

# The Facts About Carbon Monoxide



Gas  
Networks  
Ireland

# What is carbon monoxide?

## The basic facts:

- Carbon monoxide (also known by its chemical symbol, CO) is a highly poisonous gas
- It has no colour, no smell and no taste and is often called 'the silent killer'
- When inhaled, it prevents blood from absorbing oxygen
- At high levels it can kill in as little as 3 minutes; at lower levels it causes illness
- It kills, on average, 6 people in Ireland every year and makes many more ill
- It can be produced by any fuel when burned – coal, turf, oil, gas, wood
- It doesn't just occur at home – in fact it can be produced anywhere that fuel is being burned: caravans, tents, mobile homes, boats, holiday homes, workplaces

## How to protect yourself from carbon monoxide:

- Be aware: any appliance, burning any type of fuel, can produce carbon monoxide
- Ensure fuel burning appliances are properly installed and regularly maintained by a qualified service agent
- Keep vents, flues and chimneys clear
- Use fuel burning appliances correctly
- Have at least one audible carbon monoxide alarm installed in your home and anywhere else you burn fuel

# Where does it come from?

Carbon monoxide can be released by any fuel when it is burned, including coal, turf, oil, gas and wood. Harmful levels can be produced by:

- Any badly installed, faulty, damaged or blocked heating appliance, chimney or flue, such as:
  - Open fireplaces (coal, turf, wood, briquettes)
  - Gas or LPG boilers, heaters, fires etc.
  - Oil-fired boilers
  - Solid fuel stoves
- Blocked or insufficient ventilation in rooms where a fuel burning appliance is in use
- Barbecues
  - Barbecues produce carbon monoxide when in use, but can also release carbon monoxide after they appear to be extinguished
- Petrol-driven machinery
  - Never run a car, lawnmower, generator or other engine-powered equipment in any confined, enclosed or poorly ventilated spaces
  - Ensure exhaust fumes are not drawn in through open doors, windows or vents
- Improper use of fuel-burning appliances, such as:
  - Using a cooker to heat a room
  - Using a gas grill with the door closed
  - Bringing a barbecue indoors or under cover such as into a tent or awning
  - Burning rubbish in an open fireplace or stove that could block the chimney

Carbon monoxide can also be produced by the natural oxidation of wood and biomass pellets such as those used for wood pellet heating systems, even without burning.



It's colourless, it's odourless,  
It's hard to detect.  
So carbon monoxide deserves  
Your respect.

Beware of the odourless,  
Colourless gas, carbon monoxide.  
And always barbecue out in the open  
Never, ever inside.



# How do I prevent carbon monoxide poisoning?

There's a lot you can do.

- Make sure all your fuel-burning appliances are installed by a qualified installer
- Get your boiler and any other fuel-burning appliances serviced once a year
  - Always use a qualified service agent for your fuel type
- Get your chimney swept once a year
- Keep your flues and chimneys clear at all times
- Never block room ventilators
- Make sure any building work does not interfere with your existing ventilation or flue arrangements
- Use appliances correctly and for their intended purpose
- Don't use appliances you suspect may be faulty
- If you store wood or biomass pellets, make sure your store is well ventilated

What else do I need to know about appliances?

- Get all appliances serviced annually
  - If you are not sure it is working safely, get it inspected by a qualified service agent
- Always buy appliances from a reputable outlet
- All appliances should carry the CE mark
- Read the instruction manuals carefully
- If you're moving house, leave the instruction manual for any appliance you're not taking with you
- You'll find safety notifications about appliances on [www.carbonmonoxide.ie](http://www.carbonmonoxide.ie)

Be sure your boiler's always kept  
In excellent condition,  
By getting it serviced once a year  
By a registered technician.



# Carbon monoxide alarms

Alarms are no substitute for prevention, but if there is carbon monoxide in your home, you need an alarm to detect it and alert you.

- Alarms should be audible; a visual indicator alone is no use if you're asleep
- Alarms should carry the CE mark and should comply with the European Standard EN 50291
- They should have an 'end of life' indicator to tell you when they need replacing
- Alarms are available in most hardware or DIY shops
- Basic models usually cost between €20 and €30
- You should have one in every room that has a fuel-burning appliance and one within 5m (16ft) of every bedroom
- Always follow the manufacturers' installation instructions carefully
- Check your alarm regularly by pushing the 'test' button
- Alarms should also be fitted in caravans, boats or other locations where fuel is burned

What if the alarm goes off?

- Open doors and windows to ventilate the area
- Turn off / stop using any fuel burning appliances immediately
- Get everyone in the property into fresh air
- If you are sure you are not suffering any symptoms related to carbon monoxide poisoning (see next page), call a qualified service agent to check your appliances before you re-use them
- If you are still concerned, call the Carbon Monoxide Awareness Line on 1850 79 79 79

And not just any alarm now,  
It has to make a beep,  
So if you're in yer scratcher,  
It'll wake yeh from yer sleep.



# What are the signs of carbon monoxide in your home?

## Signs of carbon monoxide may include:

- Staining, sooting or discolouring around an appliance
- Condensation on your windows
- A strange smell when an appliance is on (remember: carbon monoxide itself has no smell but other fumes produced by burning may smell)
- A yellow or orange flame on a gas appliance where it is normally blue

## What are the symptoms of carbon monoxide poisoning?

Symptoms of carbon monoxide poisoning can include:

- Flu-like symptoms e.g. drowsiness and headaches
- Chest pains
- Nausea (feeling sick)
- Diarrhoea
- Dizziness
- General lethargy (lack of energy)

Other signs include:

- Symptoms occurring when a particular appliance is on
- Others in the property (including pets) suffering similar symptoms
- Symptoms improving when you are away from the property

# What do I do?

- If you or someone you know is experiencing some of the described symptoms and you suspect carbon monoxide poisoning, visit a doctor immediately and ask them to check for carbon monoxide poisoning
- If you find someone ill or unconscious and suspect carbon monoxide poisoning, ventilate the area immediately by opening all windows and doors
- Stop using all fuel-burning appliances immediately and don't use them again until they have been inspected by a qualified service agent

# What if I'm away from home?

Even when you're away from home, remember: anything that burns fuel – kerosene heaters, engines, stoves, generators, barbecues etc. – can emit carbon monoxide.

If you own a holiday home, caravan, mobile home or boat...

- Ensure appliances are installed, maintained and used correctly
- Make sure there is adequate ventilation
- Keep all vents and exhausts clear
- Install an audible carbon monoxide alarm

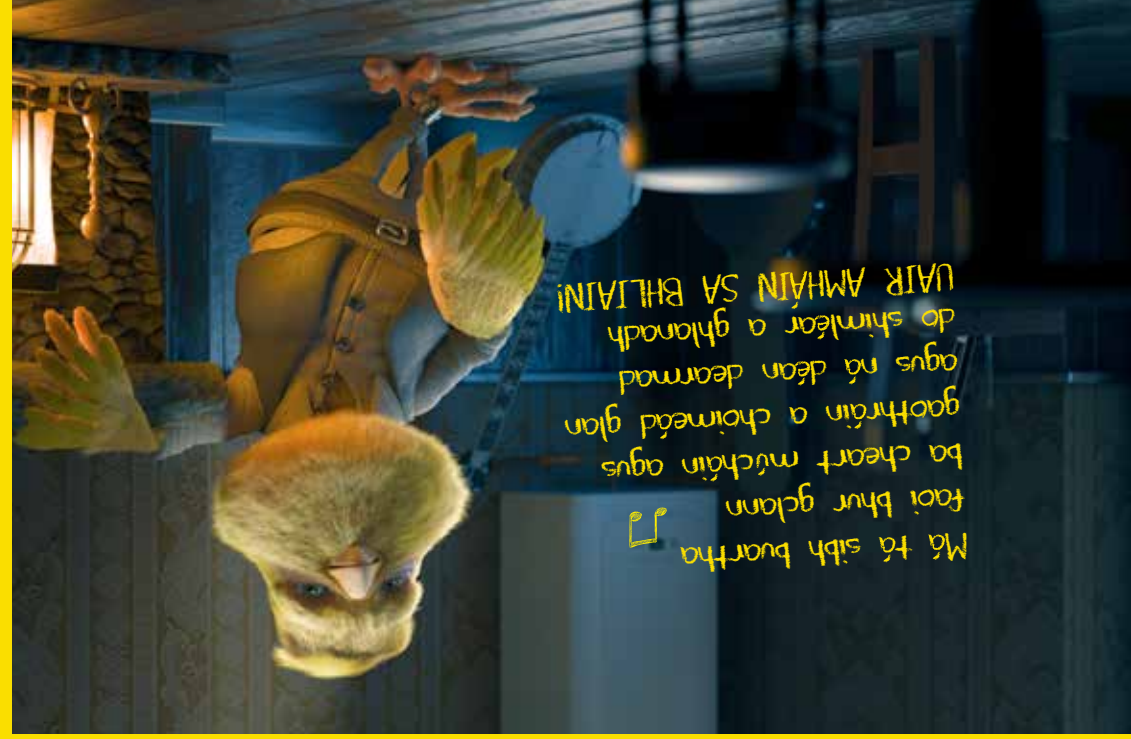
Many people don't realise that barbecues can emit a lot of carbon monoxide both while they're burning and after they appear to have gone out. So always use a barbecue in a well-ventilated place and never bring it under a cover or awning, or inside a tent.



# Who can I talk to for carbon monoxide advice?

- **General advice**  
Visit [www.carbonmonoxide.ie](http://www.carbonmonoxide.ie) or call 1850 79 79 79
- **Gas appliances**  
Contact a Registered Gas Installer. Visit [www.rgii.ie](http://www.rgii.ie) or call 1850 454 454
- **LPG appliances**  
Contact a Registered Gas Installer or visit [www.ilpga.ie](http://www.ilpga.ie)
- **Oil appliances**  
Contact a qualified professional such as an OFTEC Registered Technician. Visit [www.oftec.org](http://www.oftec.org) or call (01) 864 5771
- **Solid fuel appliances**  
Contact your appliance supplier or manufacturer

Alternatively, contact your fuel supplier.



Ma tá sibh buartha  
faoi bhur glann  
ba cheart m'chlain agus  
gaothráin a choimeád glan  
agus ná déan dearmad  
do shimléar a ghlanadh  
VAIR AMHAIN SA BHLIAINI!



If yeh care about yer fambly,  
Flues and vents should be kept clear,  
And don't forget to clean your chimbley  
ONCE A YEAR!

## Cá háit ar féidir liom comhairle faoi aon-ocsaíd charbóin a fháil?

- Comhairle ghinearálta  
Tabhair cuairt ar [www.carbonmonoxide.ie](http://www.carbonmonoxide.ie) nó cuir glao ar 1850 79 79 79
- Fearais gháis  
Déan teagmháil le Suiteálai Gáis Cláráithe. Tabhair cuairt ar [www.rgii.ie](http://www.rgii.ie) nó cuir glaoch ar 1850 454 454
- Fearais GPL  
Déan teagmháil le Suiteálai Gáis Cláráithe nó tabhair cuairt ar [www.ilpga.ie](http://www.ilpga.ie)
- Fearais ola  
Déan teagmháil le gairmí cáilithe mar Theicneoir OFTEC Cláráithe. Tabhair cuairt ar [www.oftec.org](http://www.oftec.org) nó glaoigh ar (01) 864 5771
- Fearais breosla sholadai  
Déan teagmháil le do sholáthrair nó do dhéantóir fearais  
Mar rogha eile, déan teagmháil le do sholáthrair breosla

## Cad ba cheart dom a dhéanamh?

- Má tá cuid de na comharthaí a thuairiscítear le feiceáil ionat féin nó i nduine eile a bhfuil aithne agat orthu agus má mheasann tú go bhfuil aon-ocsaíd charbóin i gcuairt ar dhochtúir láithreach agus iarr orthu seiceáil a dhéanamh le haghaidh nimhiú aon-ocsaíd charbóin
- Má thagann tú ar dhúine breoite nó gan aithne agus má mheasann tú go bhfuil nimhiú aon-ocsaíd charbóin i gceist, cuir aer san áit láithreach trí gach fuinneog agus doras a oscailt
- Cas as gach fearas a dhóinn breosla ar an bpointe boise agus ná húsáid arís iad go mbeidh scrúdu déanta ag gníomhaire seirbhíse cáilithe orthu

## Céard a tharlaíonn má bhím as baile?

Fíu nuair a bhíonn tú as baile, ná dean dearmad: rúd ar bith ina ndóitear breosla – téitheoirí ceirsin, innill, soirn, gineadóirí, fuilachtaí srl. – is féidir leis aon-ocsaíd charbóin a chur amach.

Má tá teach saoire, carbhán, teach soghluaiste nó bad agat...

- Déan cinnte go bhfuil fearais suiteáilte i gceart ann, agus go ndéantar iad a chothabháil agus a úsáid i gceart

• Bí cinnte go bhfuil aerú imleor ann

• Coinnigh gach gaothaire agus próbán sceite saor ó bhac

• Suiteáil aláram aon-ocsaíde carbóin inchloiste

Is iomaí duine nach dtuigeann go gcuirtear amach go leor aon-ocsaíde carbóin ó fuilachtaí nuair a bhíonn siad lasta agus fíu nuair a bhíonn an chuma orthu go bhfuil siad murchta. Mar sin, úsáid fuilachtaí i gcónaí in áit ina bhfuil aerú maith agus ná húsáid fuilachtaí faoi chumhdach ná faoi scáthbhhrat ná i bpuball riamh.



## Cad iad na comharthaí d'aon-ocsaíd charbóin i do theach?

I measc na gcomharthaí féideartha d'aon-ocsaíd charbóin tá:

- Smáil, súiche nó dídhathú timpeall fearais
- Comhdhlúthú ar do chuid fuinneog
- Boladh aisteach nuair a bhíonn fearas ar síl (cuimhnigh: ní bhíonn boladh ar aon-ocsaíd charbóin é féin ach d'fhéadfadh go mbeadh boladh ar mhúch eile a dhéantar trí dhó)
- Bladh m bhui nó oráiste ar fhéaras gáis nuair a bhíonn sé gorm de ghnáth

D'fhéadfadh iad siúd a leanas a bheith i measc na gcomharthaí de nimhiú aon-ocsaíd charbóin:

• Comharthaí ar nós an fhliú m.sh. codlátacht agus tinnéas cinn

• Pianta sa chliabhrrach

• Masmás (ag mothú tinn)

• Buinneach

• Meadhrán

• Marbhántacht ghinearála (easpa fuinnimh)

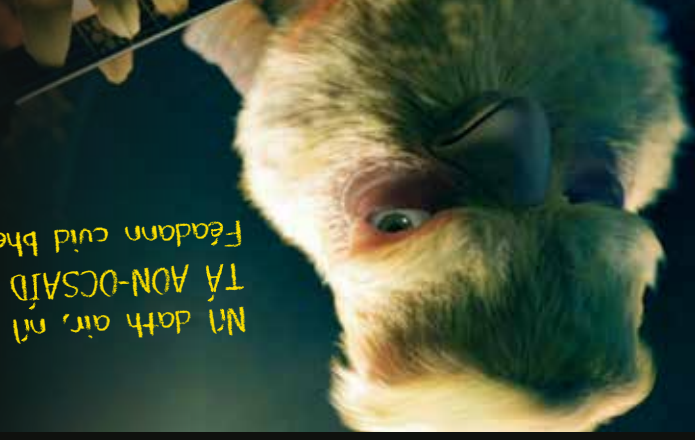
I measc na gcomharthaí eile tá:

• Tagann na comharthaí chun cinn nuair a bhíonn fearas áirithe ar síl

• Bíonn na fadhbanna eile á bhfuilaint ag daoine eile (agus peataí) sa teaghlach

• Tagann feabhas ort nuair a bhíonn tú lasmuigh den áit

Ná dath air, ní boladh air  
TÁ AON-OCSAID CARBÓIN MAFACHI  
Féadann cuid bheag tu a dhéanamh tinn



# Conas is féidir liom nimhiú aon-ocsaíd charbóin a chosc?

Tá go leor rudar ar féidir leat a dhéanamh.

- Déan cinnte go ndéanann suiteálar cáilithe do chuid fearas go léir a dhónn breosla a shuiteáil

- Faigh seirbhís le haghaidh do choiré agus le haghaidh aon fhearais eile a dhónn breosla uair amháin sa bhliain

- Úsáid gníomhaire seirbhíse atá cáilithe le haghaidh do chineál breosla i gcónaí

- Scuib do shimléar uair amháin sa bhliain

- Coimeád do chuid murchán agus simléar glan i gcónaí

- Ná bac gaothráin seomra riamh

- Déan cinnte nach gcuireann aon obair tógála isteach ar na socruithe atá i bhfeidhm agat le haghaidh aerála nó murchán

- Úsáid fearais ar an mbealach ceart agus don chuspóir a bhfuil siad ceaptha

- Ná húsáid fearais a mheasann tú go bhfuil locht orthu

- Má stóráilann tú pillínlí adhmaid nó bitimhaise déan cinnte go bhfuil do stór aeráilte go maith

## Cén t-eolas eile a theastáil uaim maidir le fearais?

- Faigh seirbhís gach bliain le haghaidh gach fearais
- Mura bhfuil tú cinnte go bhfuil sé ag obair go sábháilte, cuir faoi deara gníomhaire seirbhíse cáilithe scrúdu a dhéanamh air

- Ceannaigh fearais ó shiopa creidúnach i gcónaí

- Ba cheart go mbeadh an marc CE ar gach fearas

- Léigh na lámhleabhair treorach go cúramach

- Má tá tú chun bogadh go dtí teach nua, fág an lámhleabhar treorach le haghaidh aon fhearais nach bhfuil á thógáil agat leat

- Gheobhaidh tú fógraí sábháilteachta faoi fhearais ar [www.carbonmonoxide.ie](http://www.carbonmonoxide.ie)

# Aláiraim aon-ocsaíd charbóin

Ní leor aláiraim a úsáid in áit coisc, ach má tá aon-ocsaíd charbóin i do theach, beidh aláiraim ag teastáil uait chun é a bhrath agus tú a chur ar d'eolas

- Ba cheart go mbeifí in ann aláiraim a chloisteach, ní fiú comhartha físe má tá tú i do chodladh

- Ba cheart go mbeadh an marc CE ar aláiraim agus go mbeadh an Caighdeán Eorpach EN 50291 á chomhlíonadh acu

- Ba cheart go mbeadh táscaire 'deiréadh saoil' orthu chun insint duit cathain a bheidh sé riachtanach ceann nua a cheannach

- Bíonn aláiraim ar fáil sna cuid is mó de shiopaí crua-earraí nó DIY

- Is gnách gurb é an costas as múnlaí bunúsacha ná idir €20 agus €30

- Ba cheart go mbeadh aláiraim agat i ngach seomra ina bhfuil fearas a dhónn breosla agus go mbeadh aláiraim laistigh de 5m (16ft) ó gach seomra leapa

- Lean treoracha suiteála an déantóra go cúramach i gcónaí

- Seiceáil 'aláiraim go rialta tríd an gcnaipe 'test' a bhrú

- Ba cheart aláiraim a fheistiú i gcarbháin, i mbaid nó in aon ionaid eile ina ndóitear breosla

## Cad a dhéanfaidh mé má bhuaileann an t-aláiraim?

- Oscail doirse agus fuinneoga chun aer a ligean isteach san áit

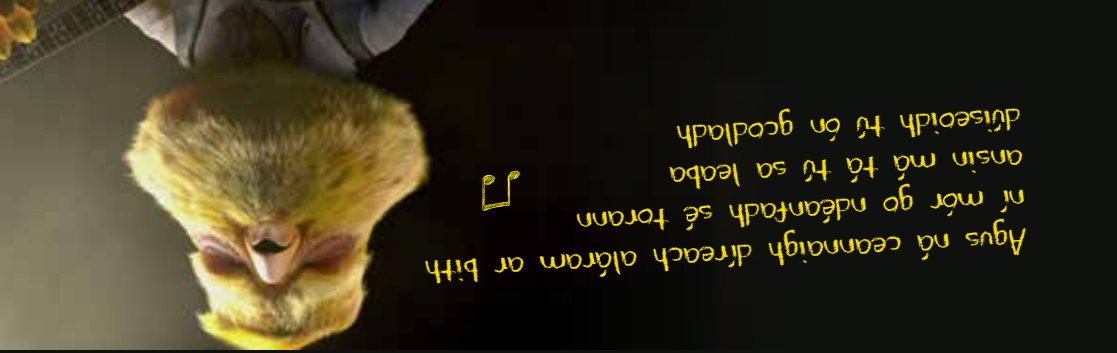
- Cas as/stop aon fhearais a dhónn breosla ar an bpointe boise

- Bog gach duine san áit amach san aer úr

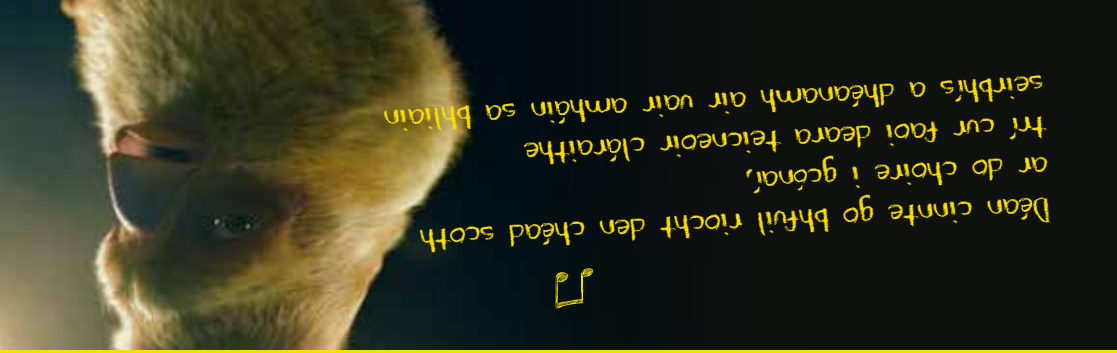
- Má tá tú cinnte nach bhfuil aon chomharthaí a bhaineann le nimhiú aon-ocsaíd charbóin á bhfuil agat (féach an chéad leathnach eile), cuir fíos ar

- gníomhaire seirbhíse cáilithe chun do chuid fearas a sheiceáil sula n-úsáidfidh tú arís iad

- Má tá imní ort fós, cuir glaoch ar an Líne Feasachta Aon-ocsaíd Charbóin ar 1850 79 79 79



Agus ná ceannaigh díreach aláiraim ar bith ní mór go ndéanfadh sé torann ansin má tá tú sa leaba  
 ☞  
 d'iseoidh tú ón gcodladh



Déan cinnte go bhfuil riocht den chéad scoth ar do choiré i gcónaí, trí cur faoi deara teicneoir cláráithe seirbhíse a dhéanamh air uair amháin sa bhliain  
 ☞

# Cad atá in aon-ocsaid charbóin?

## An t-eolas bunúsach:

- Gás uafásach nímhneach atá in aon-ocsaid charbóin (a dtugtar an tsiombail cheimiceach, CO air freisin)
- Níl dath, ná boladh ná blas air agus is minic go dtugtar an 'marfóir cívín' air
- Nuair a théann sé le hanail duine, coimeádann sé an fhuil ó ocsaigín a thógáil isteach
- Nuair a bhíonn sé ar leibhéil arda féadann sé daoine a mharú i 3 nóiméad; ar leibhéal níos ísle bíonn sé freagrach as tinneas
- Maraíonn sé seisear ar an meán in Éirinn gach bliain agus éiríonn i bhfad níos mó daoine tinn dá bharr
- Féadann aon bhreosla aon-ocsaid charbóin a dhéanamh nuair a dhóitear é – gual, móin, ola, gás, adhmaid
- Ní thagann sé chun cinn sa teach amháin – is amhlaidh gur féidir é a dhéanamh aon áit a mbíonn breosla á dhó: carbháin, pubail, tithé soghluaisté, báid, tithé saoire, ionaid oibre

## Conas tú féin a chosaint ó aon-ocsaid charbóin:

- Bí feasach: féadann aon fhearas, a mbíonn aon chineál breosla á dhó aige, aon-ocsaid charbóin a dhéanamh
- Déan cinnte go suiteáilítear fearais a dhóinn breosla i gceart agus go ndéanann gníomhaire seirbhíse cáilithe cothabháil rialta orthu
- Coimeád gaothairí, mícháin agus simléir glan
- Úsáid fearais a dhóinn breosla sa bhealach ceart
- Bíodh aon aláram aon-ocsaid charbóin ar a laghad ar féidir leat a chlosteáil suiteáilte i do theach agat agus in aon áit eile a dhóinn tú breosla



Ná dath ná boladh air  
Bíonn sé deacair é a bhrath  
Mar sin is mór bheith aireach faoi  
aon-ocsaid charbóin

# Cá háit as a dtagann sé?

Féadann aon bhreosla aon-ocsaid charbóin a scaoileadh nuair a dhóitear é, gual, móin, ola, gás agus adhmaid san áireamh. Féadann na níthe seo a leanas leibhéil díobháilacha a chruthú:

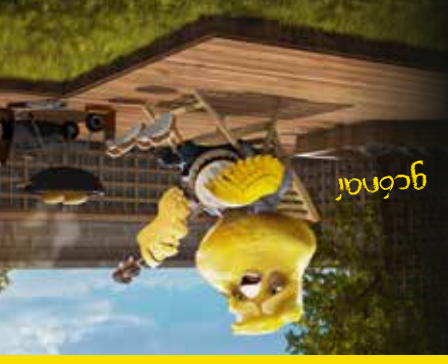
- Aon fhearas téimh, simléar nó míchán nár cuireadh isteach i gceart é, ata lochtach, a bhfuil dochar déanta dó nó atá bachtá mar:
  - Tintéin oscailte (gual, móin, adhmaid, brícní)
  - Coirí, téitheoirí, tinte gáis nó GPL srl.
  - Coirí olabhreoslaíthe
  - Soirn breosla sholadaigh
- Aeráil bhactha nó easpa aerála i seomra áit a bhfuil fearas a dhóinn breosla á úsáid
- Fulaichtaí
- Déanann fulaichtaí aon-ocsaid charbóin nuair a bhíonn siad á úsáid, ach féadann siad aon-ocsaid charbóin a scaoileadh freisin fiú nuair is cosúil go bhfuil siad míchta
- Innealra faoi thiomáint peitрил
- Ná rith gluaistean, lomaire faiche ná aon trealamh eile a bhíonn cumhachtaíthe ag inneall in aon spás srianta, dúnta nach bhfuil aeráilte go maith
- Déan cinnte nach dtógтар mých sceite isteach trí dhoirse oscailte, fhuinneoga ná ghaothairí

• Úsáid mhícheart fearais a dhóinn breosla mar:

- Cócaireán a úsáid chun seomra a théamh
- Gríoscán gáis a úsáid agus an doras dúnta

- Fulaicht a thógáil isteach nó faoi chlidach mar shampla i bpubail nó dionbhrat
- Bruscar a dhó i dtintean oscailte nó i sorn a d'fhéadfadh an simléar a bhacadh

Is féidir aon-ocsaid charbóin a dhéanamh trí hocsasáidú nádúrtha millíní adhmaid agus bitimhaise mar iad siúd a úsáidtear le haghaidh córas téimh millíní adhmaid, fiú nuair nach mbíonn siad á ndó.



Fainic an gás gan bholadh  
ná dath, aon-ocsaid charbóin  
Agus déan fulaichta amuigh san aer i gcónaí  
Seachas isteach sa teach



Na Fric! Mair le  
hAon-Dessaid Charbóin



Líonraí  
Gais  
Éireann

