

# SUN CITY GRAND COMPUTERS DEVICES SIG





Devices Classes offered by Grand Computers Club

iPad/iPhone - Basic Setup

iPad/iPhone - Own One

iPad/iPhone-Apps

iPad/iPhone - Photo Sharing

iPad/iPhone - Camera/

Photo Sharing

iPad/iPhone-Facebook

iPhone-Siri

iTunes/Apple Music

Cloud Explained

Windows 10 PC & Tablet

Seminar

Android Google Apps

Android Smartphones

Android Tablets

los9 for iPhone/iPad









#### **Grand Computers**

**Grand Computers Club** 

www.GrandComputers.org

623-546-7508

The Chaparral Center 19745 N Remington Dr



#### **Devices SIG**

Provides a forum for sharing knowledge on hand held devices (smartphones & tablets)



Contact: David Weeks

623 0257 0342

davidjw13@yahoo.com



# SUN CITY GRAND COMPUTERS DEVICES SIG – ASSISTANT FACILITATOR





VICKI LAUHOFF
VLAUHOFF2@GMAIL.COM



# Grand Computers Club 2023 Executive Board







#### GRAND COMPUTERS CLUB 2023 VIP'S







## www.grandcomputers.org



#### **Grand Computers Club**



Home Calendars\* Activities\* Education\* Newsletters\* SIGs\* Membership About Us\*

#### Welcome to Grand Computers Club Website!

We support our members by enhanding their use of computers, hand-held devices and related technology. We offer numerous learning opportunities through special interest groups, various meetings and classes. Please explore! CLUK ON AN IMAGE.

\*\* January Grand Bytes Newsletter \*\*













# Thanks to our Website Committee:

Leigh Donaldson, Chairperson Dennis Jarc, Web Developer Pat Tsotsos, Web Designer Don Cole, Webmaster Barb Vivian Klaudia Jurewicz Leon Chapman

David Weeks Sandra Byl





# Club Website

# www.grandcomputers.org

Now Club has over 1447 active members.

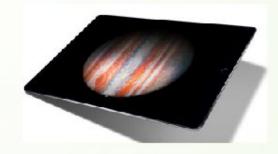
GRAND COMPUTERS – WWW.GRANDCOMPUTERS.ORG



# GRAND COMPUTERS SPECIAL INTEREST GROUPS (SIG)



- Apple SIG
- Compose Yourself SIG
- Devices SIG
- Financial Education SIG
- Genealogy SIG
- Flight Simulator SIG
- Graphics SIG
- New Technologies SIG
- Photoshop Elements SIG (formerly Digital Scrapbooking)



# How to remove Windows Defender security warning scam

Updated on: 15 November 2023



LY 13



Rūta Rimkienė, Writer



Fact-checked by Paulius Masiliauskas



The Windows Defender security warning that might randomly pop up on your screen while you're browsing is a **type of malware** that wants you to trick into contacting scammers. You can get infected with it by visiting a suspicious website, clicking on a malicious link, or simply having adware on your computer.

Luckily, you can easily get rid of it. In this article, you'll learn how to **remove the Windows Defender security warning scam** from your computer once and for all. Additionally, you'll get some useful tips on how to protect yourself from other viruses.

#### **Table of Contents**

- What is the Windows Defender security warning?
- 2. Why I am seeing the Windows Defender security warning?
- How to remove Windows Defender security warning
- 4. How to reset browser settings
- 5. How can I protect my PC against viruses?
- 6. Conclusion
- 7. FAQ

#### Best antivirus to remove malware:

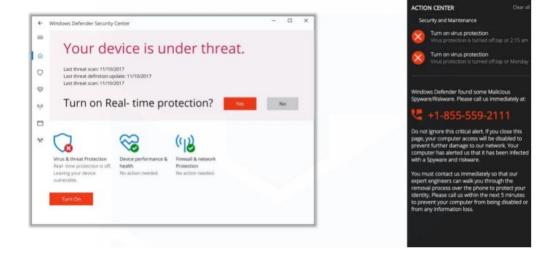




## What is the Windows Defender security warning?

Windows Defender security warning is a type of scareware or a phishing scam.

It redirects you to a page that looks like the official Microsoft website, even though its URL suggests otherwise. The page will display a message that your computer has been infected with malware (<u>Trojan</u>, for example) and that you need to contact a customer support agent by phone so that they could fix the problem.



One thing you should know about the Windows Defender Security warning is that it looks like a legit message by Windows, and that's why it's so dangerous - many users might not even bat an eye and try to google about it.

### Windows Defender Article

# How to remove Windows Defender security warning pop-ups

As the Windows Defender security warning is **browser-based**, most of the steps you should take to get rid of it are also related to your browser. Here are the possible measures you can take to make the warning disappear:

- 1. Force close and reopen your browser
- If you still get redirected to the scam page, reset the browser's settings (more instructions below), or completely reinstall the browser
- If this still occurs, you might have adware or some kind of a PUP (Potentially Unwanted Program) installed on your computer and need to remove it

If you are unsure which one of the installed apps causes this behavior, an antivirus (like TotalAV) can detect that for you and remove it from your computer.

Remove adware with TotalAV

# Remove Windows Defender security warning from your browser

Resetting the browser settings is one of the first things you should do if you want to get rid of the Windows Defender Security warning scam. Below you will find the instructions on how to do it on different browsers.

### Malwarebytes Free Download

**Malware** bytes

Personal Business Pricing Partners Resources

**FREE DOWNLOAD** 

# Malwarebytes Premium

Protect yourself from online attacks that threaten your identity, your files, your system, and your financial well-being.



Works for any (mix & match): ## 💹 🦁 👘 🍏

#### New and improved:

Malwarebytes for Mac is smarter, faster, and lighter than ever.

## McAfee scam info



This pop-up is genuine. It's asking you to turn on McAfee WebAdvisor's Secure Search, which makes your internet browsing experience even more secure. So it's safe to accept this prompt.

# Messages that appear to come from McAfee

Unfortunately, you might also see some **unwanted pop-up messages** that **appear** to come from McAfee, but which **don't originate from McAfee**. These messages are 'spoofed' (fake) messages that pretend to be from McAfee and try to make you click one of their options.

TIP: If you click the options in a fake pop-up or alert, the security of your PC might be compromised. So, it's always a best practice to read pop-ups or alert messages carefully.

#### How to tell if a pop-up or notification is fake

Cybercriminals are smart enough to make their pop-ups look genuine, so it's hard to tell if an alert is real. But here are a few ways to help you identify fake pop-ups:

- Look closely at the information shown by the pop-up before clicking any options. Does it seem genuine, or do the options shown seem unusual?
- For example, the spoofed pop-up shown on the left has no text explaining why the pop-up has appeared. Compare that to the genuine McAfee pop-up at the beginning of this article, which includes a much more informative, and complete description.

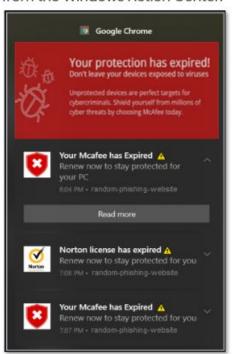


A typical spoofed message might look like this:

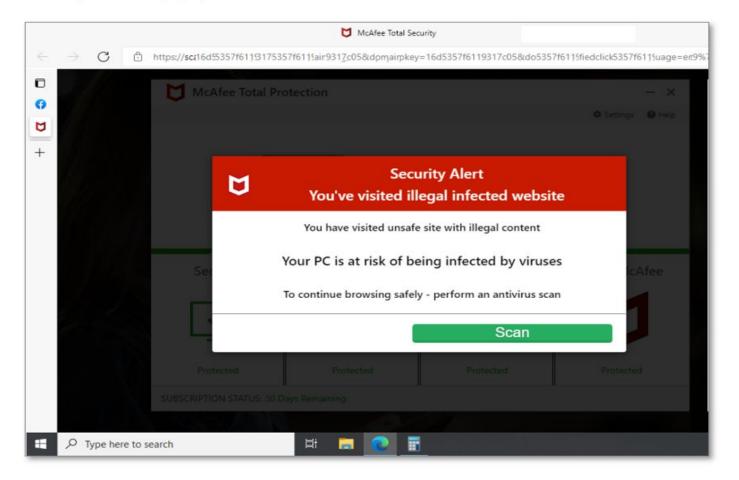


The notification above appears to come from McAfee because it uses the McAfee icon, but it isn't genuine and not from McAfee.

This spoofed message pops up from the Windows Action Center:



An example of a fake pop-up is shown here:



To stop these pop-ups from appearing, use your favorite pop-up blocker extension or plug-in in your web browser.

To stop these pop-ups from appearing, use your favorite **pop-up blocker** extension or plug-in in your web browser.

# How to recognize and avoid email scams

- Check the address that the original message came from. If it claimed to come from a legitimate address, did the email address include the company's name, for example no-reply@mcafee.com? If a generic address was used, such as hotmail.com or gmail.com, the email might be a scam.
- Does the email ask you to click a link and log on to your financial or personal account? Instead of clicking the link, go directly to the website and log in there.

Never open an email attachment unless you know the sender and are expecting the file. If you're unsure, contact the sender and ask for verification. If you open an unsafe attachment, it can install malware on your computer that can make you the victim of financial fraud or identity theft.

## Akira ransomware article



News **▼** 

Editorial

Security

Privacy

Crypto

Tech

Resources -

Tools ▼

Reviews ▼

Home » News

# City in Texas attacked by Akira ransomware gang

Updated on: 23 November 2023





Paulina Okunytė, Journalist

Nassau Bay has admitted to having suffered a ransomware attack, leaving more than 8,000 affected.

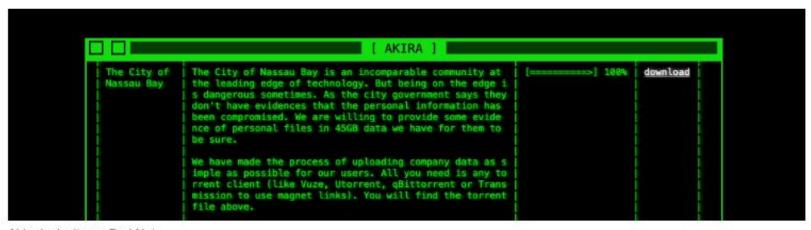
In a notice to affected clients on November 22nd, Nassau Bay officials explained that there had been a "data security incident that caused the encryption of certain systems and files."

According to the officials, the attack happened on May 23rd, 2023. An internal investigation showed that "the unauthorized party removed a number of files" from their network, including financial account numbers and credit/debit card numbers in combination with security codes, access codes, passwords, and PINs for the accounts.

Nassau Bay is a city in Harris County, Texas, with a population of 5,347. The Office of the Maine Attorney General states that 8,839 people were affected by the attack. Free credit monitoring and identity theft protection services have not been offered to those affected.

"We have no evidence of financial fraud or identity theft related to this data," claimed Nathan Burd, a Nassau Bay City Manager.

While the notice to the affected residents does not identify who's responsible for the attack, it was allegedly carried out by a threat actor named Akira. The ransomware gang has listed a 45GB-strong dataset on its DarkNet leak site that allegedly belongs to Nassau Bay.



Akira leak site on DarkNet

"Nassau Bay is an incomparable community at the leading edge of technology. But being on the edge is dangerous sometimes. The city government says that they don't have evidence that the personal information has been compromised. We are willing to provide some evidence," wrote Akira on their leak site.

The gang earlier this month listed <u>Stanford University</u> as the target of a ransomware attack threatening to leak online 430GB of internal data. The university has since confirmed the cybersecurity incident.

# Dozens of attacks in the US and Canada

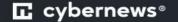
Akira, a ransomware group discovered in March 2023, takes its name from a Japanese cyberpunk manga. According to Ransomlooker, a Cybernews tool that monitors the dark web, in its short existence, Akira has already listed 45 victims, carrying out numerous attacks on organizations in the United States and Canada.

The group follows a consistent modus operandi, demanding ransom payments ranging from \$200,000 to \$4 million. If these demands are not met, they resort to publishing compromised data online.

In July 2023, researchers at Avast, a cybersecurity firm, <u>released</u> a decryptor for the Akira ransomware used in several incidents. However, it only combats the Windows version of the ransomware. Akira also targets Linux-based systems with a specifically developed strain of malware.

# Cyber News Video on Youtube





News ▼

Editorial

Security

Privacy

Crypto

Tech

Resources ▼

Tools ▼

Reviews -

Home » Security

# Microsoft alerts CyberLink to North Korean threat

Updated on: 23 November 2023





Damien Black, Senior Journalist



By Shutterstock

Microsoft has alerted software company CyberLink to the misuse of its software by North Korean group Diamond Sleet. The cyber gang is believed to have injected malicious code into the program, infecting more than 100 targets.

The threat is described by the tech giant as "LambLoad [...] a weaponized downloader and loader containing malicious code added to a legitimate Cyberlink application." Microsoft says it has been used to attack targets in Japan, Taiwan, Canada, and the US.

"This malicious file is a legitimate CyberLink application installer that has been modified to include malicious code that downloads, decrypts, and loads a second-stage payload," it added.

The file was embedded in the software firm's legitimate update infrastructure and includes features that enable it to evade detection by cybersecurity programs.

Microsoft said the campaign could be linked with "high confidence" to North Korean threat actor <u>Diamond Sleet</u>, noting that the attack vector bears hallmarks of one used in a previous attack linked to the group.

"The second-stage payload observed in this campaign communicates with infrastructure that has been previously compromised by Diamond Sleet," said Microsoft.

# **ITVRUS Subscriptions**

ITVRUS Home Q

New Refund Policy: Starting 10/08/2019...Refunds will be in Full within 48HRS of Account Creation.

After that, it will be at a Prorated Rate. Minimum of 20% will be deducted from

Original Purchase Price and will Further Adjust From There Based on Time Left of Subscription

Thank You And Happy Streaming!!

Please Allow Up To 24-48HRS To Process On ALL Orders. Thank You!!

Current Prices are Locked-In until Jan 31st, 2021
There Will Be an Increase Across All Services
New Pricing Shown in BLUE Below For Each Service...
Still Will Be BEST ON THE Web Pricing!!

#### **CUSTOMER APPRECIATION SPECIAL #1**

Ultimate Bundle Is BACK!! iTV3.2 / KOSTv / iTV6 / DAB2.0 Bundle.

11 Connections on Live TV across 3 Services + 2 Connections VOD

4 Premium Services under \$200!!

BEST ON THE WEB PRICING!!

\$195 For 12 Months



iTV3.2 Subscription
2 Connections | No IP Lock
Live TV 3400+ Channels
High Quality Local Regionals!!

\$40 for 3 Months | \$120 For 12 Months



KOSTv Subscription
5 Connections | No IP Lock
Live TV 6000+ Channels
\$40 for 3 Months | \$120 For 12 Months



iTV6 Subscription
4 Connections | No IP Lock
Live TV 7500+ Channels
\$40 for 3 Months | \$120 For 12 Months



#### DAB2.0 VOD 2 Connections

Over 21k Movies | Ovr 8k Adult | Over 3000+ Series

\$60 for 12 Months



Thank you

Mike Sullivan info@itvrus.com www.itvrus.com iTV3.2 | KOSTv | iTV6 | DAB2.0

#### **IPTV** installation

# ITVRUS installs on Firestick

Go to Apps, and install Downloader

You may need to go to your fire stick settings and enable unknown sources

Under developer options. If it does not show this option, you must press the enter button several times to enable developer option. Then enable unknown sources from there.

From downloader enter: 298344

At bottom of screen, install, open and scroll down to IPTV SmartersProX

And install it. You will get an account when you pay for one of the subscriptions.

Just enter in your account info and it will get you into the service you purchased.

# Jetson One



Jetson One video

Blackfly EVTOL video



# Switchblade flying car







#### **BYD Dolphin**

BYD announced the milestone at a launch event on Friday, claiming its "ocean-inspired design and advanced technology" is being praised. The Dolphin is BYD's fourth EV in the region, joining the Han sedan, Tang SUV, and Yuan Plus electric SUV launched in June.

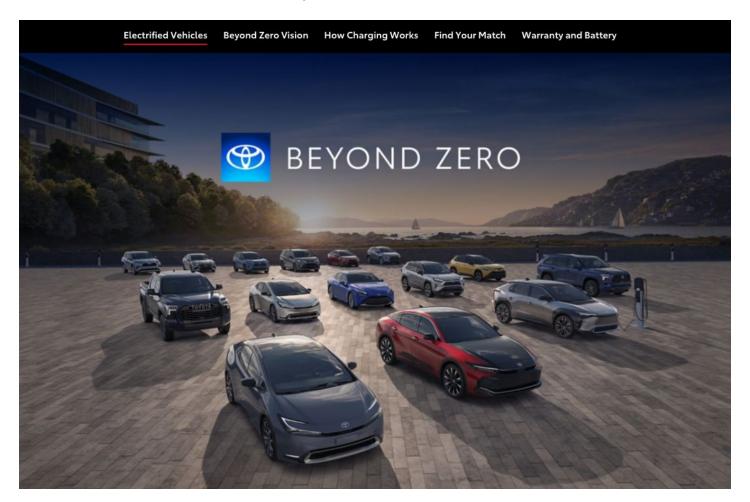
The Dolphin EV will start at MXN 539,990 (\$31,000) with up to 405 km (251 miles) NEDC range.

The EV is powered by a 70 kW electric motor and 44.9 kWh BYD Blade battery, which offers "class-leading efficiency" of 11 kWh/ 100 km.

At 4,125 mm (162 inches) long, 1,770 mm (70 inches) wide, and 1,570 mm (62 inches) tall, the model is 20 cm (7 inches) smaller than the European version, introduced in June. The EU version also offers an optional 60.4 kWh battery.



#### Toyota electric world





**2023 bZ4X**Starting MSRP **\$42,000\***Up to 252 **mi** Est. Range\*



Trucks

2024 Highlander Hybrid Starting MSRP \$40,720\* Up to 36/35 Est. MPG\*



2024 Grand Highlander Hybrid Starting MSRP \$44,670\* Up to 37/34 Est. MPG\*



2024 Toyota Crown Starting MSRP \$40,050\* Up to 42/41 Est. MPG\*



**2024 Sequoia**Starting MSRP **\$60,875\***Up to **21/24** Est. MPG\*



2024 Prius Prime Starting MSRP \$32,675\* Up to 48/114 Est. MPG\*/MPGe\*



2024 Prius Starting MSRP \$27,650\* Up to 57/56 Est. MPG\*



2024 Corolla Hybrid Starting MSRP \$23,300\* Up to 53/46 Est. MPG\*



Screenshot

2024 Corolla Cross Hybrid Starting MSRP \$27,970\* Up to 45/38 Est. MPG\*



2024 Camry Hybrid Starting MSRP \$28,855\* Up to 51/53 Est. MPG\*

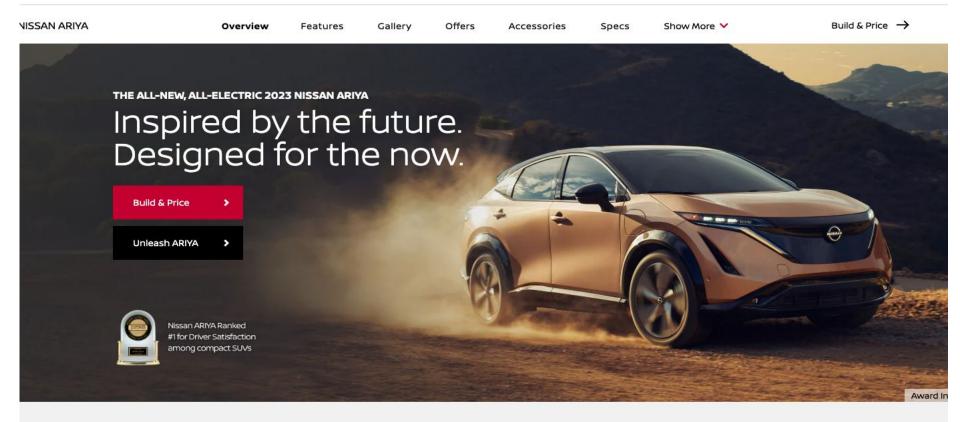


**2024 RAV4 Hybrid** Starting MSRP **\$31,475\*** Up to **41/38** Est. MPG\*



2024 RAV4 Prime Starting MSRP \$43,440\* Up to 38/94 Est. MPG\*/MPGe\*

## Nissan Ariya EV



\$43,190\*

RANGE UP TO 304 MILES 87 kWh battery [\*]

**0-60 IN**4.8 SECONDS [\*] (select trims only)

 $\begin{array}{c} \text{HORSEPOWER} \\ 389 \, \text{HP} \, [^*] \\ \text{(select trims only)} \end{array}$ 

#### **Edmonds Best EVs**

#### **Best Electric Cars**

Mainstream electric cars are the entry point for many EV shoppers, providing a driving range of anywhere from about 100 miles to well over 200. Expect spirited acceleration, too.





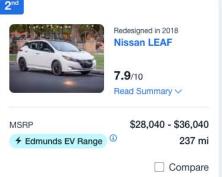
8.0/10 Edmunds Rating

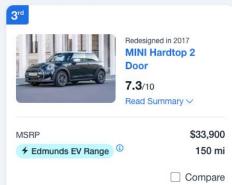
The Chevrolet Bolt boasts quick acceleration, a very approachable price and 278 miles of range when driven on Edmunds real-world EV range loop. Even with more competitors now, the Bolt is certainly worth checking out if you're in the market for an affordable EV. Read full review



\$26,500 - \$29,700 265 mi

Compare





## **Best All-Wheel-Drive Electric Cars**

Mainstream brands typically reserve all-wheel drive for SUVs, but AWD electric cars are appealing because they promise better efficiency, range and acceleration than equivalent SUVs.

Not enough vehicles yet to rank



Introduced in 2023

### Hyundai IONIQ 6

8.2/10 Edmunds Rating

The Ioniq 6 looks like nothing else on the road and has plenty of range. It's fun to drive, too. Tight rear headroom is its main drawback. Read full review

MSRP

\$41,600 - \$56,100

303 mi

Compare

#### **Best Electric SUVs**

The line between SUV and hatchback gets blurry in this segment, but you can count on versatile cargo space and an elevated driving position.



Redesigned in 2023
Kia Niro EV

**8.2**/10 Edmunds Rating

The Niro EV isn't the best in any one particular area, but it does a lot of things very well. It's comfortable, packed with in-car tech, and has impressive real-world range. It's not the cheapest EV out there, but Kia's long list of standard features and excellent warranty help offset that. Read full review

MSRP

★ Edmunds EV Range

⑤

\$39,550 - \$44,550 280 mi

Compare

2<sup>nd</sup>

MSRP



∳ Edmunds EV Range 
<sup>⑤</sup>

Introduced in 2019
Hyundai Kona
Electric

8.2/10

Read Summary V

\$33,550 - \$41,550

315 mi

Compare

3<sup>rd</sup>



Introduced in 2022
Chevrolet Bolt EUV

**8.0**/10

Read Summary V

MSRP

\* Edmunds EV Range (1)

\$27,800 - \$32,300 265 mi

☐ Compare

#### **Best All-Wheel-Drive Electric SUVs**

In the EV world, all-wheel drive typically means a lot more power, since it requires adding another motor. You get all-weather traction, too, but range will suffer relative to single-motor setups.



\$42,995 - \$59,995

304 mi

TOP RATED

Introduced in 2022

#### Hyundai Ioniq 5 Limited AWD

8.3/10 Edmunds Rating

The Hyundai Ioniq 5 springs out of the gate with retro-themed styling and the latest in electric vehicle design. It's also comfortable, practical and generously equipped. While it can't quite match the range of the equivalent Tesla Model Y or Ford Mustang Mach-E models, there's still plenty to love about this all-new all-electric SUV. Read full review

**MSRP** 

★ Edmunds EV Range

⑤

\$41,450 - \$56,500 270 mi

Compare



MSRP

★ Edmunds EV Range 

⑤

Introduced in 2022
Kia EV6 GT-Line

8.0/10
Read Summary >

MSRP
\$42,600 - \$61,600

\$Edmunds EV Range

## **Best Luxury Electric Cars**

Luxury electric cars tend to cost a lot more than mainstream models, but you also get a lot more, typically including sports-car acceleration and the latest interior tech.



Compare

Introduced in 2017
Tesla Model 3

**8.0**/10 Edmunds Rating

The Model 3 rises above the class in almost every area. It's fun to drive, practical and stylish. The touchscreen interface and lack of dedicated smartphone integration can be annoyance at times, but overall the 3 is a great pick for an EV. Read full review

**MSRP** 

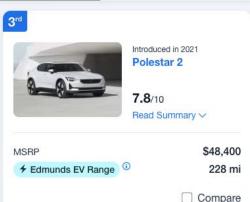
★ Edmunds EV Range

③

\$40,240 - \$53,240 232 mi

Compare





## **Best Luxury All-Wheel-Drive Electric Cars**

Do you need all-wheel drive in a luxury electric car? The enhanced winter traction is certainly a plus, as is the dramatic power boost, but keep in mind that you'll lose some range in the bargain.

(i) Not enough vehicles yet to rank



Redesigned in 2023 **Genesis G80 Electrified**  8.1/10

Edmunds Rating

The Electrified G80 is a well-appointed all-electric luxury car with lots of in-car tech and a full suite of driver aids. It has plenty of power and range, though its battery's placement limits trunk space and overall utility. Read full review

**MSRP** 

∳ Edmunds EV Range 
<sup>③</sup>

\$79,825 309 mi

Compare



Introduced in 2021 Polestar 2 Long Range Dual Motor

7.9/10

Read Summary V

MSRP ★ Edmunds EV Range 
⑤

\$51,900

228 mi

## **Best Luxury All-Wheel-Drive Electric SUVs**

Given the popularity of luxury SUVs, it's no surprise that luxury electric SUVs are on the rise. Versatile interior space, cutting-edge technology and serious acceleration are par for the course.



Introduced in 2022

BMW iX xDrive50

8.4/10 Edmunds Rating

The all-electric iX is spacious, comfortable, surprisingly efficient and ridiculously agile for its size. If you can get past its slightly polarizing design, you may just fall in love with this electric BMW. Read full review

**MSRP** 

★ Edmunds EV Range 

⑤

\$87,100 - \$111,500 377 mi

Compare



Introduced in 2023 Electrified GV70

8.4/10

Read Summary V

MSRP ★ Edmunds EV Range 

⑤ \$65,850 255 mi

Compare



★ Edmunds EV Range

⑤

Introduced in 2020 Tesla Model Y Long

Range

8.1/10

Read Summary V

\$43,990 - \$52,490 MSRP

Compare

317 mi

## **Best Super Luxury Electric Cars**

Want to get the most range out of your executive-class EV? This is the segment for you. Because these cars lack all-wheel drive, they maximize the platform's range potential.

(i) Not enough vehicles yet to rank



Introduced in 2020

#### **Porsche Taycan Performance Battery** Plus

8.2/10

Edmunds Rating

While the 4S, GTS, Turbo and Turbo S variants return stunning performance, the base rear-wheel-drive Taycan model doesn't excite in quite the same way. We found it competent, comfortable and highly customizable, but it lacks the performance punch you expect from the brand. Read full review

**MSRP** 

★ Edmunds EV Range 

⑤

\$86,700 - \$187,400 286 mi

Compare



Introduced in 2022 Mercedes-Benz EQS 450+

8.2/10

Read Summary V

MSRP \$104,400 - \$147,550

★ Edmunds EV Range 
⑤

422 mi

## **Best Super Luxury All-Wheel-Drive Electric Cars**

Standard AWD means you're adding power and subtracting range, but you'll still get plenty of miles per charge in these luxury cruisers, plus face-flattening acceleration.



Compare

Introduced in 2023

BMW i7 xDrive60

**8.4**/10 Edmunds Rating

Superior to the regular 7 Series in nearly every way, the all-electric i7 offers fantastic ride quality, a library-quiet interior, and an impressive suite of technology features. It sets a new standard for BMW and is a worthy competitor to the best Mercedes-Benz has to offer. Read full review

MSRP

# Edmunds EV Range

3

\$119,300 320 mi

Compare

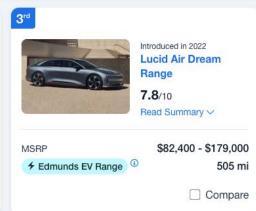
Introduced in 2022

Mercedes-Benz
EQS 580 4Matic

8.2/10
Read Summary V

MSRP \$125,950

# Edmunds EV Range 3 381 mi



## **EV Battery Fires**

# **EV Battery Fires: What Consumers Should Know**



in

Updated: Sep 16, 2021

Related Articles

Best SUVs of 2022

Best Trucks of 2022

Best Midsize SUVs For 2022

**Related Accessories** 

Best Portable Jump Starters

Best Car GPS Navigators For

Best Dash Cams Of 2023

Best All-Season Tires



Sales of Chevrolet's Bolt EUV (left) and Bolt EV (right) have been halted while the company works to resolve problems related to battery fires. Chevrolet

Production of General Motors' two long-range battery-electric vehicles, the Chevrolet Bolt EV and Bolt EUV, have been put on hold, ostensibly because of the ongoing shortage of semiconductor chips.

But, for the moment, dealers' hands are tied with the two electric vehicles because of recent recalls related to battery fires.

GM's expanded recall now covers all 142,000 of the two Bolt models sold since 2017–including the 2022 models sitting on showroom lots–because the EVs could catch fire. It's now waiting for new battery packs that resolve a series of manufacturing defects.

## **Cross-Industry Battery Challenges**

Chevy is the latest manufacturer to recall its battery-electric vehicles due to the risk of fire, but it's not alone. Hyundai earlier this year expanded a similar callback covering about 90,000 of its Kona EVs. Ford recalled more than 20,000 plug-in hybrids in Europe because they also could overheat and catch fire. And Tesla products also have been linked to several fires.

Such recalls have proved to be costly. The two service actions covering the Chevrolet Bolt alone will now run the manufacturer about \$1.8 billion. The Kona recall cost Hyundai about \$900 million. But the impact of such recalls—and the news coverage they generate—could have a far bigger impact, long-term, industry insiders fear.

"It's a serious issue that needs to be solved," said Dave Sargent, head of the automotive practice at research firm J.D. Power. "It's something the industry will have to get a grip on if EVs are going to be the future."

Battery fires are not unique to the auto industry. In 2019, the Federal Aviation Administration and the U.S. Department of Transportation jointly banned the shipment of lithium-ion batteries as cargo on passenger airplanes, and limited how they can be shipped on cargo aircraft. Several incidents, including the 2013 crash of a UPS 747, had been linked to battery fires. And concerns grew due to defects that caused a number of Samsung smartphones to burst into flames.

Battery manufacturers—and the automakers they serve—contend there have been significant improvements in the technology, with Tesla CEO Elon Musk repeatedly insisting that the risk of an EV battery pack catching fire has been way overblown.

Sam Abuelsamid, the principal auto analyst at Guidehouse Insight, agrees. All told there have been at least seven confirmed instances of battery fires involving the two Chevy Bolt lines, a tiny percentage of those sold to date, Abuelsamid told *Forbes Wheels*.

#### **Two Types of Battery Fires**

When battery fires do occur they appear to fall into two categories. Some are triggered by a crash that damages and shorts out the pack, setting individual cells ablaze. This happened with Tesla products early on, leading the automaker to add more protection around the packs on vehicles like the Models S and X.

What draws media attention, however, have been fires that appear to have occurred while vehicles were parked—in some cases while inside a garage. In some, but not all, cases involving the Chevy Bolt the vehicles were hooked up to chargers. One such fire heavily damaged a home in Port St. Lucie, Florida last October.

GM has traced the problem to manufacturing defects at the plant run by its battery supplier, a subsidiary of LG Chem. The automaker is pressing the South Korean automaker to cover much of the cost of the ongoing recall. Manufacturing issues with LG Chem batteries also were blamed for the Kona EV recall.

While the number of EV blazes are relatively minor, experts note that once a lithium-ion pack does catch fire they can be extremely difficult for authorities to deal with.

#### Resolving the Issues

A number of auto industry executives contacted by *Forbes Wheels* acknowledged they are concerned about battery fires—and the publicity they generate. The general consensus is that, as production volumes rise and the industry learns more about lithium-ion technology, problems like those involving the Chevrolet Bolt and Hyundai Kona are being resolved. GM officials assert they addressed such problems when developing the new Ultium batteries that will power future EVs like the GMC Hummer and Cadillac Lyriq.

Manufacturers are also investing billions of dollars to develop next-generation batteries, most notably the solid-state cells that manufacturers including Mercedes-Benz, Honda and Toyota hope to start using around the middle of this decade. By replacing the chemical slurry found in current batteries with a solid alternative, solid-state batteries are expected to be essentially fireproof.

But there's no reason to wait until then. "The key is that EVs are not necessarily more prone to fire," says Abuelsamid. "The evidence suggests they may be less prone to catch fire."

Perhaps, but auto fires provide the dramatic footage TV news and other visual social media platforms like Instagram like to focus on. These dramatic images can have an outsized impact on public attitudes.

The Chevy EV has helped position GM as second in the emerging market behind only Tesla, with nearly a 10% share of battery-car segment this year. Dealers will have to wait until they can replace suspect packs with new ones before sales of the Bolt EV and EUV models can resume. Whether the two versions of the Bolt can regain their momentum likely will serve as a test of how concerned EV buyers are about the risk of battery-car fires.

## Have a safe and sane Holiday!!!

See you next year!!!

December meeting will not be held due to the Holiday season