

Recommendations for safe eclipse observation



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Health Risks

Preventing heatstroke and dehydration

If possible, check the UV radiation index before exposure at: <https://www.aemet.es/es/el-tiempo/prediccion/radiacionuv>, and use broad-spectrum sunscreen with a high protection factor appropriate for your age, skin type and the body area exposed. Sunscreen should be applied generously 30 minutes before sun exposure and reapplied every two hours. The only way to completely avoid sun damage is to avoid exposure altogether and, when this is not possible, adopt the recommended protective measures to reduce the risk.

Reduce exposed areas of the body as much as possible by wearing caps, hats, long-sleeved shirts and long trousers suitable for the season—preferably loose, lightweight and breathable clothing in summer.

If you are undergoing medical treatment, check whether your medication increases sensitivity to ultraviolet radiation. More information at: <https://www.sefh.es/escuela-de-pacientes-conoce-tus-medicamentos-detalle.php?mdl=4&tm=52>.

Keep medications in a cool place; heat and radiation may alter their composition and effects.

Drink water and fluids frequently, even if you do not feel thirsty. Avoid drinks containing caffeine, alcohol or large amounts of sugar, as they may contribute to dehydration.

Stay as much as possible in cool, shaded or air-conditioned places, and cool yourself whenever necessary.

Reduce physical activity and avoid outdoor sports during the hottest hours of the day. Wear lightweight, loose-fitting, breathable clothing, as well as physical protection such as caps or hats.

Do not leave anyone inside a parked and closed vehicle.

Consult a healthcare professional if symptoms related to high temperatures last longer than one hour.

Eat light meals that help replenish salts lost through sweating.

Pay special attention to vulnerable populations such as babies and minors, breastfeeding mothers and pregnant women, as well as elderly people or individuals with conditions that may worsen with heat (such as heart disease, kidney disease, diabetes, hypertension, obesity, cancer, mobility impairments, dementia and other mental illnesses, as well as drug abuse or alcohol use disorders).

A woman with blonde hair in a ponytail, wearing sunglasses and a red t-shirt, is drinking from a clear water bottle labeled 'ADVENTURE'. She is standing in a grassy field with rolling hills and a small village in the background under a warm, orange sunset sky. The water bottle has a black cap and a black strap.

Health Risks

Risks Related to Insect Bites

The time of year when the eclipses will take place is favourable for insect bites (mosquitoes, ticks), which can transmit diseases. It is recommended to use approved insect repellents on exposed skin (for example, those containing DEET, Icaridin, Citriodiol or PMD, IR3535, etc.), as well as wearing long sleeves and long trousers, especially in vegetated areas. Avoid areas near stagnant water and places with high mosquito density. Check your skin and clothing after outdoor activities for possible ticks.

Prevention of Communicable Diseases

During mass events, there is a greater risk of transmission of infectious diseases. It is recommended to keep vaccinations up to date, maintain proper hand hygiene, cover your mouth and nose when coughing or sneezing, and avoid attending the event if you have symptoms compatible with a respiratory illness.

Risks Related to Crowds

Large crowds can lead to falls, dizziness, anxiety and difficulties accessing water or medical assistance. It is recommended to avoid travelling to overcrowded places unless necessary. If you are in a crowded area, know and follow safety rules and instructions from authorities, identify exits and emergency equipment, purple points (safe assistance points), as well as shaded areas, toilets and water fountains. Always carry your medication and that of the people under your care.





Eye Protection and Safe Observation

Use ISO 12312-2 glasses

Looking at the Sun without proper protection can cause burns to the macula and permanent vision loss. Certified ISO 12312-2:2015 eclipse glasses are the only safe way to observe the Sun directly during the partial phases of an eclipse, as they block the intense radiation that can cause solar retinopathy. Sunglasses, no matter how dark they are, do not provide this protection.

Verify the authenticity of the glasses

During previous eclipses, many counterfeit products appeared on the market that did not meet minimum safety requirements. Checking the origin, certification and manufacturing details is essential to ensure proper protection.

Inspect filters before use

Even certified glasses can become dangerous if they are scratched, warped, or punctured. They should be discarded immediately if damaged, since even a tiny defect allows concentrated sunlight to pass through.

Supervise children and people with disabilities

Children may accidentally remove the glasses or look out of curiosity without protection. Past events have shown this to be one of the leading preventable causes of eye injuries. People who depend on assistance may also need help to ensure proper use of protective eyewear.

Do not look through cameras or telescopes without a specific filter

Optical devices amplify sunlight, and if they are not equipped with certified front-mounted filters, they can cause almost instant eye damage—even when ISO-certified glasses are being worn.

Do not use improvised filters

Objects such as CDs, X-ray films, or smoked glass do not block dangerous radiation and must never be used under any circumstances.



Eye Protection and Safe Observation

Use indirect projection methods

Methods such as pinhole boxes or projection through perforated sheets allow the eclipse to be observed without looking directly at the Sun, reducing risk when certified glasses are unavailable.

Remove eclipse glasses only during totality

Totality is the only moment when the Moon completely blocks the solar disk. As soon as the first flash of sunlight appears, the brightness can damage the retina, so it is essential to put the glasses back on immediately. Totality will only occur during the 2026 and 2027 eclipses. During the annular eclipse of 2028 there will be no totality period, and protective glasses must be worn at all times.





Logistics and Mobility Safety

Plan travel in advance

Severe and prolonged traffic congestion is expected before and after the eclipse, with hours-long delays on both main and secondary roads. Avoid unnecessary travel, especially during the sudden darkness, exercise extreme caution while driving, and always follow road safety regulations. Likewise, planning routes and schedules in advance is essential to avoid traffic blockages.

Avoid stopping on road shoulders

Observing the eclipse from improvised roadside locations caused incidents and traffic hazards during past events. Park only in designated areas to avoid endangering yourself and other drivers.

Bring essential supplies

During previous eclipses there were overloaded services, temporary shortages, and long waiting times. Having water, food, and fuel ensures self-sufficiency in case of serious congestion.

Expect mobile network saturation

Mobile phone networks collapsed in several high-attendance areas during other mass events. It is recommended to have alternative means of communication such as FM radios, and to establish prearranged meeting points.

Use areas designated by authorities

It is recommended to avoid areas with difficult access and instead use official spaces prepared to handle large crowds and changing environmental conditions. In this regard, official websites should be consulted to determine whether there are recommended viewing points or restricted areas.

Establish family or group protocols

In the event of loss of mobile coverage or accidental separation, having a prior plan reduces uncertainty and helps locate people more quickly.



Environmental risks

Avoid overcrowding fragile areas

During previous events, mountain areas were discouraged due to risks of erosion, ice, mud and the difficulty of rescue operations. In Spain, the same principle applies to ecologically sensitive areas. Stay informed about areas that authorities have declared restricted or not recommended.

Do not leave waste behind

Large crowds can have a significant environmental impact. Keeping areas free of litter protects local flora and fauna and minimises environmental degradation.

Avoid disturbing local wildlife

The massive presence of people can cause sudden disturbances to animals, especially birds, during abrupt changes in light conditions. Respectful behavior helps reduce stress on wildlife.

Do not enter private property or farmland

In previous events, the search for open spaces led to accidental trespassing onto private property. Respecting private land—especially agricultural land—helps prevent conflicts and unintended damage.





Wildfire Risks

Lighting fires is prohibited

In summer, even a small ignition source can trigger a major wildfire. Spanish regulations prohibit any type of fire in forested areas during this time of year.

Do not park on dry vegetation

Hot vehicle components, such as catalytic converters, can start fires. This risk has been identified during past mass events in rural areas.

Keep emergency access routes clear

Parking on forest tracks can block routes used by emergency services.

Check the daily wildfire risk level

Before travelling, it is important to know the current risk conditions in order to adjust routes or avoid areas with extreme danger.





Additional recommendations

Pet control

Sudden darkness may alter animal behaviour. Keeping pets under control helps avoid them getting lost or reacting unpredictably.

Watch the eclipse from your municipality

Residents of municipalities located within the path of totality are encouraged to observe the eclipse from their hometowns. This not only strengthens their connection to their roots, but also allows them to enjoy this extraordinary astronomical event in a calm and safe way, reducing risks and improving the overall experience. If observing the eclipse from your municipality is not possible, it is recommended to use the viewing areas designated by public authorities.





References

<https://trioeclipses.es/>

https://www.sanidad.gob.es/areas/sanidadAmbiental/riesgosAmbientales/calorExtremo/publicaciones/docs/planNacionalExcesoTemperaturas_2025.pdf

<https://www.sefh.es/escuela-de-pacientes-conoce-tus-medicamentos-detalle.php?mdl=4&tm=52>

https://eclipses.ign.es/src/img/eclipses/como-observar-eclipses/calidad_gafas_eclipse_CNE.pdf

<https://www.aemet.es/es/eltiempo/prediccion/incendios>

<https://www.aemet.es/es/eltiempo/prediccion/radiacionuv>

<https://www.miteco.gob.es/es/biodiversidad/temas/incendios-forestales/estadisticas-actuaciones.html>

<https://ciencia.nasa.gov/sistema-solar/como-observar-un-eclipse-solar-total-de-forma-segura/>





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