister of the Interior and Kingdom Relations:

1. Ensure that, when taking decisions on safe housing policies, the safety of citizens in their living environment is considered on a structural and recognizable basis.
2. Encourage mayors to take a leading role in the local collaboration processes.

To the Minister for Medical Care and Sport:

1. Ensure that, when taking decisions on policies and measures in the context of the policy of tolerance - and also in relation to the experiments with the cultivation of cannabis that have been announced - the safety of citizens in their living environment is considered on a structural and recognizable basis.
2. Improve the recording of the physical safety shortcomings of cannabis grow rooms when they are dismantled and of cannabis-related house fires, so that the safety risks and the effects of prevailing policies can be made clearer.

CONCLUSIONS

During the past few decades, the Netherlands has evolved into a cannabis-producing country. Using available data and calculations, the Dutch Safety Board assumes that there are between 10,000 and 30,000 commercially-operating cannabis grow rooms in the country. Experience shows that some of the cultivation takes place in the immediate living environment of citizens - in attics, in bedrooms, under floors, and in sheds. Domestic cultivation takes place in warm and damp conditions. This means that the temperature, light, air circulation, air humidity and watering all have to be controlled, that CO₂ has to be added to enhance growth, and that pesticides are needed. The cultivation of cannabis involves a high level of electricity consumption and the illegal tapping of that electricity. In many cases, this results in unsafe electricity connections that cause domestic fires, among other things.

In this report, the Dutch Safety Board describes the physical safety risks to which commercially-operating cannabis grow rooms expose citizens in their living environment, while also offering options for taking action in order to prevent or reduce these risks.

The research has led to the following main conclusions:

- 1. A commercially operating cannabis grow room in a home is unsafe for immediate and other local residents, including future residents.**

The average cannabis grow room in a home is risky. The amount of equipment and the lack of skill of many growers when setting up and operating their grow rooms increase the likelihood of unsafe situations for nearby residents. The consequences for local residents can be enormous - fire, danger of the building collapsing, and adverse effects on health. The risk of fire stems primarily from unsafe electricity connections. Because of the high need for energy, the costs associated with that and the importance of not being discovered, the level of theft of electricity and of unsafe and illegal connections to the electricity network is high. Fire may occur as a result of overheating caused by overloading or a short circuit. In recent years, there have been around 65 cannabis-related fires annually. However, this figure is under-recorded. In practice, it appears that in 76% of the almost 6,000 cannabis grow rooms dismantled every year, there is clear evidence of a dangerous situation caused by shortcomings in the electrical equipment - more than 4,500 unsafe situations in the homes in question. Using the available figures and calculations, the Board assumes that there are between 10,000 and 30,000 cannabis grow rooms. As well as fire, the danger of the building collapsing is also enhanced,

because of the inexpert constructional alterations to the home involved. The health of nearby residents may also be adversely affected, by water leaks, contamination of the water supply, danger of electrocution, increased levels of CO₂, poisoning by CO, SO₂ or by pesticides, the formation of mould, the growth of bacteria colonies like *Legionella*, and the noise nuisance of the equipment.

2. There is a lack of safety in the residential environment.

Because of the illegal nature of these activities, the main approach is the detection and prosecution by the police and justice authorities. The emphasis of the approach by the Public Prosecution Office lies on detecting criminal networks, the people in them, and the deprivation of their illegally obtained profits. The unsafety caused by the cannabis grow rooms is not a primary concern in this regard. The dangers that are included in indictments are hardly ever regarded as aggravating factors in increasing penalties. Because of the limited recording of unsafety, there is no overall picture of the risks.

The approach based on criminal law leads to the dismantling of cannabis grow rooms, giving the suggestion that the acute dangers to nearby residents are over. However, checks on how safe homes are after grow rooms have been dismantled do not form part of the current criminal-law based or usual administrative approach. As a result, dangers to local residents may continue to exist. There is no doubt that there is an uncontrolled risk.

There are no indications that the number of cannabis grow rooms in homes is falling. This means that the related unsafety to those living nearby (or subsequent dwellers) remains undiminished. The control measures for environmental safety in residential areas are structurally inadequate. Consequently, the level of safety for nearby residents and subsequent dwellers is under the socially acceptable norm; everyone is entitled to safe living environment, but a cannabis grow room at the neighbour's forms an unacceptable violation of that right. There is a lack of safety at local level.

3. Relevant public and private parties take insufficient responsibility in preventing or limiting physical unsafety to local residents.

The cultivation of cannabis is illegal, as stated in the Opium Law, and is therefore not regulated by the government. This illegality makes it difficult for the government and other relevant parties to guarantee environmental safety using standard supervision methods that apply to production processes. In the production chain, too, there is a widespread lack of opportunity to take the usual measures designed to prevent or control environmental risks. Because of its illegality, many public and private parties expect the police and justice authorities to be the only ones who should tackle and solve the problem. In many cases, they fail to recognize their own role and responsibilities in preventing or limiting the unsafety caused by the cultivation of cannabis. Because of its illegal nature, they feel justified in not taking any action. This is in spite of the fact that, unlike the police and justice authorities, they do have a (social) responsibility in preventing and eliminating unsafety caused by cannabis grow room in residential areas, and in the post-dismantling phase.

The research uses practical examples to show that relevant public and private parties do indeed have the means to control environmental safety or to contribute towards it. By using such means, parties like distribution network operators, local authorities, the fire service and homeowners show that they are able to break away from that reflex of detection and prosecution and find ways of taking measures aimed at preventing the unsafety resulting from illegal cannabis grow rooms or eliminating their consequences and post-dismantlement.

Awareness-raising among citizens and employees of the parties concerned is an important basis from which to change everyone's thinking on the cultivation of cannabis in residential areas. By changing the perspective from 'only' illegal cultivation to the causes of unsafety in residential areas, the parties involved have found new ways of making their responsibility for preventing or combating such unsafety count.

Energy suppliers, housing corporations, private landlords, insurance companies and mortgage lenders are in a position to verify the identities of tenants and contracting parties. In the 'chain' suppliers of equipment could check where and to whom they supply, and cannabis café operators could collectively enforce safe production. Distribution network operators, local authorities, housing corporations and private landlords could raise awareness among their employees and local residents by communicating with them about the dangers involved, thereby increasing their willingness to report anything suspicious; such willingness would be further encouraged by the setting up of an adequate reporting system, by exchanging relevant data and by visibly taking action against anything unsafe. Distribution network operators, local authorities and housing corporations could actually go to residential areas in order to improve their environmental safety, with the police and Public Prosecution Office in the background, ready to intervene if necessary.

4. Local authorities are not bringing public and private parties together and encouraging them to jointly improve environmental safety.

Unsafety caused by the cultivation of cannabis in homes is a complex problem that should involve multiple parties. A feature of this is that it should be tackled at a local level. The issue is more urgent in some local authorities and districts than it is in others. It is up to individual local authorities to consider the various measures that should be taken in order to prevent unsafety in residential areas or limit its consequences.

The research shows that there is a structural lack of control measures in relation to the environmental safety associated with illegal cannabis grow rooms in residential districts. Because of the illegality, public and private parties do not always recognize their own roles or social responsibilities towards improving environmental safety. In many cases, local authorities are insufficiently aware of their options for bringing parties together and for encouraging and directing them to jointly contribute towards combating unsafety caused by cannabis grow rooms in residential areas. Local authority representatives are, by virtue of their responsibility for public order and social safety and their co-responsibility for environmental safety, already in contact with various locally operating public and private parties. This means they are best placed to weigh up which local parties they need to bring together in order to devise both a preventive and reactive approach, and to decide what follow-up action to take.

The combination of awareness-raising and acknowledging shared responsibility for environmental safety, firm leadership by the mayor and improving the exchange of information is the key to gaining greater control of environmental safety in residential areas. This requires the parties involved to have the courage to change their approach and to be willing to examine their own responsibilities, and to act accordingly, and consistently so. Although each of the parties has its own responsibility in eliminating unsafety caused by cannabis grow rooms, the mayor has a key position in bringing about this collaborative partnership and in improving it.

**Visiting address**

Lange Voorhout 9
2514 EA The Hague
T 070 333 70 00
F 070 333 70 77

Postal address

PO Box 95404
2509 CK The Hague

www.safetyboard.nl