

TEXTO PARA AS QUESTÕES DE 01 a 03

‘Nightmare bacteria’ cases are increasing in the U.S.

by The Associated Press

Infection rates from drug-resistant “nightmare bacteria” rose almost 70% between 2019 and 2023, according to a new report from Centers for Disease Control and Prevention scientists.

Bacteria that are difficult to treat due to the so-called NDM gene primarily drove the increase; CDC researchers wrote in an article published Monday in the Annals of Internal Medicine. Only two antibiotics work against those infections, and the drugs are expensive and must be administered through an IV, researchers said.

Bacteria with the gene were once considered exotic, linked to a small number of patients who received medical care overseas. Though the numbers are still small, the rate of U.S. cases jumped more than fivefold in recent years, the researchers reported.

“The rise of NDMs in the U.S. is a grave danger and very worrisome,” said David Weiss, an Emory University infectious diseases researcher, in an email.

It’s likely many people are unrecognized carriers of the drug-resistant bacteria, which could lead to community spread, the CDC scientists said.

That may play out in doctors’ offices across the country, as infections long considered routine and easy to treat — like urinary tract infections — could become chronic problems, said Dr. Maroya Walters, one of the report’s authors.

Antimicrobial resistance occurs when germs such as bacteria and fungi gain the power to fight off the drugs designed to kill them. The misuse of antibiotics was a big reason for the rise — unfinished or unnecessary prescriptions that didn’t kill the germs made them stronger.

In recent years, the CDC has drawn attention to “nightmare bacteria” resistant to a wide range of antibiotics. That includes carbapenems, a class of antibiotics considered a last resort for treatment of serious infections.

Researchers drew data from 29 states that do the necessary testing and reporting of carbapenem-resistant bacteria.

They counted 4,341 cases of carbapenem-resistant bacterial infections from those states in 2023, with 1,831 of them the NDM variety. The researchers did not say how many of the infected people died.

The rate of carbapenem-resistant infections rose from just under 2 per 100,000 people in 2019 to more than 3 per 100,000 in 2023 — an increase of 69%. But the rate of NDM cases rose from around 0.25 to about 1.35 — an increase of 460%, the authors said.

A researcher not involved in the study said the increase is probably related to the COVID-19 pandemic.

“We know that there was a huge surge in antibiotic use during the pandemic, so this likely is reflected in increasing drug resistance,” said Dr. Jason Burnham, a Washington University researcher, in an email.

The CDC’s count is only a partial picture.

Many states are not fully testing and reporting cases. Even in states that do, cases tend to be among hospital patients sick enough to warrant special testing. Many hospitals also aren’t able to do the testing needed to detect certain forms of genetic resistance.

The CDC researchers did not have data from some of the most populous states, including California, Florida, New York and Texas, which means the absolute number of U.S. infections “is definitely underestimated,” Burnham said.

This is not the first study to report a rise. A CDC report published in June noted an increase in NDM cases in New York City from 2019 to 2024.

Fonte: Disponível em: <https://www.nbcnews.com/health/health-news/nightmare-bacteria-cases-are-increasing-us-rcna233398> Acesso em Outubro de 2025.

GLOSSÁRIO (Questões de 01 a 03)

1. **fivefold** (adj.) – multiplicado por cinco; um aumento de cinco vezes.
2. **warrant** (verbo) – justificar, garantir.

Fonte: Cambridge Dictionary (English-Portuguese)
<https://dictionary.cambridge.org/dictionary/english-portuguese/> Acesso em outubro 2025.

Questões

QUESTÃO 1. De acordo com o texto, uma limitação importante da metodologia do estudo do CDC é que:

- a) Todos os estados dos EUA realizam os testes necessários para bactérias resistentes a carbapenens.
- b) Dados de estados populosos como Califórnia e Nova York não foram incluídos, subestimando o número real de casos.
- c) Os pesquisadores contaram apenas com dados de pacientes hospitalares que haviam recebido cuidados médicos no exterior.

QUESTÃO 2. Assinale a alternativa que apresenta um potencial impacto do aumento da disseminação comunitária das bactérias com o gene NDM, de acordo com a Dra. Maroya Walters, uma das autoras do relatório:

- a) Infecções antes ditas comuns, como infecções do trato urinário, podem se tornar problemas crônicos.
- b) O uso de antibióticos por via intravenosa será completamente substituído por comprimidos.
- c) O número de portadores não identificados vai diminuir drasticamente devido aos novos testes.

QUESTÃO 3. Leia o trecho a seguir:

“Antimicrobial resistance occurs when germs such as bacteria and fungi gain the power to fight off the drugs designed to kill them. The misuse of antibiotics was a big reason for the rise — unfinished or unnecessary prescriptions that didn’t kill the germs made them stronger.”

Podemos afirmar que, o que tornou os antibióticos ineficazes foi:

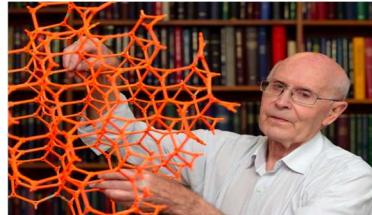
- a) A descoberta recente de germes desconhecidos em ambientes hospitalares.
- b) A utilização incorreta de tratamentos médicos prescritos por profissionais.
- c) A produção insuficiente de medicamentos novos nas fábricas farmacêuticas.

TEXTO PARA AS QUESTÕES DE 04 a 06

Nobel prize in chemistry awarded to scientists for work on ‘Hermione’s handbag’

Trio honored for developing revolutionary materials for applications ranging from gas storage to drug delivery

The Nobel prize in chemistry has been awarded to three scientists who created revolutionary porous materials that can harvest water from desert air, capture carbon dioxide from industrial facilities and remove toxins from water.



UK-born Richard Robson, one of the Nobel prize winners, with a model of a metal-organic framework.

Photograph: University of Melbourne/Getty Images

Susumu Kitagawa, of Kyoto University, Richard Robson, of the University of Melbourne, and Omar Yaghi, of the University of California, Berkeley, shared the 11m Swedish kronor (about £871,400) prize awarded by the Royal Swedish Academy of Sciences in Stockholm.

The trio found ways to combine metal ions and organic molecules into highly porous structures through which liquids and gases could flow. Tens of thousands of such materials have since been made for applications ranging from storing hydrogen to removing forever chemicals from water and recovering valuable rare earth metals from waste.

The scientists were honored “for the development of metal-organic frameworks”, or MOFs, which have such potential that they have been called the material of the 21st century.

Speaking at the prize announcement, Prof Heiner Linke, the chair of the Nobel committee for chemistry, said: “They have found ways to create materials, entirely novel materials with large cavities on the inside, which can be seen almost like rooms in a hotel, so that guest molecules can enter and also exit again from the same material.

“A small amount of such material can be almost like Hermione’s handbag in Harry Potter. It can store huge amounts of gas in a tiny volume.”

The research began in 1989 with Robson, a chemist born in Glusburn, West Yorkshire, who moved to Australia after studying at Oxford and Stanford universities.

Inspired by the structure of diamonds, he combined copper ions with a four-armed molecule to make pyramid-shaped molecules. These bonded together to form crystals strewn with cavities.

Robson realized the potential for the structures but they were unstable and tended to fall apart. It took further work from Kitagawa and Yaghi to turn metal-organic frameworks into the valuable materials they are today.

Kitagawa showed that similar structures based on cobalt, nickel and zinc were not only stable but could be used to store and release methane, nitrogen and oxygen. He went on to show that MOFs could be tailored to different tasks and even made from flexible materials.

Reached by the Nobel committee, Kitagawa said he was “deeply honored and delighted” to receive the prize. Asked about his hopes for the future, Kitagawa said he wanted to use MOFs to extract important elements such as carbon and oxygen from the air and with green energy turn them into useful materials. “This is my dream,” he said.

Yaghi became fascinated with chemistry at the age of 10 after sneaking into the school library, which was usually locked, and plucking a book at random from the shelves. He was brought up with his siblings in a single room in Amman, Jordan, with no running water or electricity. At his father’s insistence he went to study in the US. Frustrated with the traditional way of building new molecular structures, Yaghi developed a more precise approach that was more like assembling pieces of Lego into large crystals. In the 1990s, he revealed MOFs that resembled nets held together with copper or cobalt. Later, he created an extraordinary zinc-based MOF. A couple of grams held an area as large as a football pitch, meaning it could absorb a vast amount of gas for its size.

Dr Becky Greenaway, a chemist at Imperial College London, said: “Lots of chemists have been wondering when metal-organic frameworks would get the Nobel prize, and it’s finally happened. Their discovery has enabled a whole range of applications, from gas storage and separations to drug delivery, and also opened up other areas, including porous liquids – liquids with holes in – which are showing promise in carbon capture and catalysis.”

Fonte: Disponível em: <https://www.theguardian.com/science/2025/oct/08/nobel-prize-in-chemistry-awarded-to-scientists-for-work-on-porous-materials> Acesso em outubro 2025

GLOSSÁRIO (Questões de 04 a 06)

1. **harvest** (verb) – coletar.
2. **chair** (subst) – titular, presidente.
3. **novel** (adj) - novo, original, inusitado.
4. **cooper** (subst) - elemento químico, metal cobre.
5. **crystal strewn with cavities** (grupo nominal) - cavidades revestidas de cristais.

Fonte: Cambridge Dictionary (English-Portuguese)

<https://dictionary.cambridge.org/dictionary/english-portuguese/> Acesso em outubro 2025.

Questões

QUESTÃO 4. Na frase “*...they have been called the material of the 21st century*”, o pronome pessoal **they** se refere diretamente:

- a) Aos três cientistas premiados.
- b) Aos Metal-Organic Frameworks (MOFs).
- c) Às aplicações mencionadas, como a captura de carbono.

QUESTÃO 5. O texto descreve a evolução das MOFs como um esforço colaborativo entre três pesquisadores. No entanto, a contribuição específica de Omar Yaghi foi crucial porque ele:

- a) Foi o primeiro a provar que as estruturas poderiam ser usadas para armazenar e liberar metano.
- b) Resolveu o problema inicial da instabilidade das estruturas, impedindo que se desfizessem.
- c) Desenvolveu uma abordagem mais precisa para construir as estruturas, comparável a montar peças de Lego.

QUESTÃO 6. Leia o trecho extraído do texto e responda:

“Their discovery has enabled a whole range of applications, from gas storage and separations to drug delivery, and also opened up other areas, including porous liquids – liquids with holes in – which are showing promise in carbon capture and catalysis.”

A declaração da Dra. Becky Greenaway:

- a) Apresenta uma crítica sobre a demora em premiar a descoberta.
- b) Fornece um exemplo de uma aplicação futura e não comprovada das MOFs.
- c) Reforça o impacto do trabalho dos laureados, estendendo-o para além das MOFs.

TEXTO PARA AS QUESTÕES DE 07 a 10

Call for Research Grant Proposals AERA Grants Program Seeks Proposals for Research Grants

Deadline: October 6, 2025
11:59 pm (Pacific Time)

With support from the National Science Foundation (NSF), the American Educational Research Association (AERA) Grants Program seeks proposals for Research Grants. The AERA Grants Program provides Research Grants to faculty at institutions of higher education, postdoctoral researchers, and other doctoral level scholars. The aim of the program is to advance fundamental knowledge of relevance to STEM education policy, foster significant science using education data, and build research capacity in education and learning.

Applicant Eligibility

Research Grants are available for faculty at institutions of higher education, postdoctoral researchers, and other doctoral level scholars. Proposals are encouraged from the full range of education research fields and other fields and disciplines engaged in education-related research, including economics, political science, psychology, sociology, demography, statistics, public policy, psychometrics, and discipline-based education research (DBER). Applicants for this one-year or two-year, non-renewable award must have received their doctoral degree at the start of the award. Applicants may be U.S. citizens or U.S. permanent residents. Non-U.S. citizens affiliated with a U.S. university or institution are also eligible to apply. Researchers who have previously received Research Grants through the AERA Grants Program may not apply for a Research Grant.

Research Grant Award

Awards for Research Grants are up to \$25,000 for 1year projects, or up to \$35,000 for 2year projects. In accordance with AERA's agreement with the funding agencies, institutions may not charge indirect costs or overhead on these awards.

The funds can be used for research-related expenses such as course buyout, summer salary, travel to secure data enclaves or scholarly conferences, books, computer equipment, and other expenses directly related to conducting this research. As part of the proposal, applicants provide a budget that outlines anticipated research-related expenses.

Evaluation Criteria

Evaluation criteria include the significance of the research question, the contribution beyond the extant scientific literature, the conceptual clarity and potential contribution of the proposal, the strength of the methodological model and proposed statistical analysis, the

relevance to an important STEM education policy issue, and the applicant's relevant research and academic experience.

In preparing proposals, applicants should consider the following questions: What is significant about the proposed research and how does it contribute to what is already known on the issue? How might this project inform STEM education policy? How does the methodology relate specifically to the research question? Does the applicant know the data set? Does the analytic plan fit the question and the data? The fit or relevance of one's skill set to the proposed study or how will any material gaps be addressed?

Research Grant Application Guidelines

Application Deadline

All applications for the AERA Grants Program must be completed using the AERA Apply Portal **by 11:59pm (Pacific Time) on October 6, 2025**. An applicant may submit only one proposal to the AERA Grants Program for review at any one time. Due to the large volume of applications received, the AERA Program is unable to provide individual feedback on unfunded proposals.

Submission Information

Please enter the background information requested in the proposal submission portal. This includes the principal investigator's contact and background demographic information. Also, enter the proposal title, amount of funding requested, and the start and end dates of the project.

Project abstract

Enter the abstract of your proposed research project (250 words maximum).

Contribution to the field

Briefly describe the potential contributions this research will make to the field of education (250 words maximum). You may cut and paste or type into the text box.

Proposal

1. **Narrative:** Prepare a narrative (limited to 7 single-spaced pages) to include the following:

- Statement of how this research advances the current state of knowledge in the field, substantively and/or methodologically
- Theoretical or conceptual framework for the research
- Brief review of relevant research/policy literature
- Research questions, hypotheses to be tested
- Description of methodology including the data set(s) and justification for selecting data file to address research question; any additional or supplemental data sample (e.g.,

groups used, exclusions to sample, and estimated sample sizes); rationale for variables used; and specification and clarification of variables and analytic techniques

- Data analysis plan and/or statistical model or formulas, appropriately defined
- Brief dissemination plan for this research including proposed conferences to present the findings and potential scholarly journals to publish the research

2. **Variables list:** Provide a categorized list of the variables from the NCES, NSF, or other data set(s) that will be used in this research project. (2 single-spaced pages maximum)
3. **References cited** (not part of page limit)
4. **Budget.** Awards for Research Grants are up to \$25,000 for 1year projects, or up to \$35,000 for 2year projects. There is no specific template for the budget. It may be a simple 2-column format or a more complex spreadsheet. Note that institutions may not charge overhead on AERA Research Grants. (no page limit)
5. **Current other support.** If you currently have support from other sources (foundations, government agencies, institutions, etc.), include a list of any grants or fellowships that the PI and CoPI(s) have been awarded. Include the name of the funding organization, title of project, dates of project, and amount awarded; otherwise enter NONE. (no page limit)
6. **Principal and Co-Principal Investigator curriculum vitae** (limited to 2 pages each) that includes:
 - Research and academic employment history
 - Relevant graduate courses in statistics and methodology
 - Relevant publications and presentations
 - Relevant professional affiliations and/or memberships

Fonte: Disponível em: <https://www.aera.net/Professional-Opportunities-Funding/AERA-Funding-Opportunities/AERA-NSF-Grants-Program/Research-Grants> Acesso em outubro 2025 (texto adaptado).

GLOSSÁRIO (Questões de 07 a 10)

1. **course buyout** (nominal group) – Em universidades (especialmente nos EUA), *course buyout* ocorre quando um professor consegue financiamento (por exemplo, de um projeto de pesquisa) para “comprar” parte de sua carga de ensino. Isso significa que ele será liberado de ministrar uma disciplina, e o dinheiro do projeto cobre o custo de substituição (pagando outro professor, por exemplo). Liberação de carga didática substituição/docente financiada por projeto.
2. **data enclave** (nominal group) – ambiente seguro e controlado onde pesquisadores podem acessar dados sensíveis (por exemplo, dados confidenciais de saúde, renda, etc.) sem poder baixá-los ou copiá-los. É comum em centros de pesquisa e institutos de estatística. Ambiente controlado de acesso a dados.

Fonte: Definições geradas por IA: <https://chatgpt.com/c/68e98db2-5344-8330-bcbo-8079a68647ee> Acesso em outubro 2025.

QUESTÕES

QUESTÃO 7. Com relação à **estrutura** e ao **orçamento** da proposta, leia as assertivas e assinale a alternativa que traz as recomendações corretas do edital:

- I. Deve constar da proposta um orçamento detalhado e as variáveis utilizadas, seguindo o *template* fornecido;
- II. Deve constar da proposta questões de pesquisa, quadro teórico, metodologia, análise de dados e plano de disseminação;
- III. O orçamento deve seguir um modelo rígido de duas páginas definido pela AERA e ter sido aprovado pelo governo antes de ser enviado à AERA;
- IV. O orçamento pode ser em formato simples (duas colunas) ou planilha, sem limite de páginas, e não permite cobrança de overhead (despesas administrativas) pelas instituições;
- V. É imprescindível que a proposta traga um plano breve de disseminação da pesquisa, incluindo propostas de apresentações de trabalho sobre os resultados da pesquisa e planos de publicação em revistas científicas.

As assertivas corretas são:

- a) II, IV, V
- b) I, II, III
- c) I, III, IV

QUESTÃO 8. De acordo com o texto, ao preparar uma proposta, o que os candidatos devem demonstrar com clareza?

- a) Que o projeto apresenta o maior número possível de perguntas de pesquisa, utiliza modelos estatísticos complexos e evita a revisão extensiva de literatura existente.
- b) Que o projeto é independente de estudos anteriores do candidato, não exige conhecimento do conjunto de dados e se apoia em discussões teóricas que culminam em um plano analítico de dados.
- c) Que o projeto tem relevância, pode contribuir para a política de educação em STEM, e que a metodologia e o conjunto de dados escolhidos respondem diretamente às perguntas de pesquisa.

QUESTÃO 9. Segundo o texto, quem pode se candidatar a este *Research Grant*? Assinale a alternativa que traz todos os perfis corretos de candidatos.

- I. Apenas cidadãos estadunidenses com doutorado;
- II. Doutores ou pós-doutores de várias áreas relacionadas à educação, incluindo cidadãos não estadunidenses vinculados a universidades dos EUA;
- III. Docentes de instituições de ensino superior dos EUA que tenham recebido bolsa de pesquisa no programa AERA;
- IV. Doutorandos com data prevista para defesa de doutorado antes do início do período de bolsa.

- a) Apenas II e IV
- b) I, II e III
- c) Apenas III e IV

QUESTÃO 10. “Um grupo nominal é uma estrutura linguística que consiste em uma palavra ou conjunto de palavras que funcionam juntas como um único elemento dentro de uma sentença. Geralmente, um grupo nominal inclui um núcleo, juntamente com modificadores e outros elementos que o acompanham para fornecer mais detalhes ou contexto.” (Texto redigido pela equipe de elaboração de exames do Instituto de Línguas - outubro, 2025).

Considerando o processo de leitura de grupos nominais, assinale a alternativa que traz as traduções corretas dos seguintes grupos nominais, presentes no texto:

- I. National Science Foundation (NSF);
- II. the American Educational Research Association (AERA) Grants Program;
- III. discipline-based education research (DBER).

- a) Fundação Nacional de Educação Científica; Programa de Financiamento da Fundação Nacional Americana de Ciência; Pesquisa em Educação Básica e disciplinar.
- b) Fundação Nacional de Ciência; Programa de Bolsas da Associação Americana de Pesquisa Educacional; Pesquisa em Educação Baseada na Disciplina.
- c) Fundação Nacional Científica; Programa de Gratuidade da Fundação Americana Nacional de Pesquisa na Educação; Pesquisa em Educação Interdisciplinar.

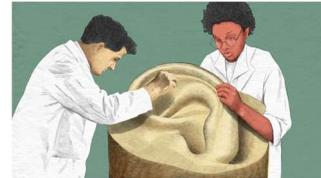
TEXTO PARA A QUESTÃO 11

What your earwax can reveal about your health

28 April 2025

By Jasmin Fox-Skelly

From Alzheimer's to cancer, earwax can contain valuable indicators to a person's health. Now scientists are analyzing its chemistry in the hope of finding new ways of diagnosing diseases



(Credit: Emmanuel Lafont/ BBC)

It's orange, it's sticky, and it's probably the last thing you want to talk about in polite conversation. Yet earwax is increasingly attracting the attention of scientists, who want to use it to learn more about diseases and conditions like cancer, heart disease, and metabolic disorders such as type 2 diabetes.

The proper name for the gloopy stuff is *cerumen*, and it's a mix of secretions from two types of glands that line the outer ear canal; the ceruminous and sebaceous glands.

Once formed in the ear canal, the substance is transported by a kind of conveyer belt mechanism, clinging on to skin cells as they travel from the inside of the ear to the outside – which they do at a speed of approximately one 20th of a millimeter every day. The primary purpose of earwax is debated, but the most likely function is to keep the ear canal clean and lubricated. However, it also serves as an effective trap, preventing bacteria, fungi and other unwelcome guests such as insects from finding their way into our heads. So far, so gross. And yet, possibly due to its unpalatable appearance, earwax has been somewhat overlooked by researchers when it comes to bodily secretions.

That's now starting to change, however, thanks to some surprising scientific discoveries. The first is that a person's earwax can actually convey a surprising amount of information about them – both trivial and important.

For example, the vast majority of people of European or African descent have *wet* earwax, which is yellow or orange in color and sticky. However, 95% of East Asian people have *dry* earwax, which is grey and non-sticky. The gene responsible for producing either wet or dry earwax is called *ABCC11*, which also happens to be responsible for whether a person has smelly armpits.

However, perhaps the most useful earwax-related discoveries relate to what the sticky stuff in our ears can reveal about our health.

Important clues

In 1971, Nicholas L Petrakis, a professor of medicine at University of California, San Francisco, found that Caucasian, African-American and German women in the USA, who all had "wet earwax", had an approximately four times higher chance of dying from breast cancer than Japanese and Taiwanese women with "dry" earwax.

More recently in 2010, researchers from the Tokyo Institute of Technology took blood samples from 270 female patients with invasive breast cancer, and 273 female volunteers who acted as controls. They found that Japanese women with breast cancer were up to 77% more likely to have the gene coding for wet earwax than healthy volunteers.

What is more established is the link between some systemic illnesses and the substances found in earwax. Take maple syrup urine disease, a rare genetic disorder that prevents the body from breaking down certain amino acids found in food. This leads to a buildup of volatile compounds in the blood and urine, giving urine the distinctive odor of maple syrup.

The molecule responsible for the sweet-smelling wee is *sotolone*, and it can be found in the earwax of people with the condition. This means the condition could be diagnosed through simply swabbing someone's ears, a much simpler and cheaper process than doing a genetic test. Although such a test may not even be necessary.

"The earwax literally smells like maple syrup, so within 12 hours of the birth of the baby, when you smell this distinct and lovely smell it tells you that they have this inborn error of metabolism," says Rabi Ann Musah, an environmental chemist at Louisiana State University.

Covid-19 can also sometimes be detected in earwax, and a person's earwax can also tell you whether they have type 1 or type 2 diabetes. Early work has suggested that you can tell if someone has a certain form of heart disease from their earwax, although it's still easier to diagnose this condition from blood tests.

"Our interest in earwax as a reporter of disease is directed at those illnesses that are very difficult to diagnose using typical biological fluids like blood and urine or cerebral spinal fluid, and which take a long time to diagnose because they're rare," says Musah.

But what is it about earwax that makes it such a treasure trove of health information? The key, it turns out, is down to the waxy secretions' ability to reflect the inner chemical reactions taking place inside the body – a person's metabolism.

"Many diseases in living organisms are metabolic," says Nelson Roberto Antoniosi Filho, a professor of chemistry at the Federal University of Goiás in Brazil, who lists diabetes, cancer, Parkinson's, and Alzheimer's disease as examples. "In these cases, mitochondria cells begin to function differently to those in healthy cells. They start to produce different chemical substances and may even stop producing others."

Antoniosi Filho's lab have discovered that earwax concentrates this great diversity of substances more than other biological fluids such as blood, urine, sweat, and tears.

Tricky diagnoses

With this in mind, Antoniosi Filho and his team are developing the "*cerumenogram*" – a diagnostic tool they claim can accurately predict whether a person has certain forms of cancer based on their earwax.

In a 2019 study, Antoniosi Filho's team collected earwax samples from 52 cancer patients who had been diagnosed with either lymphoma, carcinoma, or leukemia. The researchers also took earwax from 50 healthy participants. They then analyzed the samples using a method which can accurately detect the presence of volatile organic compounds (VOCs) – chemicals that evaporate easily in air.

The researchers identified 27 compounds in earwax that served as a kind of "fingerprint" for cancer diagnosis. In other words, the team could predict with 100% accuracy whether someone had cancer (either lymphoma, carcinoma, or leukemia) based on the concentrations of these 27 molecules.

"In the future, we hope that the *cerumenogram* will become a routine clinical examination, preferably every six months, that allows, with a small portion of earwax, to

simultaneously diagnose diseases such as diabetes, cancer, Parkinson's, and Alzheimer's, as well as evaluate metabolic changes resulting from other health conditions," says Antoniosi Filho.

In Brazil, the Amaral Carvalho Hospital has recently adopted the *cerumenogram* as a diagnostic and monitoring technique for cancer treatment, says Antoniosi Filho.

Fonte: Disponível em: <https://www.bbc.com/future/article/20250424-what-your-earwax-can-reveal-about-your-health> (adapted) Acesso em 26 de setembro de 2025.

GLOSSÁRIO (Questão 11)

1. **gloopy** (adj) – grudento.
2. **conveyer belt** (noun) – *a continuous moving strip or surface that is used to transport objects from one place to another*
3. **cling** (v) – grudar.
4. **gross** (adj) – nojento. *Disgusting.*
5. **swab** (v) – limpar. *to take a small amount of substance from a body using a small piece of soft material.*
6. **maple syrup** (noun) – xarope de bordo. *A thick, sweet liquid produced from the maple tree, eaten with or used in making food.*
7. **treasure trove** (noun) – tesouro. *A treasure trove of information* – um tesouro de informações.

Fonte: Adaptado de: <https://dictionary.cambridge.org/pt/dicionario/ingles-portugues/>. Acesso em setembro 2025.

QUESTÃO 11. Em até 20 linhas, redija um resumo informativo do artigo de divulgação científica “*What your earwax can reveal about your health*”, de Jasmin Fox-Skelly, publicado no site *bbc.com*. Seu texto deverá conter as informações essenciais e termos-chave do artigo, dados numéricos/estatísticos relevantes e apresentação das fontes-base mencionadas para a redação da publicação original. O caráter informativo deve ser mantido. Lembre-se de que seu texto deve ser redigido em língua portuguesa no caderno de respostas, à caneta azul ou preta. Não faça tradução direta ou literal do artigo.

Para a escrita de um **resumo informativo**, considere as informações abaixo:

Um **resumo informativo** é um tipo de resumo que **apresenta de forma concisa as principais informações e ideias de um texto original**, incluindo os pontos centrais discutidos. Ele **não se limita a indicar a existência de um texto**, mas **transmitir o conteúdo essencial**, permitindo que o leitor compreenda o que foi tratado **sem necessariamente consultar o original**.

Características principais do resumo informativo:

- É **objetivo e imparcial**.
- **Evita julgamentos de valor** ou opiniões pessoais.
- Apresenta o conteúdo de forma **clara, fiel e concisa**.
- Pode incluir dados, números, conclusões e até resultados.