

# “Wrong Recipient” Notifications For Email Misdelivery

IETF 119, DISPATCH

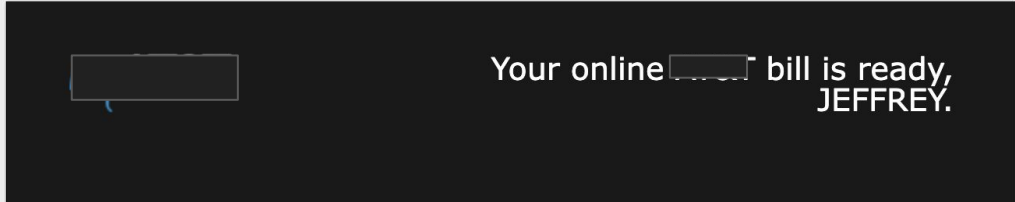
# What to do? →

- Actual email received
- (I'm not Jeffrey.)
- **Not spam**
- Legit sender
- Legit purpose
- Correct ARC, DMARC, SPF, and DKIM
- **Can't unsubscribe**
- **Can't reply**

Your [redacted] online bill is ready to be viewed ⌵



**Account Management** <update@emailff.[redacted]> Thu, Dec 28, 2023, 10:36 AM (9 days ago)  
to me ▾



Hi JEFFREY,

Your new [redacted] bill is available now at [redacted]

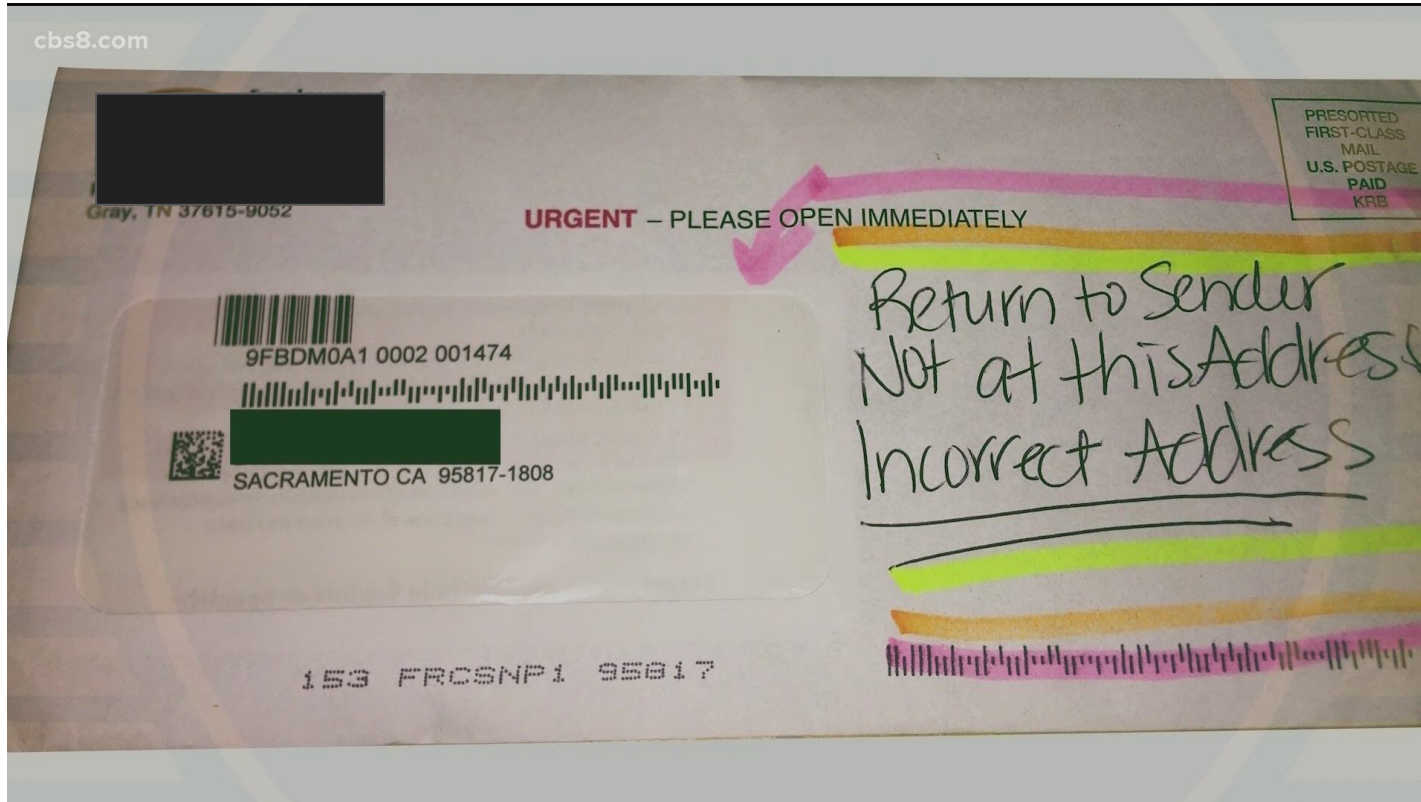
Service: [redacted]  
Account number: 2 [redacted]  
Payment due: 01/11/2024  
Bill total: \$218.33

Heads up: Your total balance doesn't include any payments you made after your bill period ended. Want to see more recent payments and your current balance? Sign in to [redacted] and check your account overview or bill & payments info:

[View your bill](#)

[Schedule a payment](#)

# Postal Mail Solved This 100+ Years Ago?



# What if Email Had a “Wrong Recipient” Notification?

- Would need to be user-initiated via UI - “this wasn’t meant for me”
- Probably should only show this UI if confident it’s not spam.
- Mostly for B2C using noreply@ - if a human writes to you, you can just reply “you sent this to the wrong person”.
- Would benefit:
  - **Wrong Recipient:** no longer receive emails for someone else
  - **Sender:** minimize liability for transmitting PII to a third party, repair broken comms channel
  - **Correct Recipient:** might finally gets the message for them

# What Could a Sender Do If Notified of a Wrong Recipient?

- Stop sending emails to the wrong recipient for that account
  - But *don't* treat as “send no email” to that address; the user might have a valid account!
- Use postal mail, phone call, or text message to collect a better email address
- Try other / prior email addresses for the user account?
- Display in-app / web message for the user that they need to provide a correct email address

Note: can avoid this flow if only sending transactional emails to verified addresses!

# How Might We Enable Wrong Recipient Notifications?

- HTTPS URI in “Wrong-Recipient” SMTP header field, modeled after List-Unsubscribe One-Click (RFC 2369 / RFC 8058)
- Simple POST to sender-provided URI, no cookies included
- Could offer mailto: URI option to support non-HTTP MUA / offline use
- “Undeliverable” via Return-Path probably not optimal since the email address is actually deliverable, and also is an asynchronous & user-initiated action
- RFC 8058 has seen robust adoption, let’s ride their coattails?

# Proposal (draft-dweekly-wrong-recipient)

Header Field in Email:

```
Wrong-Recipient: <https://example.com/wrong-recipient?uid=12345&email=user@example.org&sig=a29c83d>
```

Resulting POST request:

```
POST /wrong-recipient?uid=12345&email=user@example.org&sig=a29c83d HTTP/1.1
```

```
Host: example.com
```

```
Content-Length: 20
```

```
Wrong-Recipient=true
```

# Thanks!

<https://datatracker.ietf.org/doc/draft-dweekly-wrong-recipient/>

david@weekly.org