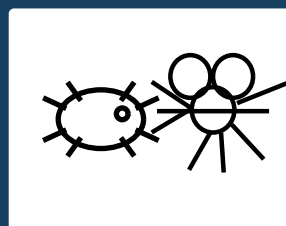


Dr Sancho Rodriguez-Villar, LMS, MSc, PhD, EDIC
Senior Clinical Advisor for the WJA

Consultant in Critical Care Medicine
 Infection, Control and Prevention Co-Lead Consultant at King's College Hospital
 King's College Hospital NHS Foundation Trust
 Denmark Hill, London SE5 9RS, United Kingdom

Honorary Senior Clinical Lecturer in the GKT School of Medical Education,
 Faculty of Life Sciences & Medicine at King's College London.
 London, United Kingdom.



Vector-borne disease in UK and Europe; risk ahead of summer 2026.

Tick and mosquito bite awareness

1. What are vector-borne diseases?

- Infections spread by a bite. They are carried by a vector, most commonly ticks or mosquitoes.
- Ticks: can spread Lyme disease and, rarely in the UK, tick-borne encephalitis, anaplasmosis, babesiosis or louping ill.
- Mosquitoes: in some countries can spread dengue, chikungunya, West Nile virus, malaria and other infections.
- Most bites do not cause serious illness. The worker message is: avoid bites, check for ticks, remove ticks safely and seek advice if unwell.
- Season: risk in the UK and Europe increases from late spring, April/May, to October.

2. Why WJA members should know

- Water jetting, drain, sewer and industrial work may take place near long grass, woodland edges, riverbanks, culverts, wetlands, flood water or standing water.
- Outdoor work, temporary accommodation and European/overseas deployment can change the risk.
- High-pressure jetting should not be used as an insect-control method. Avoid creating unnecessary mist, spray, slip hazards or contamination spread.
- The aim is simple: spot the risk, prevent bites, check after work, report symptoms or credible exposures.

SPOT
vegetation /
standing water

PROTECT
cover skin /
repellent

CHECK
skin, clothing and
PPE

REPORT
bite exposure /
symptoms

Before starting: does the job involve any of these?

- | | |
|--|--|
| ☐ Outdoor work between April/May and October. | ☐ Standing water around welfare units, buckets, plant, tyres, drains or accommodation. |
| ☐ Long grass, woodland, hedges, moorland, parks, gardens or overgrown access routes. | ☐ Outdoor work at dawn, dusk, evening or night. |
| ☐ Riverbanks, canals, wetlands, ditches, culverts, reservoirs, flood water or standing water. | ☐ Multiple insect bites or unusually heavy mosquito activity on site. |
| ☐ A worker finds an attached tick during or after the job. | ☐ European or overseas work, secondment, travel or outdoor accommodation. |
| ☐ Known local tick, mosquito or vector-borne disease alert. | ☐ A worker develops fever, rash, flu-like illness, severe headache, joint pain, weakness or confusion after bites/travel. |

If yes: pause, keep people away if needed, and follow the control plan on page 2 before disturbing vegetation, standing water or contaminated material. Add tick and mosquito controls to the dynamic risk assessment.

Current context at production date (May 2026): UKHSA reports that vector-borne disease risk in the UK and Europe increases from late spring to October. Lyme disease remains the most common locally acquired vector-borne disease reported in humans in the UK. Across Europe, local transmission of some mosquito-borne infections is becoming more frequent. Figures and affected areas can change - check official travel and public-health updates before deployment.

Routine

No vegetation, no standing water, no bite exposure, no travel/outbreak concern: continue normal RAMS, hygiene and PPE.

Controlled task

Outdoor vegetation, wetland, culvert, ditch, riverbank, standing-water work or European/overseas deployment: add bite controls and tick checks.

Stop/escalate

Worker unwell, attached tick with symptoms, heavy insect activity, suspected outbreak/travel link, or unsafe welfare/accommodation: stop routine work and get advice.

On-site control plan for tick and mosquito exposure

Use this as a simple add-on to the job risk assessment. Local WJA, company, client, confined-space, environmental and public-health rules take precedence.

1. STOP / PLAN

- Check the location: long grass, woodland edge, wetland, culvert, ditch, riverbank, flood water, standing water or outdoor accommodation.
- Brief the team before work starts, especially in spring and summer.
- For overseas work, check country-specific travel-health advice before travel and allow time for vaccination or malaria advice where relevant.
- Record the risk on RAMS/dynamic assessment: location, season, standing water, vegetation, planned controls and PPE/RPE decisions.

2. PREVENT BITES

- Cover exposed skin where practical: long sleeves, long trousers, socks and boots. In tick areas, tuck trousers into socks or use gaiters.
- Use insect repellent on exposed skin. GOV.UK advises 50% DEET as first choice where suitable; use alternatives if DEET is not tolerated.
- Reapply repellent as instructed, especially after sweating, washing or heavy work. Apply after sunscreen when sunscreen is used.
- Balance bite protection with heat-stress controls: hydration, shade, rest breaks and supervision.

3. CHECK / REMOVE TICKS

- After outdoor work, check clothing, boots, socks, gloves and PPE before travelling home or to accommodation.
- Check skin carefully: legs, waistband, behind knees, armpits, groin, neck, hairline and behind ears.
- If a tick is attached, use a tick-removal tool or fine-tipped tweezers. Grip close to the skin and pull slowly upwards.
- Do not squeeze, crush, burn or cover a tick with chemicals. Clean the bite and record the date and site.

4. CONTROL SITE / AFTER THE JOB

- Where the site is under your control, remove, empty or cover unnecessary standing water in buckets, tyres, containers, plant recesses and waste areas.
- Keep welfare doors/windows screened or closed where practical; keep break areas away from long grass and standing water.
- Log credible exposures: tick bite, attached tick, heavy biting, symptoms, travel link, PPE used and affected workers.
- If a worker is unwell, direct them to same-day medical advice and escalate immediately for emergency signs.

Do

- Treat tick and mosquito exposure as a seasonal site risk where vegetation, standing water or travel is relevant.
- Cover skin and use repellent correctly.
- Check for ticks after outdoor work and remove attached ticks promptly and safely.
- Tell medical staff about outdoor work, tick bites, mosquito bites and travel if symptoms develop.

Do not

- Do not ignore an attached tick or a spreading rash.
- Do not crush, burn or cover a tick with chemicals.
- Do not leave removable standing water around welfare areas.
- Do not assume fever after travel is "just flu" - malaria and other infections may need urgent testing.

Credible exposure for reporting: attached tick; tick bite with symptoms; heavy or repeated mosquito bites; outdoor work in high tick/mosquito activity; exposure to standing water or vegetation with subsequent illness; or illness after European/overseas travel. Routine work with no bite, no symptoms and no travel/outbreak concern is not, by itself, a vector-borne disease alert.

Symptoms, medical action and key conclusions

Most bites do not cause serious illness. Seek advice promptly if a worker becomes unwell after a credible exposure.

Exposure tick bite / mosquito bites / travel	Watch period days to weeks	Early illness fever, rash, aches, fatigue	Emergency signs confusion, stiff neck, collapse
---	-------------------------------	--	--

Early symptoms to report

- Fever, chills, sweats or sudden flu-like illness.
- New circular, oval or spreading rash after tick exposure. On brown or black skin it may look more like a bruise.
- Headache, muscle aches, joint pains, severe tiredness or pain behind the eyes.
- Facial droop, numbness, tingling, weakness, severe headache or stiff neck.
- Fever after travel, especially after a malaria-risk country.

Seek urgent help now

- Call 999/112 or go to ED/A&E if there is confusion, seizure, collapse, severe headache with stiff neck, new facial/limb weakness, breathing difficulty, unusual bleeding, persistent vomiting, severe dehydration or rapidly worsening illness.
- Fever after malaria-risk travel is urgent. Malaria must be excluded quickly.
- Do not drive yourself if faint, confused, breathless or very unwell.

Medical information to say or show:

"I work in water jetting/drainage/sewer/industrial environments. On [date] at [site/country], I worked near [long grass / woodland / riverbank / wetland / culvert / standing water / outdoor accommodation] and had [an attached tick / tick bite / multiple mosquito bites]. Symptoms started on [date]. Please consider vector-borne infection, including Lyme disease or travel-related mosquito-borne disease depending on exposure."

Lyme disease reminder, supervisor actions and sources

Use exact site, outdoor-exposure and travel details in risk assessments, exposure reports and medical handovers.

Specific reminder: Lyme disease

1. What it is / where to think of it

- Lyme disease is a bacterial infection spread by infected ticks. It is usually easier to treat when diagnosed early.
- Ticks are found across the UK. Higher-risk places include grassy and wooded areas, long grass, woodland edges, parks, gardens and moorland.
- UKHSA states Lyme disease remains the most common locally acquired vector-borne disease reported in humans in the UK.

2. Rash and early symptoms

- A circular, oval or spreading rash around a bite can be an early sign. It may look like a bullseye, but not always.
- The rash is not usually hot or itchy. On brown or black skin it may be harder to see and may look more like a bruise.
- Flu-like symptoms can include fever or shivers, headache, muscle or joint pain and tiredness.

3. Check and remove promptly

- After outdoor work, check skin, clothing, boots, socks, gloves and PPE. Tick bites are not always painful.
- Use a tick-removal tool or fine-tipped tweezers. Grip close to the skin and pull slowly upwards.
- Do not squeeze, crush, burn or cover a tick with chemicals. Clean the bite and record date/site.

4. When to seek medical advice

- Ask for an urgent GP appointment or NHS 111 advice if a worker has had a tick bite, or visited a tick area in the last 3 months, and develops flu-like symptoms or a round/oval rash.
- Tell the clinician the work location, date, tick exposure and symptoms.
- Do not rely on commercial tick-testing results to decide diagnosis or treatment.

Worker reminder: most tick bites do not cause illness, but Lyme disease is best treated early. Check after outdoor work and act quickly if rash or flu-like symptoms develop.

Supervisor actions after a credible exposure

- Record date, time, exact site, task, vegetation/standing-water exposure, travel location, tick or mosquito exposure, PPE used and exposed workers.
- Check whether anyone has symptoms, an attached tick, heavy bite exposure or recent travel.
- Direct unwell workers to same-day medical advice; escalate immediately for emergency signs.
- Review RAMS: access routes, vegetation, standing water, welfare areas, repellent, tick checks and worker briefing.
- For overseas work, confirm country-specific travel-health advice before deployment and after return if illness occurs.
- Follow company reporting, occupational-health and local public-health procedures for clusters, unusual vector activity or outbreak-linked travel.

Current UK and Europe context - May 2026

- UKHSA reports that vector-borne disease risk in the UK and Europe increases from late spring, April/May, to October.
- In the UK, Lyme disease remains the most common locally acquired vector-borne disease reported in humans.
- The geographic range of ticks is expanding, so areas where Lyme disease could be transmitted are likely to increase.
- Across Europe, local transmission of some mosquito-borne infections is becoming more frequent. West Nile virus continues to expand northwards; dengue and chikungunya activity is an increasing concern.
- Native UK mosquito-borne disease risk remains low, but mosquito surveillance and local control remain important.

Key conclusions for WJA members

- Tick and mosquito risks are usually low in routine UK industrial work, but they increase during warmer months and vary by site and country.
- Think about bite risk near long grass, woodland, wetlands, riverbanks, culverts, ditches, flood water, standing water and outdoor accommodation.
- Prevent bites: cover skin, use repellent correctly, reduce standing water where practical, and avoid unnecessary contact with vegetation.
- Check for ticks after outdoor work and remove attached ticks safely. Do not ignore a spreading rash, fever, severe headache, confusion, weakness or illness after travel.
- High-pressure water jetting injuries remain separate surgical emergencies: a small entry wound can hide severe internal injury. Follow WJA emergency procedures.

Verified sources used

UKHSA Briefing Note BN2026/013: Vector-borne disease in UK and Europe; risk ahead of summer 2026; NHS Lyme disease guidance; GOV.UK/UKHSA tick awareness and tick bite prevention resources; GOV.UK mosquito bite avoidance advice for travellers; WJA water-jetting clinical guidance and previous WJA member leaflet format.

Safety note

This leaflet is for awareness and should not be used as a stand-alone vector-borne disease response plan. Follow local public-health direction, site procedures and specialist clinical or occupational-health advice where required.