NDSU CENTER FOR IMMUNIZATION RESEARCH AND EDUCATION

The Evidence Hasn't Changed: Communicating Vaccine Science When the Landscape Has

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The questions in this document were submitted by attendees during the live webinar and are presented here as originally written. The responses were provided by the speaker for informational purposes only.

"Do you have a suggestion of how to discuss the concern of 'dead babies' (fetal cells) for vaccine production with parents?"

Start by acknowledging the concern genuinely — this touches on deeply held values and deserves a real answer, not a quick dismissal. Then clarify what's actually happening: some vaccines were developed using cell lines that originated from fetal tissue biopsies conducted decades ago, primarily in the 1960s and 70s. These aren't fetal cells or fetal tissue — they're lab-grown cell lines that have replicated thousands of times since then and bear no resemblance to the original tissue. They're used because of something called viral tropism: certain viruses used in vaccines will only grow effectively in specific cell types, and these particular lines happen to work. The vaccines themselves don't contain any cellular material — it's removed during purification before the final product is packaged. No new fetal tissue has been collected since the original lines were established.

For parents with religious concerns, it's also worth noting that major religious bodies including the Vatican have concluded that using these vaccines is morally acceptable, citing the significant distance in time from the original tissue donation and the public health benefit of preventing disease. It can also help to point out that these same cell lines have been used in the research and development of many common medications — Tylenol, Advil, Benadryl, and others — which often reframes the conversation in a useful way.

Some reference posts:
Vaccines and Fetal Cell Lines: Facts vs. Misconceptions (Instagram)
Fetal Cell Lines and COVID-19 Vaccines (Instagram)
What Counts as a Religious Exemption from Vaccination? (Instagram)

"Do you feel that the Frameworks Institute idea of analogies when discussing vaccines (among some of their other ideas) are beneficial?"

Yes, and the research on science communication supports this pretty consistently. Analogies work because they don't ask people to build understanding from scratch — they let you map new, unfamiliar information onto something people already know and trust. That's a more

efficient cognitive pathway than presenting raw facts, which is part of why data dumps tend to underperform in conversations about health.

We use this approach regularly in our own content. Explaining what's in a vaccine? Antigens are a "wanted poster" for your immune system, adjuvants are a megaphone, stabilizers are bubble wrap. Explaining how the immune system works? We reach for analogies there too. The goal is always to lower the barrier to understanding without sacrificing accuracy — and a good analogy can do both at once.

A few caveats worth keeping in mind: analogies need to be matched to your audience. What resonates with a curious parent who's open to learning looks different from what lands with someone who's already skeptical. An analogy that oversimplifies can also create new misconceptions, so it's worth checking that the comparison holds up under follow-up questions. And Frameworks' broader toolkit goes beyond analogies — their work on values-based framing, leading with shared values before explaining mechanisms, is arguably just as useful in clinical settings where trust is the core issue rather than knowledge.

Bottom line: yes, use analogies. They're not dumbing things down — they're meeting people where they are.

Example:
Unboxing Vaccines: What's really inside? (Instagram)

“You say that narratives work better in providers motivating patients to engage in health behaviors, but also treat patients as ‘data points.’ Isn’t this inconsistent?”

These two things are actually doing completely different jobs, so I'd push back on the framing of inconsistency. When I say narratives are effective communication tools, I'm talking about how we reach people — how we open a door that data alone often can't. Stories activate different cognitive pathways than statistics. They build trust and emotional connection first, which creates the conditions where someone is actually willing to engage with evidence. A parent who feels heard is far more likely to have a real conversation than one who feels lectured at. That's not anti-science; that's how human communication works.

When I say treat a patient's anecdote as a data point, I mean something much simpler: take their experience seriously as real information about their reality. If a parent tells you their child changed after vaccination, dismissing that observation damages the relationship and closes the conversation. Acknowledging it — really listening, asking follow-up questions, thinking through it together — keeps you in the room. That's not the same as agreeing that vaccines caused harm. It's recognizing that their lived experience matters to them, and that your relationship with them depends on treating it that way.

The through-line is that both approaches serve the same goal: getting a foot in the door so the evidence actually has a chance to land. Narrative gets you there. Respectful listening keeps you there. The science does the rest but only if you've created the conditions for it to be heard.

“How do you answer the question from parents that ask why you are not following the CDC’s guidelines when for years you had been referring to them as the gold standard?”

This is one of the more difficult questions providers are navigating right now, and transparency is the best approach. The honest answer is that the CDC's credibility has always depended on the independence and rigor of its scientific processes — and there are legitimate concerns, shared widely across the scientific and medical community, that recent leadership and policy changes have compromised that independence in specific areas. That doesn't mean abandoning the CDC wholesale; it means doing what good clinicians have always done — looking at the totality of the evidence, including recommendations from the AAP, ACIP's prior guidance, and WHO, and making decisions based on the science rather than any single institution.

You might say something like: "The evidence on vaccine safety and effectiveness hasn't changed. What I'm doing is making sure I'm reading that evidence carefully, not just deferring to any one authority." That positions you as a thoughtful clinician rather than a rule-follower, which is actually a more trustworthy stance for many patients, and more accurate to what good clinical practice has always looked like.

“I’ve often heard from families/providers – ‘AAP and IDSA (Infectious Diseases Society of America) accepts money from pharmaceutical companies (by way of donations/partnerships) and the potential to influence vaccine decisions.’ These companies include GSK, Pfizer, Sanofi, and Merck which are listed on the AAP/IDSA websites. Can you provide us with some talking points about this topic?”

Yes, I see this a lot! A few things are worth unpacking. First, what's actually being referenced: the pharma logos on the AAP website are donors to the Friends of Children Fund — a charitable fund, not payments to recommendation committees. That's a meaningful distinction. Donating to a children's health charitable fund is categorically different from paying clinicians to reach specific conclusions.

Second, transparency here is a feature, not evidence of wrongdoing. The AAP and IDSA publicly disclose these relationships precisely because the field has developed strong norms around disclosure. The fact that you can find this information on their websites is the system working as intended.

Third, if pharma were actually pulling the strings at AAP, the organization wouldn't be doing what it's currently doing. AAP recently broke from CDC recommendations to maintain COVID vaccine guidance for infants and young children, at significant institutional risk and in direct opposition to the current administration. That's not what a captured organization does. It's the opposite of the commercially convenient position.

Fourth, the committees that actually produce vaccine recommendations — particularly ACIP, which advises the CDC on the childhood schedule — have strict conflict-of-interest policies that exclude voting members with direct financial ties to the products being evaluated. The process involves independent scientists reviewing the same underlying data across multiple institutions.

Finally, the broader evidence base for vaccine safety and effectiveness isn't owned by any single organization. It comes from thousands of independent researchers across dozens of countries, published in journals with their own editorial oversight. The convergence of that evidence across wildly different funding sources is one of the strongest arguments for its validity.

Ongoing scrutiny of industry-academic relationships is appropriate and important; no system is perfect. But validating the question while pointing to the structural safeguards and especially pointing to AAP's current willingness to take an unpopular stand, tends to be more persuasive than dismissing the concern outright.

“What do we do about clinicians who are antivaxxers?”

It helps to start from a place we're all familiar with as people who work with data: every dataset has outliers. That doesn't mean we throw out the dataset, and it doesn't mean we redesign our protocols around the outlier. We note it, we understand it in context, and we keep our focus on the signal, which is the overwhelming scientific consensus that vaccines are safe and effective.

Clinicians who reject that consensus are outliers in the same sense. They exist in every field. And just like in data analysis, the answer isn't to let the outlier drive the conclusion.

What you actually do depends on your role and your relationship with that person. If you're a colleague, the research on clinician-to-clinician communication is pretty clear — direct, private, non-confrontational conversations focused on specific patient cases move the needle far more than public challenges or debate. Coming in with "here's what the evidence shows for this child's situation" lands differently than "here's why you're wrong about vaccines."

If you're in a position of institutional authority, this becomes a credentialing and peer review question. Actively discouraging vaccination or spreading misinformation to patients is a patient safety issue, and licensing boards and medical societies are increasingly treating it that way.

For patients who've already been influenced by an anti-vaccine provider, the same principles apply as in any trust-repair conversation — start from their perspective, don't attack their

doctor directly, and anchor the conversation in their child's specific situation rather than a broad debate about vaccines.

The outliers exist and we don't have to pretend otherwise. But the consensus is the consensus, and that's where we keep our eyes.